

(Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)

P-ISSN: 2548-7094

E-ISSN 2614-8021

Volume 10 Issue 1, 2025



**PROGRAM PASCASARJANA
UNIVERSITAS PGRI PALEMBANG**



JMKSP

(JURNAL MANAJEMEN, KEPEMIMPINAN, DAN SUPERVISI PENDIDIKAN)

Published twice a year, in January-July and August-December, it contains scientific articles on Educational Management and Supervision, summarizing research findings.

Editorial Board

Protector

: Dr. Hj. Meilia Rosani, SH, MH

: Assoc. Prof. Dr. H. Bukman Lian, MM, M.Sc.

Person Responsible

: Assoc. Prof. Syaiful Eddy, M.Sc.

: Dr. Nur Ahyani, M.Pd.

Editor in Chief,

Syaiful Eddy (PGRI University of Palembang, South Sumatra, Indonesia)

([Scopus ID: 57195985265](#)), ([SINTA ID: 5975316](#)), ([Google Scholar](#))

Section Editor,

Neta Dian Lestari (PGRI University of Palembang, South Sumatra, Indonesia)

([Scopus ID: 57205390980](#)), ([SINTA ID : 5995680](#)), ([Google Scholar](#))

International Editorial Advisory Regional,

Hazri Jamil (Malaysian Science University, Malaysia)

([Google Scholar](#))

Renee Shiun Yee Chew (INTI International University, Malaysia)

([Google Search](#))

Gunar Yadi (Indonesische School te Wassenaar (SIDH), Netherlands)

([Google Scholar](#))

Sirinun Krisnachinda (Panyapiwat Institute of Management, Thailand)

([Google Scholar](#))

Heni Mulyani (Indonesian University of Education, Indonesia)

([Scopus ID: 57193438980](#)) ([Google Scholar](#))

Asti Putri Kartiwi (University of Bengkulu, Indonesia)

([Scopus ID: 58090332000](#)) ([Google Scholar](#))

Arwildawanto (Gorontalo State University, Indonesia)

([Scopus ID: 57209298285](#)) ([Google Scholar](#))

Slamet Fauzan (State University of Malang, Indonesia)

([Scopus ID: 58311049600](#)) ([Google Scholar](#))

Wachidi (Muhammadiyah University of Surakarta, Indonesia)

([Scopus ID: 57216754985](#)) ([Google Scholar](#))

Suryadi (State University of Jakarta, Indonesia)

([Scopus ID: 57209733847](#)) ([Google Scholar](#))

Feby Elra Perdima (Dehasen University of Bengkulu, Indonesia)

([Scopus ID: 58113704300](#)) ([Google Scholar](#))

Okky Leo Agusta (Education Priority, Lubuk Linggau, Indonesia)

([Scopus ID: 58714510600](#))

Samsilaurni (Muhammadiyah University of Palembang, Indonesia)

([Scopus ID: 57459704400](#))

Arwan (Raden Fatah State Islamic University of Palembang, Indonesia)

([Google Search](#))

Editorial Advisory,

Bukman Lian (PGRI University of Palembang, Indonesia)

([Scopus ID: 57205393301](#)) ([Orcid ID: 0000-0001-5858-4596](#)) ([Google Scholar](#)) ([SINTA ID: 6002328](#)) ([Researchgate](#))

Reva Maria Valianti (PGRI University of Palembang, South Sumatra, Indonesia)

([SINTA ID: 6178952](#)), ([Google Scholar](#))

Editorial Advisory Language Editor,

Dessy Wardiah (PGRI University of Palembang, Indonesia)

([Scopus ID: 57205058823](#)) ([Google Scholar](#))

Edi Harapan (PGRI University of Palembang, Indonesia)

([SINTA ID: 5995650](#)) ([Google Scholar](#))

Yunika Lestaria Ningsih (PGRI University of Palembang, Indonesia)

([Scopus ID: 57200722069](#)) ([Google Scholar](#))

Editorial Advisory Web Production,

Enggi Ardius, M.Kom (PGRI University of Palembang)

Heru Saputra, S.Kom (PGRI University of Palembang)

Editorial Advisory Technical Editor,

Amiruddin (PGRI University of Palembang, South Sumatra, Indonesia)

([SINTA ID: 6783067](#)),([Google Scholar](#))

Tri Widayatsih (PGRI University of Palembang, South Sumatra, Indonesia)

([SINTA ID:5997521](#)),([Google Scholar](#))

Penerbit

Program Pascasarjana Universitas PGRI Palembang

Jl. Jend. A. Yani Lorong Gotong Royong, 9/10 Ulu, Kec. Seberang Ulu II, Kota Palembang,
South Sumatra 30116, Indonesia,

Telp. (0711) 510043 Fax. (0711) 514782

Email: pps@univpgri-palembang.ac.id

Email: jmksp@univpgri-palembang.ac.id

CONTENTS

Cover	i
Editorial Board	ii
Contents	iv
Improving Teacher's Performance through Change Leadership: Mediated by Job Satisfaction Fahmie Firmansyah, Sudadio Sudadio, Dase Erwin Juansah	1-19
The Parigeuing Leadership: Synergy of Sundanese Cultural Values in Educational Leadership in West Java Prasetyo Agung Darmawan, Diding Nurdin, Sururi Sururi	20-35
Enhancing Educational Quality Through Financial Transparency and Accountability: A Case Study of Pusat Pendidikan Warga Negara Indonesia Erna Sabaniah, Erny Roesminingsih, Muhammad Sholeh	36-56
Implementation of Sanctions for Problem Students at Islamic Boarding Schools Darul Hikmah Taman Pendidikan Islam Medan Ardiansah Rambe, Azizah Hanum	57-74
The Influence of Students' Initial Knowledge and Students' Learning Motivation on the Learning Outcomes Ike Pratiwi Br Limbong, Toni Nasution	75-91
Teacher's Professionalism in Teaching Social Sciences Hafizza Azahra, Eka Susanti	92-111
Point Counter-Point Learning Strategy on the Subject of Social Sciences to Improve the Learning Achievement Nurhalimah Nurhalimah, Ponidi Ponidi	112-124
Local Government Financial Performance: Good Governance, the Effectiveness Internal Control and Competence Roy Budiharjo, Dudi Pratomo, Dini Wahjoe Hapsari	125-138

The Importance of Hadith Learning in the Formation of Islamic Law	139-151
Muhammad Fajri Yusuf, Bona Bargot Riezky Nagabe Siregar	
Innovating Islamic Education Through Technology: Strategies for Overcoming Challenges in Online Learning	152-165
Rulitawati Rulitawati, Sriyanti Sriyanti, Muhammad Zainuddin, Azwar Hadi, Nova Asvio	
Transformation of Visionary and Collaborative Leadership Styles in Contributing Publication Innovation of Madrasah Aliyah	166-187
Alvi Fauzi Alfaruqi, Nurkafidz Nizam Fahmi	
Transformational Leadership in Changing the Education Paradigm: Improving the Quality of Alpha Generation Student	188-201
Ahmad Danial Karomi, Mamlukhah Mamlukhah	
Impact of MSIB Program on the Personal Development of Students at Universitas Muhammadiyah Surakarta	202-216
Amanda Putri Ardani, Suranto Suranto	
Literacy Culture and Its Effectiveness in Improving Indonesian Students' Writing Skills	217-232
Sri Indah Lestari, Tri Indah Kusumawati	
Differentiated Learning: A Solution to Increase Students' Potential Seen from Students' Readiness to Learn, Interests and Learning Profiles	233-244
Muhamad Kristiawan, Connie Connie, Nova Asvio, Wisdi Risanto	
A Systematic Literature Review of Digital Skills and Human Resource Readiness for the Industrial Revolution Era 4.0 and 5.0	245-259
Arief Dermawan, Nur Wening, Yohannes Vemberi, Lucia Ika Fitriastuti	
The Relevance and Impact of Academic Supervision on Educational Excellence in Secondary Schools	260-274
Desy Anita Karolina Sembiring, Meylani Aljeinie Tijow	

The Role of Cognitive Ability in Mediating Active Learning and Learning Discipline on Learning Achievement	275-287
Dionasius Novemasari, Sunarto Sunarto	
Principal's Supervision Strategy to Improve Teachers' Performance Based on Professional Competence	288-309
Cucun Hasanah, Sururi Sururi	
Bridging Excellence: A Multisite Study on Strategic Management and Governance in Inclusive Schools	310-330
Nuphanudin Nuphanudin, Erny Roesminingsih, Amrozi Khamidi, Muhammad Kristiawan, Ainun Ma'rifah, Aristawidya Ansori, Devita Angraeni	
The Effect of Soft Skills and Self Efficacy on Fresh Graduate Job Readiness: Mediation of Work Motivation	331-346
Anissa Fitriyani, Wahyudi Wahyudi, Dedeh Kurniasih	
The Effect of Machine Maintenance and Layout on the Production Process	347-359
Tarisa Alifah, Daman Sudarman	
The Influence of the Principal's Role on the Pedagogic Competence of State Junior High School Teachers	360-371
Hendang Zeta Lestari, Nurkolis Nurkolis, Ngurah Ayu Nyoman Murniati	
Intergenerational Social Tensions in the Workplace: Perspectives on the Role of Lecturers in Collaboration	372-388
Denny Nabawi, Zunaidah, Hamira, Ahmad Khoirun Najib, Rifda Alda Ufaira	
Digitalization of Insurance Business Processes on Life Insurance Sales Productivity	389-406
Joddy Hernady, M. Yani Syafei, Umi Narimawati	

Transformation of Education to Welcome the Golden Generation of Indonesia 2045	407-427
Meilia Rosani, Neta Dian Lestari, Reva Maria Valianti	
Exploring Lived Experience: The Integration of AI in Junior & Senior High Schools in Bandung	428-464
Alfian Supriadi, Sururi, Nurdin	
Analysis of School Readiness in Developing School Digitalization at MA Al Hikmah Kaje	465-484
Sari Mahfiroh, Lutfia Richa Ayu Mustika, Siti Rojaenah, Joko Sulianto	
The Transformational Leadership of The Principal in Fostering a Collaborative Culture Among Educators at State Senior High School 1 Percut Sei Tuan	489-511
Irma Tussa'diyah Hasibuan, Yusuf Hadijaya Yusuf	
The Role of Principal Leadership in Improving the Quality of Education	512-530
Dina Oktapia, Inom Nasution	
Application of Shame Culture in Building Teacher Disciplinary Character at MAPN 4 Medan School	531-555
Okta Elviana Manurung, Nasrul Syakur Chaniago	
Analysis of Reading Comprehension Difficulties Among Fourth-Grade Elementary School Students	556-574
Zahwa Lillatusyika, Siti Quratul Ain	
Student Character Building through Scouting Activities in Elementary School	575-592
Rama Viona Zulfa S, Siti Quratul Ain	
The Impact of Tiktok Social Media on the Behavior of Elementary School Students	593-604
Salsabila Firdausia, Febrina Dafit	

The Effect of Service Quality, Promotion Strategy, and Price Perception on Customer Satisfaction at Adira Finance Singaraja Branch	605-614
Aden Winangun Lutfi, Fridayana Yudiaatmaja, Ni Made Suci	
Correlation between Fear of Missing Out and Academic Stress Medical Students Tanjungpura University	615-627
Wanda Ayuditha Noor Alifia, Fitri Sukmawati, Ery Hermawati	
Leadership Synergy of Principals and School Committees in Improving the Quality of Education: The Perspective of Elementary School Teachers	628-638
Ririn Asparingga, Edi Harapan, Nila Kesumawati	
The Impact of Human Relations and Work Appreciation on Improving Employee Performance at The Department of Population and Civil Registration of Bogor Regency	639-657
Dhiya Fauziah, Nazifah Husainah	
Development of LKPD Through the RADEC Model to Improve Learning Outcomes of Pancasila Education for Class IV SDN 064990 Medan Johor	658-679
Reno Francius Simanullang, Surya Dharma, Sri Sri Milfayetty	
Android-Based Biology Learning Media: A Breakthrough to Improve Senior High School Students' Learning Outcomes	680-699
Atmi Suprpti, Ervan Johan Wicaksana, Dian Arisandy Eka Putra Sembiring	
A Proposal of Rewards-Linked Performance Development System: A Case Study of PT MNO	700-712
Danang Muchammad Gumilang, Yudo Anggoro	
Disability Scholarship Impact Evaluation	713-730
Rizkyta Cahya Maghfira, Victo Anggara Wisesa	
Effectiveness of Participatory Learning Strategies in Student Activity and Result in Fiqih's Subject	731-740
Miftahul Huda, Syarwani Ahmad, Darwin Effendi	

Enhancing Knowledge Management Capabilities to Support Business Competitiveness in a Maritime Company	741-759
Armand A. Putra Utama, Achmad Fajar Hendarman	
Analysis of Determinants of Stock Returns in Transportation Sub-Sector Companies on the IDX	760-777
Yesita Astarina, Claudya Nurcahaya , Dwi Riana	
School Culture in Fostering Teachers' Work Motivation	778-801
Imawati, Ika Maryani, Muhammad Zuhaery	
Democratic Leadership Profile of The Principal in Improving Interpersonal Relations of Teachers at SMP Negeri 3 Welahan	802-825
Noor Ali Fauzi, Bunyamin, Ngurah Ayu Nyoman Murniati	
The Influence of the Principal's Leadership Style on Teacher Performance and Organizational Culture in Primary Schools Sindangkasih District	826-842
Ois Mukhlisin, Syarip Hidayat, Elan	
The Development of a Digital-Based Attendance System to Enhance the Discipline of Fifth Grade Students at SD Negeri 62 Palembang	843-855
Nurul Sari, Edi Harapan, Sri Wahyu Indrawati	
Strategic Brand Positioning Through Cultural Event Programming at Garuda Wisnu Kencana Cultural Park	856-868
Erica Pricilla Tjiadarma, Ilma Aulia Zaim	
Development of Electronic Modules (MOLEK) in Learning to Write Poetry at MTS Nurrodiyah Kota Baru Jambi	869-883
Puji Sholeha, Nazurty, Rustam	
Women Principals in Education: A Literatur Review on Leadership, Gender, and Empowerment	884-897
Asti Putri Kartiwi, Fetty Poerwita Sary, Emal Hadipassa	
Implementation of Madrasah Self-Evaluation in Improving The Quality of Graduates At Mts Astoffaina, Deli Serdang District	898-910
Rabbirham, Amiruddin Siahaan, Syaukani	

911-926

The The Effect of Profitability, Debt Policy, and Investment Decisions on the Value of Insurance Companies Listed on the Indonesia Stock Exchange (2019-2023)

Ikhtiarni, Riyanti

927-942

Analysis Ability Numeracy on Sundanese Manda Game in Mathematics Learning for Grade V in Elementary School

Femi Hidayati, Nur Ngazizah, Titi Anjarini



Improving Teacher's Performance through Change Leadership: Mediated by Job Satisfaction

Fahmie Firmansyah¹, Sudadio¹, Dase Erwin Juansah¹

¹Universitas Sultan Ageng Tirtayasa, Banten, Indonesia

Corresponding author e-mail: 7782220019@untirta.ac.id

Article History: Received on 2 November 2024, Revised on 23 November 2024,
Published on 17 January 2025

Abstract: The purpose of this study is to see the effect of change leadership on teacher's performance through job satisfaction on the performance of Junior High School (SMP) teachers in Cilegon City. The method was ex post facto and uses a questionnaire and research data analysis using path analysis to understand the causal relationship between variables in a model. The results of the study indicate that change leadership has an indirect effect on teacher's performance through job satisfaction. The results of this study present novelty by exploring the role of job satisfaction as a mediator in the relationship between change leadership and teacher's performance. The findings of this study offer new insights into the importance of job satisfaction in strengthening the positive effects of change leadership on teacher's performance.

Keywords: Change Leadership, Job Satisfaction, Teacher's Performance

A. Introduction

Teachers or educators are one of the main factors in the education process, and their job is to educate and transfer knowledge and experience and instil values, culture, and religion in students. The performance of a teacher or educator can be seen from how the teacher develops and improves the quality of himself so that he can produce quality educational output as a form of devotion to the institution. As expressed by Glickman (Bafadal, 2003), "a person will work professionally if the person has a high level of abstraction and high level of commitment." Considering that the role of teachers is vital in the learning process in schools, teachers as educators are expected to be able to carry out their primary tasks, functions and obligations in accordance with their profession. As a profession, the professionalism of a teacher is something that must be fulfilled. This means that a teacher must be able to serve students as learning subjects, treat them fairly, and be able to see various potentials that must be developed. Constitution of the Republic of Indonesia No. Article 1 of Law No. 14 of 2005 concerning Teachers and Lecturers states that "Teachers are professional educators with the main task of educating, teaching, guiding, directing, training, assessing, and evaluating students in early childhood education, formal education,

basic education, and secondary education.”

The role of teachers in achieving quality educational success is essential in improving and developing human resources. Quality Human Resources (HR) who are able to compete in all aspects of life greatly determine the success of national education goals and the progress of the Republic of Indonesia, the existence of competent and qualified teacher human resources in education can help realize student learning achievements and achievements and improve the overall quality of education. There are many variables that can be indicators of increasing school quality, including school facilities and infrastructure, education costs, teachers, education personnel, parental support, student input factors, and school management in organizing education in schools (Irwansyah, 2021).

Teachers with good performance quality will be able to improve the quality of education sustainably, conversely teachers who have performance quality below the minimum standard will hinder the improvement and development of the quality of education. Teachers will perform well if the principal always provides coaching and supervision of teacher's performance. As we know, teachers are one of the most determining variables in the overall education system in an effort to improve student achievement. Therefore, any improvement efforts made to improve the quality of education will only make a significant contribution if they are supported by professional and qualified teachers. Teacher's performance must continue to improve its competence in order to be able to achieve the educational goals that have been set by using various efforts and strategies to achieve them (Zhahira, 2022). Based on data from the results of the 2022 Teacher Competency Examination (UKG), the average score for Cilegon City was 59.03 for pedagogical competence (npd.kemdikbud.go.id). With the pedagogical competence test data in Cilegon City of 59.03, the pedagogical competence of teachers in Cilegon City can be considered low. Pedagogical competence itself is the teacher's ability towards students, designing and implementing learning, evaluating learning outcomes, and developing students to actualize their various potentials (Putra et al., 2023).

This low pedagogical competence can illustrate that there are a number of teachers who need to improve their qualifications and abilities in providing education to students. The impact of low pedagogical competence of teachers can be felt in the learning process, where the quality of teaching and understanding of the material by teachers may need to be improved. This can also have an impact on students' ability to understand and master the subject matter well. In addition, the low pedagogical competence of teachers will have an impact on the low quality of learning carried out by teachers, which will ultimately result in low quality of school education and, in general, will have an impact on the low quality of national education.

To overcome these problems, the critical role of the principal is vital in change

leadership and improving the quality of teacher pedagogy. The role of the principal as a leader in the school environment is vital because he has a full role in developing human resources for teachers and education personnel so that they are able to perform well, which has an impact on improving student learning outcomes. Achieving (Mangundjaya, 2019) educational goals indeed require synergy between the roles of the principal and teachers. A principal who is able to manage the human resources available in the school well and create a work climate and culture effectively and efficiently will be able to facilitate the organization, in this case, the school, to achieve the expected goals (Richard & Gorton, 1976).

Based on this, the principal's leadership plays a vital role in the educational process. As a leader in an educational institution who has full authority over the educational process, including mobilizing and utilizing existing human resources to improve teacher's performance, especially for performance in the field of pedagogical competence (Masruroh et al., 2022). One leadership model that is considered capable of improving teacher's performance is change leadership (Kusumaningrum et al., 2020). Change leadership is an effort made by a leader in an organization to bring about change for the better so that each member of the organization is able to work together to implement the change. According to Sufyanah (2023), Change Leadership is the ability of a leader to initiate, encourage, and supervise a change process in an organization; this ability also involves the planning process to evaluate each change process carried out. Change leadership is a style or way of a change leader who has a passion for making changes and accompanying the change process so that it can produce better conditions (Mangundjaya, 2019). According to Engida et al., (2022) Change leadership is defined as the behavior of direct superiors, which aims to frame and shape organizational change, and create capacity among change recipients to implement change.

Based on the results of Gebretsadik's research (2022) entitled "An Exploration of Change Leadership at Public Higher Education Institutions in Ethiopia," it was found that there is a significant relationship between change leadership and the readiness for change in university academic staff. Furthermore, based on research conducted by Kusumaningrum et al. (2020) entitled "The Influence of Instructional Leadership, Change Leadership, Spiritual Leadership, School Culture, and Professional Ethics on Teacher Teaching Performance," it was found that leadership changes can improve teacher's performance in the teaching and learning process at Islamic Boarding Schools in East Java Province. Then, based on the results of research by Thasbikha et al. (2022) entitled "The Influence of Instructional Leadership, Change Leadership, and Spiritual Leadership Applied at Schools to Teachers' Performance Quality," it was stated that there is a significant influence of leadership changes on the quality of teacher's performance.

Another factor that is considered capable of improving teacher's performance is job

satisfaction. According to Luthans (2011), Job satisfaction is a positive emotional state resulting from an appreciation for one's work or one's work experience. It is further explained that job satisfaction is the result of employees' perceptions of how well a person's work is in providing everything that is seen as necessary through their work results. The term job satisfaction refers to an individual's attitude (emotional reaction) towards their work. Job satisfaction is an effectiveness or emotional response to various aspects of work. A set of employee feelings about whether or not their work is enjoyable. A general attitude towards one's work that shows the difference between the number of rewards workers receive and the amount they believe they should receive.

Job satisfaction is an employee's attitude towards work related to work situations, cooperation between employees, rewards received in work, and matters relating to physical and psychological factors (Loan, 2020). Robbins & Judge (2012) defines job satisfaction as an employee's pleasant or unpleasant income regarding his/her work; this feeling is seen from the employee's good behavior towards work and all things experienced in the work environment. So, it can be concluded that the definition of job satisfaction is a positive attitude from the workforce, including feelings and behavior towards their work through the assessment of one of the jobs as a sense of appreciation in achieving one of the essential values of the job.

Based on the research results of Meidiana et al. (2020) entitled "The Influence of Principal Managerial Competence and Academic Supervision on Teacher's Performance," it was found that the academic supervision variable has a significant effect on teacher's performance, in this case, academic supervision must also be able to increase the potential of teacher's performance and also increase responsibility and make teachers professional. Furthermore, based on the research results of Yuliza et al., (2021) entitled "The Influence of Principal Academic Supervision and Teacher Professional Competence on Quality of Learning" it was found that academic supervision has a strong effect on teacher's performance. Meanwhile, based on the research results of Muttaqin et al. (2023) entitled "The Effect of Academic Supervision, Managerial Competence, and Teacher Empowerment on Teacher's Performance: The Mediating Role of Teacher Commitment," it was found that teacher commitment can be increased through academic supervision from the principal and supervisor, managerial competence from the principal, and teacher empowerment and these three factors, directly and indirectly, affect teacher's performance. Based on the above explanation, the purpose of this study is to see the influence of change leaderships on teacher's performance through job satisfaction.

Until now, no research has been done on change leadership and job satisfaction on teacher's performance. So, based on the description above, the problem in this study is as follows: (1) Is there a direct influence of change leadership on job satisfaction? (2) is there a direct influence of job satisfaction on job satisfaction? (3) is there a direct

influence of change leadership on teacher's performance? (4) is there an indirect influence of change leadership on teacher's performance through job satisfaction?

B. Methods

This study uses a quantitative approach. Quantitative study relies on objective measurements and statistical analysis of data from instruments such as questionnaires or tests. The study method in this study uses ex post facto study to trace the possibility of a causal relationship from a phenomenon that has occurred, namely the influence of change leadership on teacher's performance through job satisfaction (Figure 1). The population of this study were all junior high school teachers in Cilegon City. The sampling technique in this study used purposive sampling so that the samples obtained in this study were all teachers of Junior High School 6 Cilegon City. The number of teachers at Junior High School (SMP) Negeri 6 Cilegon is 36, and the entire population in this study was used as a sample, also called total sampling.

The data collection technique in this study used a questionnaire about change leadership, job satisfaction, and teacher's performance. Before the questionnaire was used, the questionnaire was validated by experts and tested for validity using Pearson product-moment and reliability using Cronbach's alpha. This study uses three instruments, namely instruments to measure change leadership, job satisfaction, and teacher's performance, using a Likert scale with answer choices and scores strongly agree (5), agree (4), sometimes (3), disagree (2), and strongly disagree (1). The data analysis technique in this study used correlational analysis with the Path analysis statistical method, which allows researchers to evaluate the direct and indirect effects of one or more independent variables (exogenous), namely change leadership and satisfaction, on the dependent variable (endogenous), job satisfaction.

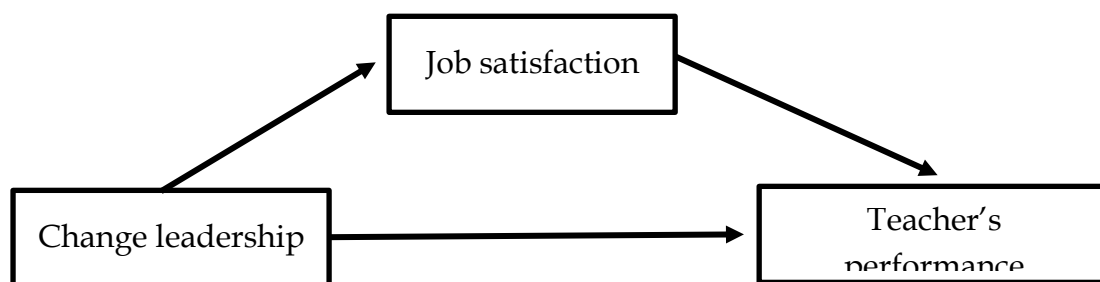


Figure 1. Path Analysis Research Design

C. Results and Discussion

Before data collection, researchers determined the indicators of change leadership variables, job satisfaction, and teacher's performance (table 1). The indicators that

have been compiled are then tested for expert assessment validity with the expert validity test assessment criteria in the table, and the results of the expert assessment scores are presented in Table 3.

Table 1. Indicators of the variables

No.	Variables		
	Job satisfaction	Teacher's performance	Change leadership
1	Salary	Mastery of knowledge	Pioneer
2	Allowances	Learning planning	Implementer
3	Promotions	Learning implementation	Coach
4	Operational procedures	Learning evaluation	
5	Co-workers	Follow-up on learning evaluation results	
6	Nature of work	Improving student achievement	
7	Communication		

Source: Mangundjaya (2019); Uno & Lamatenggo, (2012); Wirawan (2017)

Table 2. Validation result criteria

No.	Score	Category
1	$0,80 < \text{Mean } I - \text{CVI} < 1,00$	Very high validity (very good)
2	$0,60 < \text{Mean } I - \text{CVI} < 0,80$	High validity (good)
3	$0,40 < \text{Mean } I - \text{CVI} < 0,60$	Moderate validity (sufficient)
4	$0,20 < \text{Mean } I - \text{CVI} < 0,40$	Low validity (less)
5	$0,00 < \text{Mean } I - \text{CVI} < 0,20$	Very low validity (bad)
6	$\text{Mean } I - \text{CVI} < 0,00$	Invalid

Source: McLean et al., (1979)

Table 3. Expert judgment validity test results

No.	Expert	Variable		
		Change leadership	Job satisfaction	Teacher's performance
1	Expert I	0,89	0,88	0,90
2	Expert II	0,85	0,88	0,89
3	Expert III	0,89	0,87	0,89
4	Average	0,88	0,88	0,89

Furthermore, a validity test was conducted on 30 teachers who were not included in the population, with the results in table 4 and this validity test uses Pearson Product Moment (PPM).

Table 4. Validity test results

No.	Correlation	Valid	Invalid	Total
1	Change leadership	25	16	41
2	Job satisfaction	26	14	40
3	Teacher's performance	58	19	77

Based on the data in Table 4, The results for the change leadership instrument were 25 valid statements and 16 invalid statements. The results for the job satisfaction

instrument were 26 valid statements and 14 invalid statements. While on the teacher's performance instrument, the results were 58 valid statements and 19 invalid statements. After the validity test was carried out, the next step was the reliability test using Cronbach's alpha (table 5).

Table 5. Reliability test results

No.	Variable	Score reliability	Category
1	Change leadership	0,959	Very high (reliable)
2	Job satisfaction	0,937	Very high (reliable)
3	Teacher's performance	0,940	Very high (reliable)

Based on table 5, the reliability test result score on the variable of change leadership is 0.959, job satisfaction is 0.937, and teacher's performance is 0.940. These results indicate that these three variables have a high level of reliability and are suitable for use in data collection.

Table 6. The result of the correlation coefficient

No	Correlation	Correlation Coefficient	R ²
1	Change leadership on job satisfaction (r12)	0,596**	0,356*
2	Job satisfaction on teacher's performance (r23)	0,793**	0,629*
3	Change leadership on teacher's performance (r13)	0,682**	0,466*

Based on the data in Table 1, the correlation coefficient value of change leadership on job satisfaction is 0.596, which means there is a positive and very significant relationship. The determination coefficient value (R²) of change leadership on job satisfaction is 0.356, which means that 35.6% of change leadership contributes to increasing job satisfaction. The correlation coefficient value of job satisfaction on teacher's performance is 0.793, which means there is a positive and very significant relationship. The determination coefficient value (R²) of job satisfaction on teacher's performance is 0.629, which means that 62.9% of job satisfaction contributes to increasing teacher's performance.

The correlation coefficient value of change leadership on teacher's performance is 0.682, which means there is a positive and very significant relationship. The determination coefficient value (R²) of change leadership on teacher's performance is 0.466, which means that change leadership contributes 46.6% to increasing teacher's performance.

Table 7. The result of the path analysis

No.	Path Analysis	Direct effect	Indirect effect
1	Change leadership on job satisfaction (p12)	0,596**	-
2	Job satisfaction on teacher's performance (p23)	0,600**	-
3	Change leadership on teacher's performance of Job satisfaction (p12) (p23)	-	0,358**

Based on Table 7, the score of the direct influence of change leaderships on job satisfaction is 0.596, the direct influence of job satisfaction on teacher's performance is 0.600, and the indirect influence of change leaderships on teacher's performance through job satisfaction is 0.358.

The Direct Influence of Change Leadership on Job Satisfaction

Based on table 7, change leadership has a direct effect on job satisfaction with a correlation coefficient of 0.596. Change leadership has a direct impact on teacher job satisfaction. The results of this study are in accordance with the opinion Dubey et al., (2023) and Bermiana & Frinaldi (2023) that leadership influences employee performance. The results of this study are in accordance with research by and Bermiana that leadership influences employee performance. Leaders who apply this leadership style provide clear direction, support, and open communication regarding the vision of change (Hendrawan et al., 2021; Poltak, 1967). This creates a transparent work environment and encourages employees to actively participate in the change process so that they feel valued and recognized for their role. In addition, change leadership also often involves developing employee competencies through training, which increases their self-confidence and career opportunities (Kamaludin, 2023). The combination of effective communication, involvement in decision-making, and opportunities for self-development directly contribute to increased job satisfaction because employees feel the positive benefits of a supportive and appreciative work environment (Aruoren, 2023; Genda et al., 2020).

Change leadership plays a role in creating a clear vision and motivating employees to move towards new goals. Leaders can also inspire teachers with innovative ideas and clear directions so that teachers feel motivated and involved, which increases job satisfaction (Arif, 2020; Firmansyah et al., 2018). In addition, leaders with change leadership can also focus on executing change strategies by providing the resources and support needed to achieve goals. This ensures efficient work processes and reduces obstacles so that employees feel more comfortable and are facilitated in carrying out their duties (Fajar et al., 2022). Finally, leaders with change leadership can play a role in supporting teacher development through guidance and constructive feedback. Leaders as mentors can help improve competence and provide emotional support so that teachers feel cared for and appreciated. It can be concluded that leadership affects job satisfaction.

Leadership is critical in improving teacher job satisfaction because the role of leaders, especially principals, is to create a supportive environment, provide clear direction, and facilitate teachers' professional needs. Influential leaders can motivate teachers by building a shared vision of improving the quality of education, providing the necessary support, and appreciating the contribution of each teacher in the learning process (Silahusada et al., 2022; Suzanna & Fauzan, 2022). When teachers feel heard

and appreciated, they tend to be more motivated and satisfied with their work. In addition, good leadership also provides opportunities for teachers to develop through training and professional development, thereby increasing their competence and confidence in teaching. Emotional support and recognition from leaders create a sense of security and satisfaction, which are essential for maintaining teachers' enthusiasm and commitment to teaching and educating students better (Hanif & Rozi, 2024; Suzanna & Fauzan, 2022).

The Direct Influence of Job Satisfaction on Teacher's performance

Based on table 7, job satisfaction has a direct effect on teacher's performance with a correlation coefficient of 0.793. Job satisfaction has a direct impact on teacher's performance because high levels of satisfaction reflect teachers' positive feelings about their work, which in turn motivates them to deliver the best results in teaching (Burhanuddin, 2022).

The results of this study are in line with Inuwa (2016) opinion, which states the importance of job satisfaction in improving individual performance. When individuals feel satisfied with their work, then individuals will consider it as something fun and not feel bored or forced to do their work. The results of this analysis are also in line with research conducted by Kumari et al., (2021), which found a unidirectional relationship between job satisfaction and performance. Therefore, as a conclusion, the higher the job satisfaction, the higher the employee performance.

Job satisfaction has a significant impact on teacher's performance because it creates a positive environment and supports their motivation and commitment to their work (Jalagat, 2016; Lesmana et al., 2022). Research result Aisyaturrido et al., (2021) shows that teachers who are satisfied with their jobs tend to have higher morale, which has a direct impact on the quality of teaching and interactions with students. When teachers feel appreciated and receive adequate support, they are more motivated to innovate in teaching methods and increase student engagement (Emo, 2015; Sulistyaningsih et al., 2023). In addition, job satisfaction also contributes to reducing stress levels that often interfere with performance (Banata et al., 2023). Satisfied teachers will be more disciplined and responsible in carrying out their duties, thereby increasing productivity and student learning outcomes (Yap et al., 2022).

Teachers who are satisfied with their working conditions, school environment, and relationships with colleagues and leaders show tremendous enthusiasm in carrying out their professional duties. Job satisfaction creates an intrinsic drive that makes teachers more enthusiastic about teaching, more creative in developing learning strategies, and more persistent in helping students achieve optimal learning outcomes (Kristiano & Bernarto, 2015). In addition, high job satisfaction can increase a sense of belonging to the school so that teachers feel responsible for the quality of education

provided. Teachers who are satisfied with their jobs tend to be more disciplined, attend on time, and have low absenteeism rates. They are also more proactive in collaborating with colleagues to improve learning methods and improve the quality of teaching. Job satisfaction also reduces stress and fatigue levels so that teachers are able to maintain consistent teaching quality and focus on student needs (Feri et al., 2020; Soares Yuningsih et al., 2023).

Job satisfaction also improves teacher's performance in non-academic aspects, such as character-building for students and participation in school activities. Satisfied teachers are more enthusiastic about participating in professional development programs and are active in extracurricular activities, which also enrich students' learning experiences (Miyarti et al., 2023). Job satisfaction encourages teachers to take on the role of mentors and leaders in the classroom, which not only has an impact on improving students' academic achievement but also on creating a positive school climate. Thus, job satisfaction becomes an important factor that strengthens teachers' motivation, dedication, and overall performance (Kapitaraw et al., 2023).

The Direct Influence of Change Leadership on Teacher's Performance

Based on table 7, change leadership has a direct effect on teacher's performance with a correlation coefficient of 0.682. Change leadership has a direct influence on teacher's performance because this leadership characteristic focuses on innovation and adaptation in the school environment. Change leaders, such as principals who act as change agents, are able to create a clear vision for educational transformation and inspire teachers to be actively involved in the process (Murwantini, 2017; Rahayu et al., 2022). Teachers led by change leaders feel more motivated because they get clear direction and goals regarding curriculum development, the use of technology in learning, and strategies to improve teaching quality. This motivation encourages teachers to strive to improve their competence and be more effective in delivering material to students (Barnoto, 2021).

Change leadership influences teacher's performance because it is able to create an environment that supports, motivates, and inspires teachers to achieve better educational goals (Hariadi & Muafi, 2022; Ling et al., 2018). This will increase teacher motivation and work discipline so that they are more committed to carrying out their duties and responsibilities well (Abasilim et al., 2019; Mahfouz et al., 2019). In addition, effective leadership can also improve communication and collaboration between teachers and between teachers and school leaders, creating a conducive work atmosphere (Kock et al., 2019). When teachers feel appreciated and supported, they tend to show higher performance, which has a direct impact on the quality of learning and student learning outcomes.

The dimensions of change leadership, namely pioneers, implementers, and coaches, also play an essential role in improving teacher's performance. As pioneers, leaders initiate innovative changes and inspire teachers to think creatively in creating relevant and exciting learning methods (Silitonga et al., 2022). Teachers who feel driven by this innovation are more open to trying new strategies, improving their pedagogical skills, and developing more effective teaching practices. The implementer dimension ensures that planned changes can be realized well through adequate resource support. With this support, teachers have access to better teaching tools and materials, which facilitate more efficient and high-quality teaching (Isa et al., 2022).

Furthermore, the coach dimension in change leadership focuses on professional development and direct guidance to teachers. Leaders who act as coaches provide constructive feedback and support the improvement of teacher competencies through training and mentoring (Andayani, 2021). Teachers who receive this guidance will feel more confident in implementing innovative learning methods and be more prepared to face challenges in the teaching process (Alutu, 2006). Guidance provided by leaders as coaches helps teachers develop new skills and improve teaching effectiveness, which ultimately impacts student learning outcomes (Endarto et al., 2023).

Change leadership creates a positive and collaborative school climate where teachers feel valued and encouraged to continue to develop. This climate raises teachers' enthusiasm and commitment to carrying out their duties and spurs long-term performance improvements (Dasor, 2022). With change leadership, teachers are not only motivated to meet minimum performance standards but are also encouraged to exceed expectations and contribute maximally to creating meaningful learning experiences for students (Kristiani et al., 2022).

The Indirect Influence of Change Leadership on Teacher's Performance through Job Satisfaction

Based on table 7, change leadership influences teacher's performance through job satisfaction with a correlation coefficient of 0.358. Change leadership has a direct influence on teacher's performance through job satisfaction because leaders who apply this leadership style tend to create an innovative and supportive work environment (Dania & Yohanna, 2023). Change leaders focus on developing a clear and inspiring vision and encourage active participation from teachers in the change process. This creates a more positive work atmosphere where teachers feel valued and included in decision-making. When teachers feel that their role is vital in achieving school goals, their job satisfaction increases, which in turn motivates them to improve their performance (H Bay & W. Dj. Pomalato, 2021).

Change leadership has an indirect effect on teacher's performance through job satisfaction because effective leaders can create a supportive work environment and

motivate teachers to excel (Hasibuan, 2022). When leaders implement positive change strategies, such as improving communication, providing support, and involving teachers in decision-making, this can increase their job satisfaction (Safrida et al., 2023; Susilawati, 2021). Teachers who are satisfied with their jobs tend to have higher morale and greater involvement in the learning process, which in turn will improve their performance in the classroom (Abha et al., 2022). Research result from Elmazi (2018) shows that job satisfaction serves as a mediator between change leadership and teacher's performance; that is, although change leadership does not directly affect performance, its impact is seen through increased job satisfaction experienced by teachers.

Job satisfaction is an essential mediator in the relationship between change leadership and teacher's performance. Dimensions in change leadership, such as pioneer, implementer, and coach, contribute to increased job satisfaction that has an impact on teacher's performance (Mangundjaya, 2019). As a pioneer, the leader leads change with innovative ideas, inspiring teachers to explore new teaching methods. Teachers who feel supported by this innovation have a greater sense of satisfaction because they get the opportunity to develop and be creative in learning (H. Al Rasyid, 2015). This satisfaction triggers higher work enthusiasm so that they are more committed to providing quality teaching results.

Furthermore, the implementer dimension in change leadership ensures that the initiated changes are implemented effectively through adequate support, such as training and provision of resources (Niviana et al., 2021). When teachers feel well facilitated by the leader, they become more satisfied with the conducive and supportive work environment. This increased job satisfaction directly affects teacher's performance, as they feel more confident and have the tools needed to carry out their teaching duties better. Satisfied teachers also tend to demonstrate proactive work behaviours, such as participating in professional development activities and collaborating with colleagues (Guritno, 2005; Mariani & Subandrio, 2021).

The coach dimension in change leadership plays a vital role in strengthening the relationship between leadership, job satisfaction, and teacher's performance. Leaders as coaches provide emotional support and direct guidance that helps teachers overcome challenges in teaching (Muhammad Latif, 2022). Teachers who receive support and positive feedback feel more appreciated and satisfied with their work. This job satisfaction encourages them to improve their performance in more consistent and innovative ways and focus on achieving better student learning outcomes (Lantu & Irfana, 2019; Murod & Shohib, 2022). Thus, change leadership through increased job satisfaction has been proven effective in significantly influencing teacher's performance.

D. Conclusions

Change leadership has a significant influence on teacher's performance through job satisfaction. This is by the results of the study change leadership affects teacher's performance through job satisfaction with a correlation coefficient value of 0.358. Effective leaders can create a positive and supportive work environment, increasing teacher job satisfaction. When teachers feel appreciated, listened to, and involved in decision-making, they tend to show higher motivation and commitment to their tasks. This job satisfaction serves as a bridge connecting leadership style with teacher's performance; the higher the job satisfaction, the better the performance shown by teachers in the classroom.

E. Acknowledgement

We would like to thank the principal of State Junior High School (SMP N) 6 Cilegon City who has given us permission to conduct research at the school. We also express our gratitude to the parties who have helped us in this research that we cannot mention one by one.

References

- Abasilim, U. D., Gberevbie, D. E., & Osibanjo, O. A. (2019). Leadership Styles and Employees' Commitment: Empirical Evidence from Nigeria. *SAGE Open*, 9(3). <https://doi.org/10.1177/2158244019866287>
- Abha, A., Astuti, W., & Triatmanto, B. (2022). The Effect of Knowledge Sharing on Teacher's performance Mediated by Teacher Job Satisfaction in Vocational High Schools in Malang City. *International Journal of Environmental, Sustainability, and Social Science*, 2(1), 31–35. <https://doi.org/10.38142/ijess.v2i1.51>
- Aisyaturrido, A., Wibowo, I., & SE. MM, Nuridin. (2021). The Effect of Leadership and Work Environment on Job Satisfaction Through Motivation as a Mediation Variables in PT. Trinitan Plastic Industries. *International Journal of Business and Social Science Research*, 2(2), 7–15. <https://doi.org/10.47742/ijbssr.v2n2p2>
- Alutu, A. N. G. (2006). The Guidance Role of The Instructor in The Teaching and Learning Process. *Journal of Instructional Psychology*, 33(1), 44–53. <https://link.gale.com/apps/doc/A144014459/AONE?u=anon~c0750489&sid=googleScholar&xid=0dab617a>
- Andayani, F. (2021). Improving The Performance of Creative Product and Entrepreneurial Teachers through The Entrepreneurial School Production Program. *Manajerial: Jurnal Inovasi Manajemen Dan Supervisi Pendidikan*, 1(2), 175–181. <https://doi.org/10.51878/manajerial.v1i2.647>
- Arif, M. L. (2020). The Influence of Leaders' Emotional Intelligence, Work Motivation and Work Discipline on the Performance of Employees at the Investment and

- Integrated Service Office of the Religious Regency. *Target: Jurnal Manajemen Bisnis*, 2(1), 71–84. <https://doi.org/10.30812/target.v2i1.702>
- Aruoren, E. E. (2023). Leadership Behaviour Organizational Citizenship Behaviour and Job Satisfaction: is There a Relationship. *Journal of Multidisciplinary Research*, 4(1), 212–222.
- Bafadal, I. (2003). *Elementary School Quality Improvement Management, From Centralization to Decentralization*. Bumi Aksara.
- Banata, A., Pandjaitan, N. K., & Ramly, A. T. (2023). Teachers Turnover Intention: The Role of Work Motivation, Job Stress, And Organisational Commitment. *International Journal of Social Service and Research*, 3(11), 2931–2941. <https://doi.org/10.46799/ijssr.v3i11.587>
- Barnoto, B. (2021). Responding to Changes in Fulfilling Human Resource Needs at SMP Negeri 1 Pacet. *Munaddhomah: Jurnal Manajemen Pendidikan Islam*, 1(1), 1–10. <https://doi.org/10.31538/munaddhomah.v1i1.27>
- Bermana, G., & Frinaldi, A. (2023). The Influence of Leadership, Organizational Commitment on Organizational Citizenship Behavior Moderated by Job Satisfaction. *Jurnal Ilmiah Ilmu Administrasi Publik*, 13(1), 75–90. <https://doi.org/10.26858/jiap.v13i1.43170>
- Burhanuddin. (2022). *The Role of Work Motivation, Work Stress and Job Satisfaction on Teacher's performance*. In *Motivation and Attitude in Classroom Management*.
- Dania, R. F. R., & Yohanna, C. (2023). The Effectiveness of Transformational Leadership and Job Satisfaction in Maintaining the Performance of Vocational High School Teachers in the Transition Period. *Jurnal Ilmu Pendidikan Nonformal*, 09(01), 283–292. <https://doi.org/http://dx.doi.org/10.37905/aksara.9.1.283-292.2023>
- Dasor, Y. W. (2022). The Influence of School Climate on the Quality of Education in Elementary Schools. *JIPD: Jurnal Inovasi Pendidikan Dasar*, 6(2), 122–129. <https://doi.org/https://doi.org/10.36928/jipd.v6i2.1456>
- Dubey, P., Pathak, A. K., & Sahu, K. K. (2023). Assessing The Influence of Effective Leadership on Job Satisfaction and Organisational Citizenship Behaviour. *Rajagiri Management Journal*, 17(3), 221–237. <https://doi.org/10.1108/ramj-07-2022-0108>
- Elmazi, E. (2018). Principal Leadership Style and Job Satisfaction Of High School Teachers. *European Journal of Education*, 1(3), 42–48. <https://doi.org/10.26417/ejed.v1i3.p109-115>
- Emo, W. (2015). Teachers' motivations for initiating innovations. *Journal of Educational Change*, 16(2), 171–195. <https://doi.org/10.1007/s10833-015-9243-7>
- Endarto, Egar, N., & Nurkolis. (2023). The Influence of The Principal's Role as a Motivator, Teacher Work Motivation, and Teacher Internship on The Professional Competence of Productive Teachers in State Vocational High Schools in Grobogan District. *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, 9(2). <https://doi.org/10.36989/didaktik.v9i2.906>

- Engida, Z. M., Alemu, A. E., & Mulugeta, M. A. (2022). The effect of change leadership on employees' readiness to change: the mediating role of organizational culture. *Future Business Journal*, 8(1). <https://doi.org/10.1186/s43093-022-00148-2>
- Fajar, S. M., Herawati, J., & Kurniawan, I. S. (2022). The Influence of Positive Leadership and Supportive Leadership on Human Resource Productivity Mediated by Positive Employee Perceptions. *KINERJA*, 19(1). <https://doi.org/10.30872/jkin.v19i1.10904>
- Feri, S., Rahmat, A., & Supeno, B. (2020). The Influence of Motivation, Transformational Leadership Style and Organizational Culture on Employee Performance Through Job Satisfaction as an Intervening Variable Study at PT. Champion Kurnia Djaja Technologies. *INOBI: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, 4(1). <https://doi.org/10.31842/jurnalinobis.v4i1.172>
- Firmansyah, F., Komala, R., & Rusdi, R. (2018). Self-efficacy and motivation: Improving biology learning outcomes of senior high school students. *JPBI (Jurnal Pendidikan Biologi Indonesia)*, 4(3), 203–208. <https://doi.org/10.22219/jpbi.v4i3.6878>
- Gebretsadik, D. M. (2022). An Exploration of Change Leadership at Public Higher Education Institutions in Ethiopia. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221091256>
- Genda, A., Arifin, S., & Sabiq, M. (2020). Leaders of Change: Reflections on the Emergence and Development of Sociological Studies. *Hasanuddin Journal of Sociology*. <https://doi.org/10.31947/hjs.v2i1.10558>
- Guritno, W. (2005). The Influence of Employee Perceptions Regarding Leadership Behavior, Job Satisfaction and Motivation on Performance. *Jurnal Riset Ekonomi Dan Bisnis*, 63–74(1).
- H Bay, I., & W. Dj. Pomalato, S. (2021). Leadership Behavior of the Principal at State Senior High School 1 Lemito. *Berajah Journal*, 2(1). <https://doi.org/10.47353/bj.v2i1.60>
- Hanif, M., & Rozi, M. F. (2024). The Influence of Principal Leadership on the Performance of High School Teachers in Mojokerto Regency. *Educational Leadership: Jurnal Manajemen Pendidikan*, 3(2). <https://doi.org/10.24252/edu.v3i2.43142>
- Hariadi, A. R., & Muafi, M. (2022). The effect of transformational leadership on employee performance mediated by readiness to change & work motivation: A survey of PT. Karsa Utama Lestari employees. *International Journal of Research in Business and Social Science* (2147- 4478), 11(6). <https://doi.org/10.20525/ijrbs.v11i6.1945>
- Hasibuan, S. (2022). The Effect of Organizational Culture, Principal Leadership and Motivation on Teacher's performance in Madrasah. *AL-TANZIM: Jurnal Manajemen Pendidikan Islam*, 6(1). <https://doi.org/10.33650/al-tanzim.v6i1.3228>
- Hendrawan, A. Y., Mambang, M., Hati Waruwu, R., & Pebrianti, E. W. (2021). The Role of Visionary Servant Leadership in Educating and Producing Future

- Leaders with Strong Character during the COVID-19 Pandemic. *Jurnal Pendidikan Indonesia*, 2(4). <https://doi.org/10.36418/japendi.v2i4.151>
- Inuwa, M. (2016). Job Satisfaction and Employee Performance: An Empirical Approach The Millennium University Journal. *The Millennium University Journal*, 1(12). <https://doi.org/https://doi.org/10.58908/tmuj.v1i1.10>
- Irwansyah, R. (2021). Perkembangan Peserta Didik. Widina Bhakti Persada.
- Isa, I., Asrori, M., & Muharini, R. (2022). The Role of the Principal in Implementing the Independent Curriculum in Elementary Schools. *Jurnal Basicedu*, 6(6). <https://doi.org/10.31004/basicedu.v6i6.4175>
- Jalagat, R. (2016). Job Performance, Job Satisfaction, and Motivation: A Critical Review of their Relationship. *International Journal of Management and Economics*, 5(6).
- Kamaludin, K. (2023). Kepala Sekolah Sebagai Pemimpin Perubahan Dalam Pemberdayaan Warga Sekolah. *Jurnal Wahana Pendidikan*, 10(2). <https://doi.org/10.25157/jwp.v10i2.11309>
- Kapitaraw, B., Kusdyah, I., & . F. (2023). The Influence of Work Discipline, Motivation, and Job Satisfaction on the Performance of Integrated Health Vocational School Teachers in Biak Numfor Regency, Papua Province. *Jurnal Ilmiah Riset Aplikasi Manajemen*, 1(2). <https://doi.org/10.32815/jiram.v1i2.39>
- Kock, N., Mayfield, M., Mayfield, J., Sexton, S., & De La Garza, L. M. (2019). Empathetic Leadership: How Leader Emotional Support and Understanding Influences Follower Performance. *Journal of Leadership and Organizational Studies*, 26(2). <https://doi.org/10.1177/1548051818806290>
- Kristiani, S., Fitria, H., & Mulyadi, M. (2022). The Influence of Leadership Style and Work Motivation on Teacher's performance. *Jurnal Pendidikan Tambusai*, 6(3). <https://doi.org/10.31004/jptam.v6i3.5045>
- Kristiano, & Bernarto, I. (2015). The Influence of Job Satisfaction, Work Motivation, and Work Stress on Teachers' Organizational Commitment. *Jurnal Manajemen*, 12(1).
- Kumari, K., Barkat Ali, S., un Nisa Khan, N., & Abbas, J. (2021). Examining the Role of Motivation and Reward in Employees' Job Performance through Mediating Effect of Job Satisfaction: An Empirical Evidence. *International Journal of Organizational Leadership*, 10(4). <https://doi.org/10.33844/ijol.2021.60606>
- Kusumaningrum, D. E., Sumarsono, R. B., & Gunawan, I. (2020). The Influence of Instructional Leadership, Change Leadership, Spiritual Leadership, School Culture, and Professional Ethics on Teacher Teaching Performance. *Jurnal Manajemen Dan Supervisi Pendidikan*, 4(3), 198-219. <https://doi.org/10.17977/um025v4i32020p198>
- Lantu, R. Z., & Irfana, T. B. (2019). Leadership and Job Satisfaction Impact on Teacher's performance. *Jurnal Ilmiah Manajemen Ubhara*, 1(1). <https://doi.org/10.31599/jmu.v6i1.494>
- Lesmana, M. T., Nasution, A. E., & Handoko, D. T. (2022). The Role of Employee Job Satisfaction: Work Discipline and Work Environment. *Journal of International Conference Proceedings*, 5(2). <https://doi.org/10.32535/jicp.v5i2.1718>

- Ling, B., Guo, Y., & Chen, D. (2018). Change leadership and employees' commitment to change: A multilevel motivation approach. *Journal of Personnel Psychology*, 17(2). <https://doi.org/10.1027/1866-5888/a000199>
- Loan, L. T. M. (2020). The influence of organizational commitment on employees' job performance: The mediating role of job satisfaction. *Management Science Letters*, 10(14). <https://doi.org/10.5267/j.msl.2020.6.007>
- Luthans, F. (2011). *Organizational Behavior: An Evidence - Based Approach 12 th Edition* (12th ed.). The Mc Grow - Hill Companies, Inc.
- Mahfouz, S. A., Awang, Z., & Muda, H. (2019). The impact of transformational leadership on employee commitment in the construction industry. *International Journal of Innovation, Creativity and Change*, 7(10).
- Mangundjaya, W. L. (2019). *Local Wisdom, Culture, and Leadership of Change* (1st ed.). Graha Ilmu.
- Mariani, & Subandrio. (2021). The Influence of Leadership, Work Motivation and Work Discipline on Employee Performance at PT Thamrin Brothers. *Jurnal Entrepreneur Dan Manajemen Sains*, 2(2). <https://doi.org/https://doi.org/10.36085/jems.v2i2.1615>
- Masruroh, M., Mansur, R., & Wiyono, D. F. (2022). Principal Leadership Model in Improving Pedagogical Competence and Professional Competence of Islamic Religious Education Teachers at SMPN 03 Jabung. In *Vicratina: Jurnal Ilmiah*.
- McLean, L. D., Guilford, J. P., & Fruchter, B. (1979). Fundamental Statistics in Psychology and Education. *Educational Researcher*, 8(3). <https://doi.org/10.2307/1174363>
- Meidiana, M., Ahmad, S., & Destiniar, D. (2020). The Influence of Principal Managerial Competence and Academic Supervision on Teacher's performance. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 5(2). <https://doi.org/10.31851/jmksp.v5i2.3754>
- Miyarti, M., Egar, N., & Soedjono, S. (2023). The Influence of School Culture, Teacher Job Satisfaction, and Teacher Career Development on Teacher's performance. *Jurnal Manajemen Pendidikan (JMP)*, 11(3). <https://doi.org/10.26877/jmp.v11i3.14989>
- Muhammad Latif. (2022). Situational Leadership Model of the Principal in Improving Teachers' Work Discipline at SMK Polimedik, Depok City. *Angewandte Chemie International Edition*, 6(11), 951-952., 119(4).
- Murod, N. K. A. M., & Shohib, M. (2022). The influence of collaborative leadership and job satisfaction on teacher's performance. *Cognicia*, 10(2). <https://doi.org/10.22219/cognicia.v10i2.22459>
- Murwantini, S. (2017). Principals as Change Leaders in Vocational High Schools to Support the Implementation of the 2013 Curriculum. *TAMAN VOKASI*, 2(2). <https://doi.org/10.30738/jtvok.v5i2.2521>
- Niviana, A., Giatman, M., & Ernawati, E. (2021). Literature study: the role of principal leadership on teacher's performance in Padang City. *JRTI (Jurnal Riset Tindakan Indonesia)*, 6(2). <https://doi.org/10.29210/3003966000>

- Poltak, R. (1967). The Influence of Leader Character on Effective Leadership. *Angewandte Chemie International Edition*, 6(11), 951–952.
- Putra, A. E., Taufiqur Rohman, M., Linawati, L., & Hidayat, N. (2023). The Influence of Digital Literacy on Teachers' Pedagogical Competence. *Murhum: Jurnal Pendidikan Anak Usia Dini*, 4(1). <https://doi.org/10.37985/murhum.v4i1.185>
- Rahayu, R., Rosita, R., Rahayuningsih, Y. S., Hernawan, A. H., & Prihantini, P. (2022). Implementation of Independent Learning Curriculum in Driving Schools. *Jurnal Basicedu*, 6(4). <https://doi.org/10.31004/basicedu.v6i4.3237>
- Rasyid, H. Al. (2015). Function of Teacher Working Group (KKG) for the Development of Primary School Teacher Professionalism. *Jurnal Elektronik Universitas Negeri Malang*, 6(19). <https://doi.org/http://dx.doi.org/10.17977/um009v24i22015p143-150>
- Richard, A., & Gorton. (1976). *School Administration*. Brown Company Publisher.
- Robbins, S., & Judge, T. A. (2012). *Organizational behavior*. Pearson Education.
- Safrida, S., Silalahi, R. M. P., & Tannady, H. (2023). The Role of School Principal Leadership Style, Work Environment and Family Support on PAUD Teacher's performance. *Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(3). <https://doi.org/10.31004/obsesi.v7i3.4259>
- Silahasada, A. C., Sauri, S., & Ghoeir, H. F. (2022). The Influence of Leadership and School Climate on Teacher's performance in State Senior High Schools in Sumedang Regency. *JlIP-Jurnal Ilmiah Ilmu Pendidikan*, 5(4). <https://doi.org/10.54371/jljp.v4i5.518>
- Silitonga, T. B., Saptono, E., Sulistiyanto, S., & Thoyibi, T. (2022). The managerial role of school principals in developing national defense awareness during the Covid-19 pandemic. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 8(2). <https://doi.org/10.29210/020221369>
- Soares Yuningsih, E., Perseveranda, M. E., Paridy, A., Sia Niha, S., Yasinto, Y., & Man, S. (2023). The Influence of Leadership, Work Environment and Work Discipline on Employee Performance with Job Satisfaction as an Intervening Variable (Study on the Service Unit of the New Coastal Crossing Port - Rote). *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, 4(1). <https://doi.org/10.38035/jmpis.v4i1.1439>
- Sufyanah, B. (2023). Basic Concepts of Change Leadership. *INTIZAM: Jurnal Manajemen Pendidikan Islam*, 7(1), 1–14.
- Sulistyaningsih, S., Notosudjono, D., & Sunardi, O. (2023). Strengthening Empowerment, Self-Efficacy, and Motivation in Efforts to Increase Teacher Creativity. *International Journal of Social Health*, 2(8). <https://doi.org/10.58860/ijsh.v2i8.90>
- Susilawati, Y. (2021). Relationship of Transformational Leadership, Interpersonal Communication with Teacher's performance through Teacher Discipline. *J Adv Educ Philos*, 5(11).

- Suzanna, D., & Fauzan, R. (2022). The Influence of Principal Leadership on High School Teacher's performance in Sintang Regency. *Proceeding Seminar Nasional Bisnis*, 6(2017).
- Thasbikha, A. S., Bafadal, I., Sumarsono, R. B., & Supriyanto, A. (2022). Innovative Leadership of Principals in Effective Online Learning Management. *Ilmu Pendidikan: Jurnal Kajian Teori Dan Praktik Kependidikan*, 7(1).
- Yap, C. C., Mohamad Som, R. B., Sum, X. Y., Tan, S. A., & Yee, K. W. (2022). Association Between Self-Esteem and Happiness Among Adolescents in Malaysia: The Mediating Role of Motivation. *Psychological Reports*, 125(3).
<https://doi.org/10.1177/00332941211005124>
- Yuliza, Fitria, H., & Eddy, S. (2021). The Influence of Principal Academic Supervision and Teacher Professional Competence on Quality of Learning. *Jurnal Pendidikan Tambusai*.
- Zhahira, J. (2022). Principal Managerial Competence in Improving Teacher's performance. *Journal of Educational Research*, 1(1).
<https://doi.org/10.56436/jer.v1i1.16>

The Parigeuing Leadership: Synergy of Sundanese Cultural Values in Educational Leadership in West Java

Prasetyo Agung Darmawan¹, Diding Nurdin¹, Sururi¹

¹Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia

Corresponding author e-mail: tyoagung05@upi.edu

Article History: Received on 9 November 2024, Revised on 4 December 2024,
Published on 17 January 2025

Abstract: *Parigeuing* leadership, rooted in Sundanese cultural values, underscores a leader's effective communication rooted in local traditions. This study explores the leadership of the Head of the West Java Provincial Education Office as a representation of educational leadership in Sundanese society, with a focus on communication practices aligned with *parigeuing* principles. A qualitative case study methodology was employed to gather data through comprehensive, in-depth interviews, direct observations of the leader's communication style, and document analysis of the manuscript. Seven informants, including division heads, staff members, and a philology expert provided insights into the manifestation of *parigeuing* leadership. The findings highlight that *parigeuing* leadership is evident in the leader's approach to delivering instructions, guidance, and motivation, with *dasa pasanta* serving as a guiding framework. This study contributes to the theoretical advancement of inclusive educational leadership models grounded in local cultural values, providing practical insights for leaders in Sundanese society and beyond.

Keywords: Communication, *Dasa Pasanta*, Leadership, *Parigeuing*

A. Introduction

Parigeuing leadership represents a value-based approach that defines leadership as a communication process grounded in the esteemed values of Sundanese culture. This leadership model draws from the traditions of the Sundanese ancestors. The concept is effectively illustrated in the ancient manuscript *Sanghyang Siksa Kandang Karesian*, which was completed in 1518 AD (Darajat & Suherman, 2021; Nuraeni et al., 2020). *Parigeuing* leadership reflects noble values, particularly the Sundanese principle of *ngageuing keun batur*, which promotes providing guidance, direction, and constructive feedback to team members. This approach prioritizes sensitivity and respect, ensuring that interactions are constructive and do not offend the individuals involved. (Permana et al., 2020). *Parigeuing* leadership as a value-based practice rooted in Sundanese cultural traits upholds noble values such as *someah*, *silih asih*, *silih asuh*, and *silih asah* as guiding principles (Badriah et al., 2021; Hidayat & Hafiar, 2019).

Parigeuing leadership is an ideal reference and guide for Sundanese leaders as it incorporates ethics and morality in leadership practices embodied in the concept of *dasa pasanta*. The concept of *dasa pasanta* consists of ten core values in the Sundanese leadership style, emphasizing how a leader issues commands or directives to enable followers to comply without feeling pressured or offended (Prihana et al., 2020). Therefore, *parigeuing* leadership serves as a relevant guide for contemporary Sundanese leaders in various fields and reassures them that they can achieve success while staying true to their ethical and moral values.

Parigeuing leadership, a relevant leadership model across various sectors, including educational institutions at the school level, regional educational leadership, and even national scale, strongly emphasizes effective communication. In the context of regional educational leadership, the Head of the Education Office becomes a key figure (Syafaruddin et al., 2022). The Head of the West Java Education Office, a crucial figure in educational leadership within a vast administrative region characterized by a community that values Sundanese culture, consistently garners significant attention. One of the Head's primary responsibilities is coordinating and effectively communicating regional education policies to all relevant stakeholders (Andriansyah et al., 2021; Wonua et al., 2020). In executing this role, the communication skills of an education office leader, a key component of *parigeuing* leadership, are crucial to effective leadership. Effective leadership communication, a critical competency for leaders in the 21st century, is a vital part of the *parigeuing* leadership skill set (Ayub et al., 2014; Herlinawati et al., 2024; Rehan et al., 2024). Therefore, understanding and applying *parigeuing* leadership is highly relevant in supporting the Head of the Education Office's role as a leader in coordinating regional educational policies.

The circumstances reveal that the Sundanese community and its leaders must enhance their understanding of *parigeuing* leadership. A preliminary study, which included an interview with a philology expert, has shown a lack of research and surveys assessing the comprehension and application of this leadership concept among Sundanese leaders. A contributing factor to this situation is the insufficient focus and scholarship on value-based leadership models, particularly those rooted in local wisdom, such as *parigeuing* leadership, compared to Western leadership frameworks (Atwater et al., 2021; Ly, 2020). Consequently, this gap has resulted in a shortfall of effective Sundanese leadership at the national level across various sectors, including education.

In recent decades, Ir. H. Djuanda Kartawidjaja and Umar Wirahadikusuma were two notable Sundanese leaders who successfully attained top leadership positions at the national level in Indonesia (Purwoko, 2020; Widodo et al., 2020; Yustitiningtyas, 2015). The current absence of Sundanese leaders in national governance is closely associated with the decline of the *Ki Sunda leadership* identity. This lack of representation can be attributed to a waning recognition of the principles underlying

Ki Sunda's leadership. A significant factor contributing to this phenomenon is the cultural concept of *mangga ti payun*, which translates to *please go ahead*. This notion highlights humility and enriches Sundanese culture; however, it may impede the pursuit of strategic leadership roles due to a constrained competitive mindset among Sundanese leaders (Jamaludin & Novari, 2022; Sujatmiko, 2014; Prihana et al., 2020).

Research on *parigeuing* leadership constitutes an underexplored area, revealing a significant gap in academic discourse. A comprehensive review of existing studies allows us to pinpoint this gap and appreciate its relevance to our field. A prominent investigation that addresses this issue explores the concept of *parigeuing* in the context of leadership and political communication through a content analysis of four ancient Sundanese manuscripts. The results indicate a fundamental consistency in the principles of leadership and political communication presented in these manuscripts, which is vital for advancing our understanding of *parigeuing* leadership (Permana et al, 2020).

Sofiani (2022) conducted a study to develop teaching materials based on the Galuh Regent Encyclopedia, anchored in the concept of *parigeuing*. These materials are designed to cultivate leadership qualities among prospective history teacher students in Priangan Timur. The study's findings reveal that the content of the Galuh Regent Encyclopedia, which emphasizes *parigeuing* leadership values, significantly influences students. It effectively motivates them to internalize these principles, enhancing their leadership potential.

As indicated in the preliminary findings, this study aligns with previous research concerning *parigeuing* leadership and the *dasa pasanta* principles, which serve as its foundational guidelines. However, it distinguishes itself by exploring the characteristics of educational leadership within contemporary educational leadership practices employed by the Head of the West Java Education Office.

This research analyzes explicitly the communication style of the Head of the West Java Education Office, identifying it as a critical leadership skill for the 21st century. The findings offer practical insights that can be effectively implemented in educational leadership contexts. Therefore, this study seeks to address the existing research gap by situating the concept of *parigeuing* leadership within the educational leadership framework. Its goal is to provide theoretical and practical contributions that advance leadership models grounded in local cultural wisdom.

The preliminary study indicates a significant gap in the understanding of *parigeuing* leadership, illustrating an urgent need for research focused on its implementation in educational leadership. These findings highlight the critical importance of investigating *parigeuing* to preserve it as an integral aspect of the cultural heritage of the Sundanese people. Furthermore, this research is vital for introducing and developing *parigeuing* within contemporary leadership frameworks.

This study aims to enhance leadership theories by integrating local cultural perspectives, promoting a more inclusive approach. It specifically endeavors to assist contemporary Sundanese leaders by providing a leadership model grounded in local wisdom. Furthermore, this research supports the initiative to secure UNESCO recognition for the *Sanghyang Siksa Kandang Karesian* manuscript as part of its Memory of the World program, emphasizing the significant values encompassed within this text.

This research underscores the critical importance of preserving *parigeuing* leadership, a vital element of the cultural heritage of the Sundanese people. The study presents an innovative perspective by analyzing the values associated with *parigeuing* leadership within contemporary practices, mainly focusing on leaders' communication strategies. It aims to illustrate that *parigeuing* leadership embodies universal values that remain relevant and resilient across time. This study seeks to address the fundamental question: How does the leadership of the Head of the West Java Education Office exemplify educational leadership in West Java through communication practices that adhere to the principles of *parigeuing* leadership? The objective is to delineate, describe, and analyze the leadership of the Head of the West Java Education Office as a representation of educational leadership in the region, specifically focusing on communication practices that reflect the core values inherent in *parigeuing* leadership.

B. Methods

Based on the previously presented research objectives, this study is best suited to a qualitative research method and is categorized as a case study. The qualitative method comprehensively understands a phenomenon, examines processes or social interactions, and explores individuals' opinions or perspectives (Sugiyono, 2019). This research is classified as a case study because it addresses 'why' and 'how' questions, the researcher does not exert complete control over the events being examined, and it focuses on contemporary phenomena within real-world contexts (Yin, 2018). The case under investigation is the leadership of the Head of the West Java Education Office during the 2023–2024 period, with a specific focus on their leadership communication. The case in this study is limited to an individual as the central focus. Therefore, this study aims to investigate a contemporary phenomenon, processes, social interactions, and individuals' perspectives concerning the leadership of the Head of the West Java Education Office.

This study employs a combination of interviews, observations, and document analysis to collect relevant data. It utilizes semi-structured interviews, which allow the researcher to follow a predefined set of questions while adapting them as the discussion evolves. The primary objective of these interviews is to investigate processes, social interactions, and employee perspectives concerning the leadership practices of the Head of the West Java Education Office, particularly regarding

communication aspects. Direct observations focus on the leadership communication style demonstrated by the Head of the West Java Education Office, especially during public speeches. This direct approach ensures the collection of immediate and authentic data. Moreover, document analysis thoroughly reviews the *Text and Translation of Siksa Kandang Karesian*, which provides valuable insights into *parigeu* leadership. This study was conducted at the Central Office of the West Java Provincial Education Department, focusing on the leadership of its Head during the 2023–2024 period. The research involves seven informants: one philology expert, two division heads, and four staff members.

Researchers employ the Miles and Huberman model to analyze data, emphasizing an interactive and iterative process that persists until data saturation. This model involves critical activities such as collecting, reducing, displaying, and drawing conclusions from the data (Miles et al., 2014). Researchers utilize NVivo, a qualitative data processing software, to enhance the analysis. Following the data analysis process, supported by the Nvivo application, the next step involves ensuring data validity through rigorous tests. Validity checks are conducted using several techniques, including prolonged engagement, source triangulation, and method triangulation. Prolonged engagement entails intensive and sustained interaction with the research field to build trust and gain a deeper understanding of the data's context (Denzin & Lincoln, 2018). To foster strong relationships between the researcher, informants, and the research site, the fieldwork for this study was conducted over five months, from February to June. The second technique, source triangulation, aims to compare and verify information from various sources to ensure consistent data. Meanwhile, method triangulation involves employing multiple data collection approaches to enhance the validity of the study's findings. By implementing these validity tests, the research aims to achieve high levels of credibility and accuracy in representing the leadership phenomena under investigation.

C. Results and Discussion

The findings of this study indicate that the leadership of the Head of the West Java Provincial Education Office is consistent with the values embodied in the concept of *parigeu* leadership.

The Leadership of the Head of the West Java Provincial Education Office in Communication Based on *Parigeu* Leadership

This section presents the research findings, focusing on the communication leadership demonstrated by the Head of the West Java Education Office, which aligns with the principles of *parigeu* leadership values. The visualization below, generated using Nvivo software, effectively illustrates the outcomes of the data analysis.

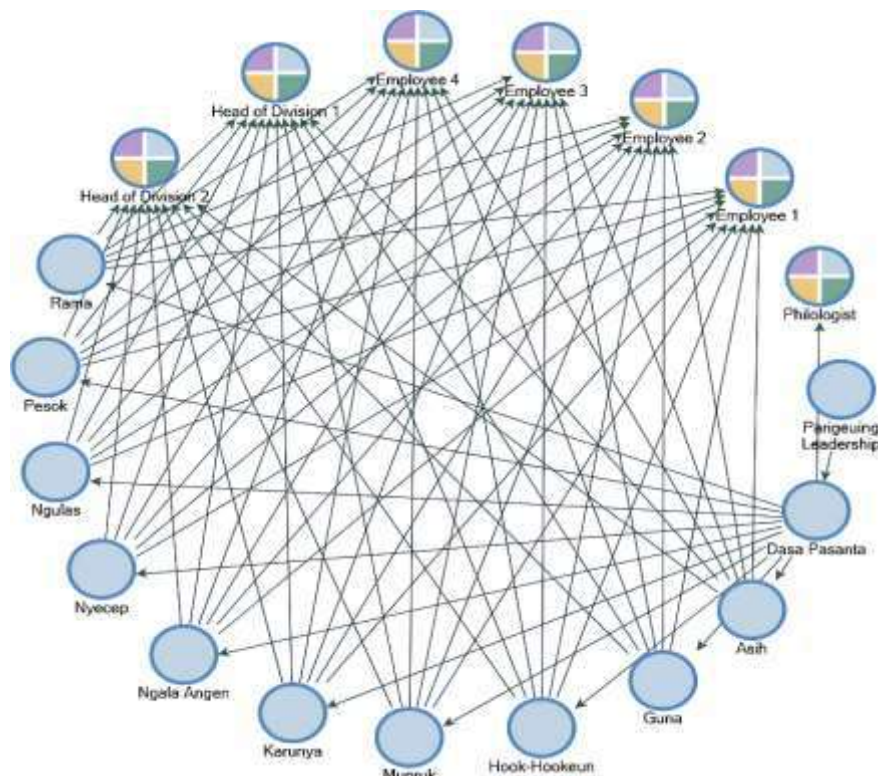


Figure 1. Visualization of Research Data Analysis Results

The image above represents a visualization of the research data analysis, illustrating the leadership of the Head of the West Java Provincial Education Office in the context of communication, based on the values of *parigeuing* leadership. The concept of *dasa pasanta*, an integral part of *parigeuing* leadership, is translated into ten practical principles that leaders can implement to foster effective, empathetic, and meaningful communication. This visualization highlights the connection between the *dasa pasanta* values and various aspects of communication practiced by the Head of the Office and their interactions with staff and other stakeholders. Thus, these findings affirm how local cultural values can serve as a practical framework for creating inclusive and impactful leadership communication patterns.

1. The Value of *Guna*

Based on the field data analysis results, *guna's* value in the *dasa pasanta* concept can be understood as wisdom, using authority appropriately, and communicating effectively, including simple language. In this context, the Head of the West Java Provincial Education Office demonstrates non-authoritarian communication, carefully selecting precise words to ensure messages are easily understood, employing a structured communication style, and using data to strengthen arguments, which reflects logical communication. These communication methods are evident during coordination meetings for program planning, policy decision-making meetings, morning briefings during flag ceremonies, and speeches at public events.

The Head of the Education Office demonstrates wisdom, reflected in their communication style. A leader's practical communication ability is essential in 21st-century leadership (Liegl & Furtner, 2024; Liu et al., 2023). The *guna* value in the *dasa pasanta* concept, serving as an indicator of implementing *parigeu* leadership, remains relevant in addressing current challenges. This research aligns with contemporary studies, particularly those emphasizing the wisdom of a leader as reflected in their communication practices, which ultimately guide them toward success in their leadership tenure. Such success is evident through improved employee motivation, enhanced performance, increased productivity, and the cultivation of healthy workplace relationships (Anggorowati et al., 2022; Husnataria et al., 2024; Nasukah et al., 2020).

2. The Value of *Rama*

Based on the field data analysis, the *rama* value in the *dasa pasanta* concept, integral to implementing *parigeu* leadership, can be understood as friendliness, politeness, respect, kindness, good character, warmth, and the ability to interact with anyone. The Head of the West Java Provincial Education Office demonstrates this value through polite communication, a soft-spoken tone, warm and embracing body language, cheerful facial expressions, and the habit of greeting all employees regardless of their position. This communication style is especially evident in daily office activities and interactions with staff at all levels. Communication grounded in the *rama* value is also reflected in how the Head delivers orders or instructions, ensuring those receiving them do not feel offended or disheartened.

The findings indicate that the Head of the West Java Provincial Education Office exemplifies the concept of *rama* from the *dasa pasanta* philosophy by promoting warm, respectful, and inclusive communication practices. This approach aligns with the study highlighting the significance of soft-spoken communication and respectful behavior in building trust and cooperation among staff (Balakrishnan et al., 2024; Dwyer & Sahay, 2023). Additionally, another research affirms that leaders who engage warmly and respectfully with all levels of staff create a positive work environment, enhancing team morale and motivation (Abolnasser et al., 2023; Geue, 2018).

3. The Value of *Hook*

Based on the field data analysis, the *hook* value in the *dasa pasanta* concept, as applied in *parigeu* leadership, represents a sense of care, assigning tasks to appreciate one's abilities and admiration for the performance achieved. The Head of the West Java Provincial Education Office demonstrates this value by assigning tasks through clear directives, either directly or via written instructions, ensuring that the tasks align with employees' capabilities. The implementation of the *hook* value is also evident in the communication style, which includes expressing appreciation and recognition for employees' achievements and congratulating them for their dedication and contributions.

This study confirms the significance of the *hook* value within the *dasa pasanta* concept in realizing *parigeuwing* leadership. The findings align with prior research indicating that leaders' expressions of care and appreciation can foster strong emotional bonds with employees (Rahmadhon et al., 2024; Venketsamy & Lew, 2024). Additionally, the delegation of tasks tailored to individual competencies, as observed in this study, has enhanced employee performance within organizational contexts (Akinola et al., 2018).

4. The Value of *Pesok*

Analysis of field data reveals that the *pesok* value in the *dasa pasanta* concept represents communication that captivates, indirectly motivates through example, and inspires enthusiasm for collaboration. In this context, the Head of the West Java Provincial Education Office consistently directs communication efforts to engage employees' commitment and foster teamwork to improve education quality. These findings align with previous studies, emphasizing that leadership communication that inspires collaboration sets examples, and encourages teamwork positively impacts productivity, loyalty, follower satisfaction, and team efficiency (Arendt et al., 2019; Erbay et al., 2024).

5. The Value of *Asih*

Based on the analysis of field data, the *asih* value in the *dasa pasanta* concept represents a form of communication that embodies compassion, generosity, and genuine care. The Head of the West Java Provincial Education Office demonstrates these traits through interactions that prioritize empathy and kindness. These findings align with studies on empathetic leadership styles, emphasizing the importance of communication that authentically conveys care and adopts a human-centered approach to fostering positive interpersonal relationships (Jian, 2022; Negoro & Wibowo, 2021).

6. The Value of *Karunya*

The analysis of field data indicates that the *karunya* value within the *dasa pasanta* concept embodies a form of communication characterized by empathy, openness in addressing issues, and sensitivity to the challenges faced by others. This is shown by the Head of the West Java Provincial Education Office, who actively engages with subordinates by listening to their concerns and ensuring transparency regarding the challenges faced during program implementation. Such communication fosters a supportive environment that encourages constructive dialogue by accommodating suggestions, especially when addressing obstacles in executing educational programs (Susanti et al., 2023). This communication style aligns with democratic and dialogic leadership approaches, emphasizing openness, dialogue, and equitable opportunities for stakeholders to voice their opinions (Fakhri et al., 2021; Khaqan & Redondo-Sama, 2024; Raupu et al., 2021).

7. The Value of *Mupruk*

Based on the analysis of field data, the *mupruk* value in the *dasa pasanta* concept reflects the communication style of the Head of the West Java Provincial Education Office, characterized by persuasion, negotiation, and the ability to convey ideas without imposing opinions. The leader's capacity to engage in persuasive communication, supported by mastery of the topic at hand, is critical in steering the organization toward achieving its noble vision for the future (Enadarlita & Asvio, 2019; Sa'imah et al., 2023). This approach is instrumental in facilitating decision-making processes that drive sustainable organizational change (Banwart, 2020; Perret & Powers, 2022; Sabariah et al., 2023).

8. The Value of *Ngulas*

Based on the analysis of field data, the *ngulas* value in the *dasa pasanta* concept reflects the communication style of the Head of the West Java Provincial Education Office, emphasizing constructive feedback, including praise, evaluations, suggestions, and critiques regarding educational programs or issues during discussions. This study highlights that the *ngulas value*, in the context of *parigeuing* leadership, can be understood as the delivery of constructive feedback. These findings align with research emphasizing the critical role of feedback in improving individual and organizational performance by fostering innovative behaviors (Bak, 2020; Choi et al., 2018; Lee et al., 2021).

9. The Value of *Nyecep*

Based on the analysis of field data, the *nyecep* value in the *dasa pasanta* concept embodies the communication style of the Head of the West Java Provincial Education Office, characterized by uplifting, encouraging, motivating, and empowering communication. This style also includes providing opportunities for growth, maintaining composure, exercising thoughtful consideration, and delivering instructions that do not impose undue burdens. A leader's ability to inspire, empower, and create opportunities for development among their members is a hallmark of modern theoretical models, specifically transformational leadership. The findings of this study demonstrate that *nyecep*, within the framework of *parigeuing* leadership, reflects transformational leadership principles that inspire and motivate subordinates to grow and achieve meaningful transformation (Akdere & Egan, 2020; Hermawan et al., 2024; Nuel et al., 2021).

10. The Value of *Ngala Angen*

Based on the analysis of field data, the *ngala angen* value in the *dasa pasanta* concept reflects the communication style of the Head of the West Java Provincial Education Office, characterized by the ability to win the hearts of interlocutors, wisdom, emotional resonance, and charisma in speech. The findings indicate that the Head of the Education Office effectively builds strong relationships with subordinates, aligning with studies highlighting emotional intelligence as a critical factor for leadership success. Moreover, this ability fosters a comfortable organizational

climate, reinforcing the importance of empathetic and relational communication within leadership contexts (Manafe et al., 2022; Pulido-Martos et al., 2024; Syarweny, 2023).

Based on the analysis of data collected through interviews, observations, and document studies, the communication leadership of the Head of the Education Office reflects the implementation of the *parigeuing* concept through the ten values of *dasa pasanta*. These values represent ten principles of emotional serenity that should be embodied in a leader's behavior when carrying out their leadership, particularly in communication tasks such as issuing instructions, providing guidance, offering motivation, giving advice, and more (Nurwansah, 2020; Permana et al., 2020; Prihana et al., 2020). A leader who integrates the *parigeuing* concept, closely tied to the ten values of *dasa pasanta*, will achieve success through their charisma and serve as a role model for their followers. This is evident in the leadership style of the Head of the Education Office when communicating to issue instructions, deliver guidance, provide motivation, or offer recognition during meetings, morning assemblies, or speeches at formal events. The Head of the West Java Provincial Education Office exhibits the dominant traits of *pesok* and *hook* while implementing the *parigeuing* leadership concept. The visualization of the processed data below illustrates these values clearly.



Figure 2. Hierarchy Chart

Thus, based on the explanation above, the leadership communication of the Head of the West Java Provincial Education Office has been effectively illustrated in alignment with the principles of *dasa pasanta*, which serve as the foundational values for implementing *parigeuing* leadership. According to Figure 2, the *hook* value is the most dominant value reflected in the leadership communication of the Head of the Education Office. This value encourages compassionate communication. Leaders delegate tasks to subordinates, showing appreciation for their skills while consistently expressing admiration for their accomplishments. Additionally, the *pesok* value is also prominently evident in the communication style of the Head of the Education Office. The *pesok* value signifies the leader's ability to win the hearts of subordinates through exemplary communication that emphasizes leading by example, serving as a role model, and consistently fostering collaboration.

The Head of the West Java Provincial Education Office represents educational leadership within Sundanese society. This role demonstrates the internalization of *dasa pasanta* values and practical principles in *parigeuing* leadership. *Parigeuing* leadership embodies universal values that remain relevant today. When leaders successfully implement *parigeuing* leadership, they become charismatic figures, role models, and sources of inspiration for their followers.

D. Conclusions

The leadership of the Head of the West Java Provincial Education Office in communication has demonstrated the implementation of the ten values of *dasa pasanta* as practical guidelines in practicing *parigeuing* leadership. The most prominent values reflected in this leadership are *pesok* and *hook*. This study highlights that *parigeuing* leadership embodies universal values relevant to contemporary leadership challenges. Furthermore, this research aspires to contribute to preserving and developing the *parigeuing* leadership concept, rooted in Sundanese culture, as a legacy of Sundanese heritage.

E. Acknowledgement

This study succeeded due to the support of various individuals and organizations. The researcher sincerely thanks the supervisors, Dr. Diding Nurdin and Dr. Sururi, for their invaluable guidance and assistance throughout the study. The researcher also appreciates the entire team at the Education Office of West Java Province for providing the opportunity to conduct this research. Additionally, the researcher extends heartfelt thanks to the respondents and especially to the philology expert who offered valuable insights into the concept of *parigeuing*.

References

- Abolnasser, M. S. A., Abdou, A. H., Hassan, T. H., & Salem, A. E. (2023). Transformational Leadership, Employee Engagement, Job Satisfaction, and Psychological Well-Being among Hotel Employees after the Height of the COVID-19 Pandemic: A Serial Mediation Model. *International Journal of Environmental Research and Public Health*, 20(4), 1–27. <https://doi.org/10.3390/ijerph20043609>
- Akdere, M., & Egan, T. (2020). Transformational leadership and human resource development: Linking employee learning, job satisfaction, and organizational performance. *Human Resource Development Quarterly*, 31(4), 393–421. <https://doi.org/10.1002/hrdq.21404>
- Akinola, M., Martin, A., & Phillips, K. W. (2018). To Delegate or Not to Delegate: Gender Differences in Affective Associations and Behavioral Responses to Delegation. *Academy of Management Journal*, 61(4), 1467–1491. <https://doi.org/https://doi.org/10.5465/amj.2016.0662>
- Andriansyah, T., Yusrizal, & Niswanto. (2021). Nagan Raya Education Office Policy in Improving the Quality of Education in Elementary Schools in Nagan Raya Regency. *Jurnal Visipena*, 12(1), 30–43. <https://doi.org/https://doi.org/10.46244/visipena.v12i1.1264>
- Anggorowati, R., Komariah, A., Permana, J., Nurdin, D., & Prihatin, E. (2022). The Role of Educational Leadership Communication in Building Relationships. *Jurnal Penelitian Pendidikan*, 21(3), 9–16. <https://doi.org/10.17509/jpp.v21i3.41984>
- Arendt, J. F. W., Verdorfer, A. P., & Kugler, K. G. (2019). Mindfulness and leadership: Communication as a behavioral correlate of leader mindfulness and its effect on follower satisfaction. *Frontiers in Psychology*, 10, 667. <https://doi.org/10.3389/fpsyg.2019.00667>
- Atwater, L., Yu, J., Tawse, A., Fields, L. H., McFarren, J. A., & Nae, E. Y. (2021). Relevance of culture in studies of leadership: ignored or dismissed? *Asia Pacific Journal of Management*, 38(2), 687–708. <https://doi.org/10.1007/s10490-019-09678-w>
- Ayub, S. H., Manaf, N. A., & Hamzah, M. R. (2014). Leadership: Communicating Strategically in the 21st Century. *Procedia - Social and Behavioral Sciences*, 155, 502–506. <https://doi.org/10.1016/j.sbspro.2014.10.330>
- Badriah, S., Sahar, J., Gunawijaya, J., Prasetyo, S., Mariani, D., & Kartilah, T. (2021). Sundanese culture-sensitive family nursing model improves behavior in controlling blood sugar in elderly patients with diabetes. *Enfermeria Clinica*, 31, S361–S365. <https://doi.org/10.1016/j.enfcli.2020.09.027>
- Bak, H. U. (2020). Supervisor Feedback and Innovative Work Behavior: The Mediating Roles of Trust in Supervisor and Affective Commitment. *Frontiers in Psychology*, 11, 559160. <https://doi.org/10.3389/fpsyg.2020.559160>
- Balakrishnan, K., Angusamy, A., Patil, R. G., & Razak, M. N. F. (2024). Enhancing Work Performance: The Role of Communication and Leadership Styles. *Jurnal*

- Komunikasi: *Malaysian Journal of Communication*, 40(1), 376–394.
<https://doi.org/10.17576/JKMJC-2024-4001-21>
- Banwart, M. (2020). Communication Studies: Effective Communication Leads to Effective Leadership. In *New Directions for Student Leadership* (Vol. 2020, Issue 165, pp. 87–97). <https://doi.org/10.1002/yd.20371>
- Choi, E., Johnson, D. A., Moon, K., & Oah, S. (2018). Effects of Positive and Negative Feedback Sequence on Work Performance and Emotional Responses. *Journal of Organizational Behavior Management*, 38(2–3), 97–115.
<https://doi.org/10.1080/01608061.2017.1423151>
- Darajat, D., & Suherman, A. (2021). Names And Terms of Livelihood of Sundanese People: An Ethnolinguistic Study. *Jurnal Kata*, 5(2), 211–223.
<https://doi.org/10.22216/kata.v5i2.413>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE Handbook of Qualitative Research* (Fifth Edition). Thousand Oaks: SAGE Publications, Inc.
- Dwyer, M., & Sahay, S. (2023). Hiring college and university presidents: communication, agency, and culture. *International Journal of Leadership in Education*, 1–36. <https://doi.org/10.1080/13603124.2023.2264254>
- Enadarlita, E., & Asvio, N. (2019). The Effect of Coordination and Communication on Organizational Effectiveness in Jambi Province. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 4(1), 34–42.
<https://doi.org/10.31851/jmksp.v4i1.2473>
- Erbay, M., Sajid Javed, M., Nelson, J. C., Benzerroug, S., Ansah Karkkulainen, E., Emmanuel Enriquez, C., & Professor, A. (2024). The Relationship Between Leadership and Communication, and the Significance of Efficient Communication in Online Learning. *Theory And Practice*, 30(6), 2065–2076.
<https://doi.org/10.53555/kuey.v30i6.5650>
- Fakhri, M., Syarifuddin, S., Winarno, A., Nurnida, I., & Hanum, S. (2021). Democratic Leadership Practice to Construct Clan Organizational Culture in Family Companies. *Journal of Asian Finance, Economics and Business*, 8(1), 803–811. <https://doi.org/10.13106/jafeb.2021.vol8.no1.803>
- Geue, P. E. (2018). Positive Practices in the Workplace: Impact on Team Climate, Work Engagement, and Task Performance. *Journal of Applied Behavioral Science*, 54(3), 272–301. <https://doi.org/10.1177/0021886318773459>
- Herlinawati, H., Marwa, M., Ismail, N., Junaidi, Liza, L. O., & Situmorang, D. D. B. (2024). The integration of 21st century skills in the curriculum of education. *Heliyon*, 10(15). <https://doi.org/10.1016/j.heliyon.2024.e35148>
- Hermawan, F., Purnomo, H., Kusumastuti, D., Fitriana, R., Octaleny, E., Ie, M., & Sudadi. (2024). The role of transformational leadership, job satisfaction and organizational commitment on organizational citizenship behavior (OCB) of SMEs employees in the digital era. *Journal of Infrastructure, Policy and Development*, 8(7), 5194. <https://doi.org/10.24294/jipd.v8i7.5194>
- Hidayat, D., & Hafiar, D. H. (2019). Someah cultural values in the communication behavior of Sundanese people. *Jurnal Kajian Komunikasi*, 7(1), 84–96.
<https://doi.org/https://doi.org/10.24198/jkk.v7i1>

- Husnataria, Ahyani, N., & Mahasir. (2024). The Influence of Communication and Leadership on the Performance of Teacher's Working Groups. *Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan*, 9(2), 1089–1099. <https://doi.org/https://doi.org/10.31851/jmksp.v9i2.15641>
- Jamaludin, A. N., & Novari, E. (2022). Integration of Religion and Culture Study of Islamic Leadership West Java, Indonesia. *Khazanah Sosial*, 4(2), 295–311. <https://doi.org/10.15575/ks.v4i2.17789>
- Jian, G. (2022). From empathic leader to empathic leadership practice: An extension to relational leadership theory. *Human Relations*, 75(5), 931–955. <https://doi.org/10.1177/0018726721998450>
- Khaqan, S., & Redondo-Sama, G. (2024). A systematic review of the role of dialogic leadership: Characterization and impacts. *Educational Research Review*, 44. <https://doi.org/10.1016/j.edurev.2024.100618>
- Lee, W. R., Choi, S. B., & Kang, S. W. (2021). How leaders' positive feedback influences employees' innovative behavior: The mediating role of voice behavior and job autonomy. *Sustainability (Switzerland)*, 13(4), 1–13. <https://doi.org/10.3390/su13041901>
- Liegl, S., & Furtner, M. R. (2024). Emotional leader communication in the digital age: An experimental investigation on the role of emoji. *Computers in Human Behavior*, 154. <https://doi.org/10.1016/j.chb.2024.108148>
- Liu, E. H., Chambers, C. R., & Moore, C. (2023). Fifty years of research on leader communication: What we know and where we are going. *Leadership Quarterly*, 34(6). <https://doi.org/10.1016/j.leaqua.2023.101734>
- Ly, N.-B. (2020). Cultural Influences on Leadership: Western-Dominated Leadership and Non-Western Conceptualizations of Leadership. *Sociology and Anthropology*, 8(1), 1–12. <https://doi.org/10.13189/sa.2020.080101>
- Manafe, H. A., Yasinto, Y., & Djonu, J. H. (2022). The Influence of Emotional Intelligence, Organizational Commitment, OCB (Organizational Citizenship Behavior), and Organizational Climate on Employee Performance (A Study of Human Resource Management Literature). *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, 4(1), 384–397. <https://doi.org/10.38035/jmpis.v4i1>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook*. Thousand Oaks: SAGE Publications, Inc.
- Nasukah, B., Sulistyorini, S., & Winarti, E. (2020). The Role of Effective Leaders' Communication in Improving Institutional Performance. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 4(1), 81–93. <https://doi.org/10.33650/al-tanzim.v4i1.899>
- Negoro, M. C. W., & Wibowo, A. (2021). Empathetic Leadership, Job Satisfaction and Intention to Leave Among Millennials in A Start-Up Industry: Needs' Satisfaction As A Mediating Variable. *Journal of Indonesian Economy and Business*, 36(2), 136–154. <https://doi.org/10.22146/jieb.v36i2.1398>
- Nuel, O. I., E., K., N. E., Ifechi, A. N., & Emmanuella, U. I. (2021). Transformational Leadership and Organizational Success: Evidence from Tertiary Institutions.

- Journal of Economics and Business*, 4(1).
<https://doi.org/10.31014/aior.1992.04.01.329>
- Nuraeni, E. S., Wijayanti, Y., & Ratih D. (2020). Hulun's Behavior (Karma Ning Hulun) in the Sanghyang Siksa Kandang Karesian Manuscript. *Diakronika*, 20(2), 128–142. <https://doi.org/10.24036/diakronika/vol20-iss2/153>
- Nurwansah, I. (2020). *Siksa Kandang Karesian: Text and Translation*. Jakarta: Perpustakaan Press.
- Permana, R. S. M., Sumarlina, E. S. N., & Darsa, U. A. (2020). The concept of "Parigeuing" in the context of leadership and political communication. *Jurnal Kajian Komunikasi*, 8(2), 253–264. <https://doi.org/https://doi.org/10.24198/jkk.v8i2.25671>
- Perret, C., & Powers, S. T. (2022). An investigation of the role of leadership in consensus decision-making. *Journal of Theoretical Biology*, 543. <https://doi.org/10.1016/j.jtbi.2022.111094>
- Prihana, E., & Labolo, M. (2020). Sundanese Culture Local Wisdom Based Leadership: The Dynamics of Government Leadership of Purwakarta Regent. *International Journal of Science and Society*, 2(1), 213–220. <https://doi.org/https://doi.org/10.54783/ijssoc.v2i1.71>
- Pulido-Martos, M., Gartzia, L., Augusto-Landa, J. M., & Lopez-Zafra, E. (2024). Transformational leadership and emotional intelligence: allies in the development of organizational affective commitment from a multilevel perspective and time-lagged data. *Review of Managerial Science*, 18(8), 2229–2253. <https://doi.org/10.1007/s11846-023-00684-3>
- Purwoko, A. A. (2020). The Material of Wawasan Nusantara as Indonesian Geopolitic Note and The Implementation in Islamic State University. *At-Turats*, 14(1), 80–95. <https://doi.org/10.24260/at-turats.v14i1.1785>
- Rahmadhon, G., Firdaus, V., & Sumartik, S. (2024). The mediating role of work motivation: The effect of leadership, workload, and reward on employee performance. *Jurnal Fokus Manajemen Bisnis*, 14(2), 190–208. <https://doi.org/10.12928/fokus.v14i2.10704>
- Raupu, S., Maharani, D., Mahmud, H., & Alauddin, A. (2021). Democratic Leadership and Its Impact on Teacher Performance. *AL-ISHLAH: Jurnal Pendidikan*, 13(3), 1556–1570. <https://doi.org/10.35445/alishlah.v13i3.990>
- Rehan, A., Thorpe, D., & Heravi, A. (2024). A framework for leadership practices and communication in the context of the construction sector. *Project Leadership and Society*, 5. <https://doi.org/10.1016/j.plas.2024.100142>
- Sabariah, S., Akbar, N., Sulistiami, S., Qatrunida, Q., & Rahmadi, R. (2023). The Influence of Visionary Leadership and Persuasive Communication on Teacher Performance in Schools. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam*, 7(3), 1064–1076. <https://doi.org/10.33650/al-tanzim.v7i3.6138>
- Sa'imah, S., Fitria, H., & Kristiawan, M. (2023). The Principal's Initiatives to Enhance Teachers' Instructional Skills. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(1), 86–99. <https://doi.org/10.31851/jmksp.v8i1.10510>

- Sofiani, Y. (2022). Development of Galuh Regent's Encyclopedia Teaching Materials Based on the Parigeuing Concept to Improve the Leadership Attitude of Prospective History Teacher Students in East Priangan (Doctoral Dissertation). Sekolah Pascasarjana, Universitas Pendidikan Indonesia, Bandung.
- Sugiyono. (2019). *Educational Research Methods (Quantitative, Qualitative, Combination, R&D, and Educational Research)*. Bandung: Alfabeta.
- Sujatmiko, I. G. (2014). Ethnic Representation in National Politics: The Case of the Sundanese Ethnic Group in the Republic of Indonesia. *Masyarakat Jurnal Sosiologi*, 19(1), 1. <https://doi.org/10.7454/mjs.v19i1.1237>
- Susanti, I. D., Prayitno, H. J., Haryanto, S., & Muhibbin, A. (2023). Progressive Leadership in Primary Education of Kartasura in the Era Global Computing. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(2), 1168–1180. <https://doi.org/10.31851/jmksp.v8i2.12713>
- Syafaruddin, Mesiono, & Harahap, A. (2022). Implementation of the Head of the Education Office's Policy in Increasing Understanding of Islamic Religious Scriptures in Public Elementary Schools. *Edukasi Islami: Jurnal Pendidikan Islam*, 11(1), 1029–1042. <https://doi.org/10.30868/ei.v11i01.1440>
- Syarweny, N. (2023). The Influence of Emotional Intelligence and Organizational Climate on Job Satisfaction of Lecturers at Jakarta State Polytechnic. *Journal of Management and Business Review*, 20(1), 81–101. <https://doi.org/10.34149/jmbr.v20i1.240>
- Venketsamy, A., & Lew, C. (2024). Intrinsic and extrinsic reward synergies for innovative work behavior among South African knowledge workers. *Personnel Review*, 53(1), 1–17. <https://doi.org/10.1108/PR-02-2021-0108>
- Widodo, H., Prasetyo, D. E., & Disantara, F. P. (2020). Power Relations Between the President and Vice President in the Constitutional System of the Republic of Indonesia. *Pandecta Research Law Journal*, 15(1), 13–25. <https://doi.org/10.15294/pandecta.v15i1.24554>
- Wonua, A. R. (2020). Analysis of Factors Influencing Organizational Citizenship Behavior of Employees of the Education and Culture Office of Kolaka Regency. *JMK (Jurnal Manajemen Dan Kewirausahaan)*, 5(1), 18–28. <https://doi.org/10.32503/jmk.v5i1.721>
- Yin, R. K. (2018). *Case Study Research and Applications. Sixth Edition (6th Edition)*. Thousand Oaks: SAGE Publications, Inc.
- Yustitiningtyas, L. (2015). Security and Law Enforcement in Indonesian Waters as a Consequence of the Determination of the Indonesian Archipelago Sea Lane (ALKI) Article History. *Pandecta*, 10(2), 143–152. <https://doi.org/10.15294/pandecta.v10i2>

Enhancing Educational Quality Through Financial Transparency and Accountability: A Case Study of Pusat Pendidikan Warga Negara Indonesia

Erna Sabaniah¹, Erny Roesminingsih¹, Muhammad Sholeh¹

¹Universitas Negeri Surabaya, East Java, Indonesia

Corresponding author e-mail: erna.23052@mhs.unesa.ac.id

Article History: Received on 8 November 2024, Revised on 6 January 2025,
Published on 17 January 2025

Abstract: This study investigates the role of financial transparency and accountability in enhancing the quality of education at Pusat Pendidikan Warga Negara Indonesia (PPWNI) in Klang, Selangor, Malaysia. The research aims to explore how effective financial management practices contribute to school quality improvement. Using a qualitative case study approach, data were collected through interviews, observations, and document analysis. The findings reveal that transparent and accountable financial practices foster trust among stakeholders, optimize resource allocation, and enhance educational outcomes. A key novelty of this research lies in its focus on an expatriate community school, highlighting unique challenges and strategies in financial management within a multicultural and transnational context. The study contributes to the discourse on educational governance by emphasizing the critical role of financial integrity in achieving quality education. These insights provide valuable implications for policymakers and educational leaders aiming to replicate best practices in similar institutional settings.

Keywords: Educational Governance Practices, Financial Accountability In Schools, Financial Transparency in Education, Quality Education Management, Trust in School Finance

A. Introduction

Financial transparency and accountability are widely recognized as foundational pillars of effective school governance and a key driver of educational quality enhancement (Al-Thani, 2024; Haghighi & Takian, 2024; Mestry, 2016; Steiner-Khamisi et al., 2024). Schools that implement transparent financial practices foster trust among stakeholders, including parents, teachers, and community members, by ensuring that resources are used responsibly and equitably (Lansing et al., 2023; Li et al., 2024; Merrill, 2007). This trust forms the basis for collaborative decision-making and shared accountability, which are essential for achieving long-term educational objectives. Furthermore, transparent financial management aligns with global frameworks, such as the Sustainable Development Goals, which emphasize inclusive, equitable, and quality education for all (UNESCO, 2020).

The adoption of transparent financial reporting practices not only supports stakeholder engagement but also facilitates oversight and accountability within educational institutions (Bouchetara et al., 2024; Saeed et al., 2024; Sciulli & Adhariani, 2023). By providing accurate and timely financial information, schools can minimize the risks associated with mismanagement, fraud, and inefficiency. Research by Bracci et al. (2021) highlights that robust financial oversight mechanisms contribute to more effective resource utilization, ensuring that funds are allocated to critical areas such as teacher training, infrastructure development, and student support programs (Bracci et al., 2021). These practices ultimately create a more conducive learning environment that directly impacts student performance and overall educational outcomes.

Globally, evidence underscores the pivotal role of sound financial management in strengthening educational systems (Alliouï & Mourdi, 2023; Nilendu, 2024). Studies such as Odden and Picus (2014) illustrate how equitable resource allocation driven by transparency can address disparities and promote better academic outcomes across diverse school settings (Odden & Picus, 2014). By embedding accountability into financial practices, schools can optimize resource usage to meet their specific challenges, whether related to limited funding, cultural diversity, or operational complexities. As schools continue to navigate these challenges, adopting and refining transparent financial systems remains a critical strategy for fostering sustainable and high-quality education.

Despite extensive research on financial governance in education, significant gaps remain in understanding how these practices operate in unique educational settings, such as expatriate schools. These institutions, which serve diverse cultural and international communities, often operate under complex regulatory frameworks that differ from those of local or national education systems. The influence of varying cultural norms, financial expectations, and regulatory structures presents unique challenges for financial governance that are not adequately addressed in existing studies (Ahmed et al., 2022). As a result, the nuances of financial management in such schools remain underexplored, creating a gap in the literature that requires further attention.

Additionally, while the relationship between financial governance and school performance is well-documented in mainstream education systems, there is a lack of research on how these dynamics play out in schools that cater to expatriate communities, such as Pusat Pendidikan Warga Negara Indonesia (PPWNI). These schools often face resource constraints and must navigate cultural diversity while maintaining high educational standards. The impact of financial transparency and accountability on educational outcomes in such a context is less understood, with few studies addressing how financial practices tailored to the unique needs of expatriate schools influence both resource allocation and student success.

Given the increasing number of expatriate schools worldwide, particularly those serving international and diplomatic communities (Alam & Mohanty, 2023; Y. Liu et al., 2024), understanding how financial governance practices affect educational quality in these settings is crucial. This study seeks to fill this gap by examining the financial transparency and accountability practices at PPWNI, an institution that operates within a multicultural environment. By exploring the relationship between these practices and educational outcomes, the research aims to contribute valuable insights into how financial governance can be adapted and implemented in expatriate schools, ultimately enhancing both the quality and sustainability of education in such contexts.

Emerging trends in educational governance emphasize the increasing role of digital tools in enhancing transparency and accountability. Technologies such as cloud-based financial systems and interactive dashboards allow for real-time tracking of financial data, improving the accessibility and clarity of financial operations for all stakeholders (Nguyen & Nguyen, 2023). These tools not only streamline financial management but also empower stakeholders by providing them with accurate and timely information, fostering a more transparent and efficient financial environment. As educational institutions continue to integrate these technologies, they have the potential to significantly enhance governance practices, enabling better decision-making and greater accountability in the use of resources.

Another key innovation gaining traction in the field of educational governance is participatory budgeting. This approach involves stakeholders, including teachers, parents, and community members, in the decision-making process regarding how school funds are allocated (Sharma et al., 2020). By directly involving these groups in the budgeting process, schools can ensure that financial decisions align with the collective priorities of the community, leading to more equitable and effective resource distribution. Participatory budgeting also strengthens the relationship between schools and their stakeholders, fostering a sense of ownership and shared responsibility in the management of school finances.

While these digital tools and participatory budgeting methods offer great potential for enhancing financial transparency and accountability, their implementation in expatriate schools like Pusat Pendidikan Warga Negara Indonesia (PPWNI) remains underexplored. The unique challenges faced by these schools, including cultural diversity, resource limitations, and varying regulatory frameworks, require tailored approaches to the adoption of such innovations. As a result, there is a gap in the literature regarding the practical application of these advancements in expatriate school settings. This study aims to address this gap by examining how PPWNI has incorporated these emerging trends into its financial governance practices and the impact of these practices on educational quality.

This study provides a unique perspective by examining the intersection of financial governance and educational quality in a transnational, multicultural setting. PPWNI, serving the Indonesian expatriate community in Klang, Selangor, Malaysia, offers a distinct case study that sheds light on the challenges and strategies of financial management in a non-traditional educational context. Unlike prior studies that focus predominantly on mainstream schools, this research uncovers the complexities of financial practices in a school operating across national and cultural boundaries.

The findings of this study contribute to the body of knowledge on educational management by offering a case-specific analysis of financial governance in expatriate schools. By highlighting effective practices and identifying potential pitfalls, the study provides actionable insights for school administrators, policymakers, and stakeholders in similar educational settings. Additionally, it emphasizes the role of financial integrity as a foundation for achieving quality education, aligning with global educational goals (UNESCO, 2020). This study seeks to address the following research question: *How do financial transparency and accountability practices impact the quality of education at Pusat Pendidikan Warga Negara Indonesia (PPWNI)?*

B. Methods

This study employed a qualitative case study approach to explore the role of financial transparency and accountability in enhancing the quality of education at Pusat Pendidikan Warga Negara Indonesia (PPWNI) in Klang, Selangor, Malaysia. The research focused on understanding the intricacies of financial management practices and their impact on school governance and educational outcomes. The research was conducted in several stages: 1) Preliminary Research: A literature review was carried out to identify theoretical frameworks and best practices in financial transparency and accountability within educational institutions; 2) Data Collection: Primary data were gathered through interviews, observations, and document analysis to obtain an in-depth understanding of financial practices at PPWNI; and 3) Data Analysis: The collected data were organized, coded, and analysed thematically to identify patterns and insights relevant to the study's objectives.

The respondents for this study were selected from key stakeholders at Pusat Pendidikan Warga Negara Indonesia (PPWNI), encompassing a diverse range of individuals involved in various aspects of the school's financial governance. This included school administrators responsible for financial planning and reporting, as they provided critical insights into the budgeting processes and decision-making mechanisms that shape resource allocation (Mestry, 2016). Teachers and staff were also included, as their perspectives on how financial resources are distributed and managed directly impact the implementation of educational strategies and the effectiveness of teaching practices (Odden & Picus, 2014). Additionally, parents and community members, who actively participate in evaluating the school's performance and the transparency of its financial operations, offered valuable input on how

financial transparency influences trust and satisfaction with the institution's governance (Bracci et al., 2021). Together, these stakeholders provided a comprehensive view of the financial practices at PPWNI and their implications for the quality of education.

The study was conducted at Pusat Pendidikan Warga Negara Indonesia (PPWNI), a school that serves the Indonesian expatriate community in Klang, Selangor, Malaysia. This institution, situated in a multicultural and transnational environment, offers a unique context for exploring financial management practices within an expatriate school setting. PPWNI's distinct demographic, comprising a diverse community of Indonesian expatriates, provides valuable insights into how financial governance can be adapted to meet the needs of both local and international stakeholders. The school's setting in Malaysia, with its blend of cultural influences and regulatory frameworks, further enriches the understanding of financial transparency and accountability in a cross-cultural educational context, highlighting the challenges and opportunities of managing resources in a multicultural environment (Ahmed et al., 2022; Sharma et al., 2020). This case study contributes to the growing body of literature on financial governance in expatriate and resource-limited schools.

The instruments used for data collection in this study included semi-structured interviews, observation checklists, and document analysis. Semi-structured interviews were conducted with school administrators, teachers, and parents to gather their perspectives on financial transparency and accountability at PPWNI, allowing for in-depth exploration of their experiences and opinions (Bracci et al., 2021). Observation checklists were employed to observe and record financial processes, including budget preparation, financial reporting, and stakeholder meetings, ensuring a comprehensive understanding of how financial governance is implemented in practice (Mestry, 2016). Additionally, document analysis was used to review key financial documents, such as financial reports, budgets, and meeting minutes, to evaluate the extent of transparency and accountability mechanisms in place (Odden & Picus, 2014). These instruments collectively provided a well-rounded approach to understanding the financial practices at PPWNI, offering both qualitative insights and objective data on the school's governance system.

Data analysis for this study was conducted using thematic analysis to identify recurring themes and patterns related to financial transparency and accountability at PPWNI. The first step involved data organization, where transcriptions of interviews and notes from observations were compiled for thorough review (Braun & Clarke, 2022). Next, the data were systematically coded, categorizing information into themes such as financial practices, stakeholder trust, and educational outcomes, allowing for a structured examination of the data (Hasan et al., 2024). Finally, the thematic findings were interpreted in the context of existing literature and the specific conditions at PPWNI, providing insights into how financial practices impact educational quality and stakeholder relationships. This approach enabled the researchers to draw

meaningful conclusions about the school's financial governance practices while situating their findings within broader theoretical frameworks on educational management and financial transparency (Bracci et al., 2021; Mestry, 2016).

C. Results and Discussion

The research question, "How do financial transparency and accountability practices impact the quality of education at Pusat Pendidikan Warga Negara Indonesia (PPWNI)?" guided this study, revealing three core themes: effective financial reporting, stakeholder participation in budgeting, and resource optimization through accountability. These interconnected practices form the foundation of PPWNI's approach to financial management, directly influencing the quality of education by fostering trust, inclusivity, and efficiency in resource allocation.

Effective financial reporting ensures the timely and accurate dissemination of financial data to stakeholders, enhancing transparency and minimizing the risk of mismanagement. This builds trust among parents, teachers, and the community, reinforcing their confidence in the school's governance. Additionally, PPWNI adopts a participatory budgeting process that actively involves stakeholders, enabling decisions to align with the community's collective priorities. Such inclusivity not only promotes equity but also strengthens the commitment of stakeholders to support the school's educational mission.

Accountability mechanisms, including regular audits and oversight committees, ensure that resources are allocated strategically to maximize their impact on education quality. These practices enable PPWNI to overcome resource limitations while prioritizing essential needs like teacher development and infrastructure improvement. Together, financial transparency, stakeholder engagement, and accountability create a synergistic effect, contributing significantly to better learning outcomes and positioning PPWNI as a model for effective financial governance in resource-constrained educational settings.

Effective Financial Reporting

Financial reporting at PPWNI ensures that all stakeholders have access to accurate and timely financial information, serving as the foundation for its transparent financial governance. By documenting income, expenses, and budget allocations in a systematic and accessible manner, PPWNI builds trust among parents, teachers, and community members. This trust reinforces stakeholder confidence in the school's financial management and governance practices. Research by Bracci et al. (2021) and Mestry (2016) supports this finding, highlighting that transparent and accurate financial reporting not only fosters accountability but also reduces the likelihood of resource mismanagement (Bracci et al., 2021; Mestry, 2016).

Such transparency also empowers stakeholders by providing them with a clear understanding of how financial decisions align with educational priorities. PPWNI's commitment to openness encourages active engagement from its community, creating a collaborative environment that enhances the overall quality of decision-making. This aligns with Sharma et al. (2020), who assert that involving stakeholders through transparent communication strengthens institutional accountability and ensures the equitable distribution of resources (Sharma et al., 2020). Moreover, the school's financial reporting practices serve as a model for other educational institutions striving to build community trust and ensure effective resource use.

PPWNI further enhances transparency through the use of simple yet effective digital tools to streamline financial reporting processes. These tools improve the accuracy and accessibility of financial data, ensuring that stakeholders remain informed and confident in the school's financial practices. While less sophisticated than advanced systems in larger institutions, this approach demonstrates that even modest digital integration can significantly enhance financial governance. Nguyen and Nguyen (2023) similarly found that adopting digital tools, even on a basic level, leads to improved financial management and stakeholder satisfaction in educational settings (Nguyen & Nguyen, 2023).

In conclusion, financial reporting at PPWNI exemplifies the critical role of transparency in fostering trust and accountability within educational institutions. By integrating accurate documentation, community engagement, and innovative digital tools, PPWNI has established a robust financial management system that minimizes risks and aligns resources with educational priorities. These practices not only benefit the immediate school community but also provide a replicable framework for other resource-limited educational institutions aiming to improve financial governance and educational quality.

Stakeholder Participation in Budgeting

PPWNI adopts a participatory approach in its budgeting process, actively involving parents, teachers, and school committees in decision-making. By creating avenues for stakeholder input, PPWNI ensures that the budgeting process is transparent and inclusive, empowering stakeholders to voice their opinions and contribute to the prioritization of resources. This approach reflects the school's commitment to fostering a sense of shared responsibility and accountability. Sharma et al. (2020) similarly emphasize that participatory budgeting in schools leads to more equitable and effective resource allocation, as decisions are informed by diverse perspectives and aligned with community needs (Sharma et al., 2020).

This inclusive process not only enhances the legitimacy of financial decisions but also strengthens community support for the school's initiatives. Parents and teachers, when involved in budget planning, develop a deeper understanding of the school's

financial constraints and opportunities, fostering a collaborative spirit. Research by Ghezal highlights that such stakeholder engagement promotes trust and reduces the potential for conflict, as all parties feel their voices are valued in the decision-making process (Ghezal, 2024). At PPWNI, the integration of diverse perspectives ensures that limited resources are allocated efficiently to address pressing educational needs, such as teacher development and classroom improvements.

Moreover, participatory budgeting helps PPWNI adapt to changing circumstances and emerging priorities. For instance, when new challenges arise, such as the need for additional technology or infrastructure, the involvement of stakeholders enables the school to reallocate resources swiftly and equitably. This adaptability is supported by evidence from Kornberger et al. (2022), who found that schools with participatory budgeting mechanisms demonstrate higher resilience and responsiveness to unexpected demands. At PPWNI, this flexibility has allowed the institution to maintain focus on long-term goals while addressing immediate needs, ensuring the sustainability of its educational programs.

In conclusion, the participatory budgeting approach at PPWNI exemplifies the benefits of inclusivity in financial management. By involving stakeholders in resource allocation decisions, the school not only promotes fairness and transparency but also fosters a sense of ownership and accountability among its community members. This approach contributes to the efficient and equitable use of resources, ultimately enhancing the quality of education. The findings at PPWNI align with broader research emphasizing the transformative impact of participatory budgeting in education, providing a replicable model for other institutions aiming to optimize their financial practices.

Resource Optimization through Accountability

Accountability mechanisms at PPWNI play a crucial role in ensuring that resources are utilized efficiently and align with the school's mission to deliver quality education. These mechanisms include regular financial audits and community oversight, which together provide a transparent framework for monitoring and evaluating resource allocation. By maintaining a structured and transparent financial management system, PPWNI prioritizes essential educational needs, such as teacher training, curriculum development, and facility improvement. This approach resonates with findings by Nguyen and Nguyen (2023), who emphasize that accountability systems enhance the efficiency of school management and foster stakeholder trust (Nguyen & Nguyen, 2023).

The regular audits conducted at PPWNI not only reinforce financial discipline but also create a culture of integrity within the institution. Audits provide an objective review of financial practices, identifying areas for improvement and ensuring compliance with established policies. Community oversight, on the other hand, ensures that

stakeholders remain actively engaged in the school's financial governance. The combination of these practices has strengthened PPWNI's ability to make data-driven decisions, allocate resources strategically, and maintain operational transparency. Similar findings by Bracci et al. (2021) suggest that effective accountability mechanisms are critical for schools to maintain credibility and maximize the impact of limited resources.

PPWNI's accountability framework extends beyond financial audits to include performance evaluations of key initiatives funded by its budget. For example, investments in teacher training programs are regularly assessed for their impact on classroom outcomes and student achievement. This results-driven approach ensures that financial resources directly contribute to the school's educational goals. Research by Gadenne et al. (2021) highlights the importance of tying accountability to measurable outcomes, as it allows schools to evaluate the return on investment of their financial decisions. At PPWNI, this has translated into a steady improvement in educational quality and community satisfaction.

In conclusion, accountability mechanisms at PPWNI demonstrate the school's commitment to efficient resource utilization and stakeholder trust. By integrating regular audits, community oversight, and performance evaluations, the school ensures that financial practices align with its educational priorities. This structured approach not only minimizes inefficiencies but also creates a sustainable model for educational excellence. The findings align with broader research, underscoring the transformative impact of accountability systems on school management and resource optimization (Nguyen & Nguyen, 2023). PPWNI's practices provide valuable insights for other educational institutions seeking to enhance financial governance and improve outcomes.

Positive Impact on Educational Quality

The interplay of transparency, participation, and accountability creates a synergistic effect that directly enhances the quality of education at PPWNI. Financial transparency ensures stakeholders are informed about the allocation and use of resources, fostering trust and cooperation within the school community. Participation through inclusive budgeting processes empowers parents, teachers, and school committees to shape financial decisions, ensuring that resources are aligned with collective priorities. Accountability mechanisms, such as audits and oversight, guarantee that funds are used efficiently and effectively. Together, these practices enable PPWNI to optimize its financial management, directly benefiting educational outcomes. Two researchers support this perspective, emphasizing that sound financial governance positively impacts academic performance (Odden & Picus, 2014).

Teachers at PPWNI report significant improvements in their access to essential teaching resources, including instructional materials, technology, and professional development opportunities. These enhancements directly impact their ability to deliver quality education, fostering a more engaging and effective learning environment. Simultaneously, parents observe measurable improvements in their children's academic achievements and overall school experience, which they attribute to the school's robust financial management. This alignment of stakeholder perceptions highlights the tangible benefits of integrating transparency, participation, and accountability in school governance. Similar findings reveal that schools prioritizing these principles achieve better educational outcomes and higher community satisfaction (Mestry, 2016).

The positive outcomes at PPWNI underscore the interconnected nature of financial governance and educational quality. By promoting shared decision-making and rigorous oversight, the school ensures that every dollar spent contributes meaningfully to its mission. This efficient allocation of resources has allowed PPWNI to overcome challenges associated with limited funding, demonstrating resilience and innovation in addressing the needs of its students and staff. Research by Nguyen and Nguyen (2023) corroborates this, showing that schools with integrated financial governance frameworks are better equipped to navigate constraints while achieving their objectives (Nguyen & Nguyen, 2023). PPWNI's approach serves as a model for resource-limited educational institutions aiming to maximize their impact through sound financial practices.

In conclusion, the integration of transparency, participation, and accountability at PPWNI significantly impacts the quality of education offered. By aligning financial governance with educational priorities, the school has enhanced resource efficiency, teacher satisfaction, and student outcomes. These findings reinforce the conclusions of previous works, validating the transformative potential of effective financial management in education (Mestry, 2016; Odden & Picus, 2014). As a case study, PPWNI provides compelling evidence for the adoption of similar practices in other schools, offering a replicable framework to improve education quality through sound financial governance.

Alignment with Digital Tools Adoption

PPWNI employs simple yet effective digital tools to manage and report financial data, reflecting the school's commitment to transparency and accountability. These tools, while not as sophisticated as those used by larger educational institutions, significantly improve the accuracy and efficiency of financial operations. By digitizing processes such as budgeting, expense tracking, and reporting, PPWNI reduces the risk of errors and ensures timely access to financial information for stakeholders. This approach aligns with findings, which highlight that even basic digital tools can

substantially enhance financial governance by streamlining processes and increasing data reliability (Nguyen & Nguyen, 2023).

The adoption of these tools has empowered the school to maintain clear and accessible financial records, fostering trust among parents, teachers, and community members. For instance, stakeholders can easily review budget allocations and expenditures, which enhances their understanding of the school's financial priorities. This transparency has also reduced misunderstandings and potential conflicts, creating a collaborative environment where all parties feel confident in the school's financial stewardship. Research by Sharma et al. (2020) corroborates this, emphasizing that digital solutions, regardless of their complexity, strengthen stakeholder engagement and confidence in financial management (Sharma et al., 2020).

Despite their simplicity, these tools have enabled PPWNI to achieve impressive results in resource optimization. Teachers report quicker access to funds for classroom materials, and administrators find it easier to monitor spending patterns and adjust allocations as needed. The efficiency gained through these tools ensures that financial resources are directed where they are most needed, supporting the school's educational goals. Odden and Picus (2014) note that financial efficiency is a critical factor in achieving educational excellence, and PPWNI's experience demonstrates how even modest technological investments can yield substantial benefits in this regard (Odden & Picus, 2014).

In conclusion, PPWNI's use of simple digital tools exemplifies the power of technology to enhance financial governance in resource-limited settings. By improving accuracy, efficiency, and accessibility, these tools have strengthened the school's financial management and fostered greater stakeholder trust. The findings at PPWNI validate Nguyen and Nguyen's (2023) assertion that basic digital solutions can significantly improve financial practices, offering a practical model for other schools with similar constraints (Nguyen & Nguyen, 2023). This case underscores the importance of leveraging technology, regardless of scale, to advance transparency and accountability in educational institutions.

Addressing Cultural and Contextual Challenges

Despite operating in a complex multicultural expatriate environment, PPWNI has successfully built and maintained stakeholder trust by prioritizing regular communication and culturally sensitive practices. These efforts address the unique challenges of serving a diverse community of parents, teachers, and students from various cultural backgrounds. Through open and consistent dialogue, PPWNI ensures that stakeholders are well-informed about the school's financial decisions and priorities. This proactive communication strategy not only fosters transparency but also creates an inclusive atmosphere where all voices are heard. Unlike Ahmed et al. (2022), who noted that cultural differences often obstruct financial transparency in

expatriate schools, PPWNI's approach demonstrates how thoughtful engagement can overcome such barriers (Ahmed et al., 2022).

A key factor in PPWNI's success is its commitment to culturally sensitive financial practices. By recognizing and respecting the values and expectations of its diverse community, the school tailors its financial policies to align with stakeholders' cultural norms. For example, the school incorporates culturally relevant modes of communication, such as community forums and multilingual updates, to ensure that financial reports are accessible and understood by all. This inclusivity minimizes misunderstandings and builds confidence among stakeholders. Research by Sharma et al. (2020) supports this, emphasizing that cultural adaptability in financial governance enhances stakeholder trust and participation in multicultural settings (Sharma et al., 2020).

PPWNI also emphasizes transparency by fostering a participatory budgeting process that accounts for cultural nuances. Stakeholders from different backgrounds are actively involved in decision-making, allowing them to contribute their perspectives and priorities. This collaborative approach ensures that financial resources are allocated in ways that reflect the collective needs of the school community. The findings challenge Ahmed et al. (2022), who suggested that expatriate schools often struggle with financial transparency due to limited stakeholder involvement (Ahmed et al., 2022). At PPWNI, inclusive practices have strengthened trust and accountability, demonstrating that cultural diversity can be an asset rather than a barrier in financial governance.

In conclusion, PPWNI's ability to foster stakeholder trust in a multicultural environment underscores the importance of regular communication and culturally sensitive practices in financial governance. By tailoring its policies to accommodate diverse cultural values, the school has created a transparent and inclusive framework for financial management. These practices not only enhance trust but also ensure that financial decisions reflect the collective priorities of its community. PPWNI's success stands in contrast to Ahmed et al. (2022) and provides a replicable model for other expatriate schools aiming to navigate the complexities of multicultural financial governance effectively (Ahmed et al., 2022).

Challenges in Resource-Limited Settings

PPWNI operates on limited resources but manages to maintain transparency and accountability through strategic planning and stakeholder engagement. This challenges Mestry's (2016) findings that resource constraints often limit transparency efforts in schools (Mestry, 2016).

PPWNI operates under significant resource constraints, yet it has managed to uphold strong transparency and accountability practices through strategic planning and

active stakeholder engagement. Despite limited funding, the school demonstrates that effective financial governance does not necessarily require substantial resources but rather a commitment to prioritizing transparency and inclusivity. PPWNI allocates its limited budget efficiently, ensuring that funds are directed toward essential educational needs such as teacher training, learning materials, and infrastructure improvements. This finding challenges Mestry's (2016) assertion that resource limitations often hinder transparency efforts in schools, showcasing how strategic planning can overcome such challenges (Mestry, 2016).

A cornerstone of PPWNI's success is its ability to engage stakeholders effectively in financial decision-making. By involving parents, teachers, and community members in budgeting and resource allocation processes, the school fosters a sense of shared responsibility and trust. Regular meetings, transparent reporting, and opportunities for feedback ensure that stakeholders are informed and feel valued in the decision-making process. Research by Sharma et al. (2020) supports this approach, emphasizing that stakeholder involvement is a critical factor in achieving financial transparency and accountability, regardless of resource constraints (Sharma et al., 2020). At PPWNI, this engagement creates a collaborative environment where financial practices are not only transparent but also aligned with the community's priorities.

Strategic planning also plays a vital role in PPWNI's financial management. The school adopts cost-effective measures and prioritizes expenditures that directly impact educational quality. For example, funds are allocated to professional development programs that enhance teacher effectiveness and, by extension, student outcomes. Additionally, the school leverages simple digital tools to track and report financial data, ensuring accuracy without incurring high operational costs. Odden and Picus (2014) highlight that efficient resource management is key to optimizing educational outcomes, and PPWNI's approach exemplifies this principle (Odden & Picus, 2014). By combining strategic planning with stakeholder engagement, the school proves that transparency and accountability are achievable even in resource-limited settings.

In conclusion, PPWNI's ability to maintain financial transparency and accountability despite resource constraints provides an important counterpoint to findings (Mestry, 2016). The school's strategic planning and inclusive practices demonstrate that financial governance is not solely dependent on the availability of resources but on the effective use of what is available. By prioritizing stakeholder engagement and adopting cost-efficient strategies, PPWNI sets a compelling example for other schools facing similar challenges. Its experience underscores the importance of commitment and creativity in building trust and ensuring financial accountability in education.

Discrepancy with Standalone Transparency

Bruns et al. (2011) argue that while transparency is vital, it is insufficient on its own to drive significant improvements in educational outcomes without being paired with robust accountability frameworks (Bruns et al., 2011). PPWNI exemplifies this principle by integrating transparency with participatory and accountability practices, creating a holistic financial governance model. The school not only provides clear and timely financial reports but also involves stakeholders in decision-making processes, ensuring that transparency translates into meaningful action. This approach addresses the limitation highlighted in prior research by demonstrating how transparency, when paired with participatory mechanisms, can lead to tangible educational benefits.

PPWNI's participatory practices play a critical role in enhancing the effectiveness of its transparency efforts. Stakeholders, including parents, teachers, and community representatives, actively engage in budgeting and resource allocation, fostering a shared sense of responsibility. This inclusivity ensures that financial decisions reflect the collective priorities of the school community, building trust and cooperation. Sharma et al. (2020) support this finding, emphasizing that participatory governance enhances the impact of transparency by aligning resource allocation with stakeholder needs (Sharma et al., 2020). PPWNI's success underscores the importance of stakeholder involvement in bridging the gap between transparency and improved educational outcomes.

Accountability mechanisms at PPWNI further strengthen its financial governance. Regular audits, public disclosures, and community oversight ensure that financial resources are used effectively and responsibly. These measures not only safeguard against resource misuse but also create a culture of trust and reliability. Nguyen and Nguyen (2023) similarly highlight the role of accountability systems in enhancing institutional efficiency and stakeholder confidence (Nguyen & Nguyen, 2023). By combining transparency with robust accountability frameworks, PPWNI demonstrates that both elements must work in tandem to achieve meaningful results. This integration ensures that the school's financial practices directly contribute to its mission of providing quality education.

In conclusion, PPWNI's model of combining transparency with participatory and accountability practices effectively addresses the limitations (Bruns et al., 2011). The school's approach demonstrates that transparency, while essential, requires complementary mechanisms to translate into improved educational outcomes. By fostering stakeholder involvement and implementing strong accountability measures, PPWNI creates a financial governance system that not only builds trust but also drives tangible improvements in education. This case study offers valuable insights for other institutions aiming to enhance their financial practices and achieve sustainable educational success.

Comparative Insights

Compared to similar studies, PPWNI distinguishes itself through its unique ability to navigate resource constraints and cultural complexities while upholding high standards of financial governance. Many expatriate schools face challenges in implementing effective financial management due to diverse cultural expectations and limited resources. However, PPWNI's strategic approach demonstrates that financial transparency and accountability can thrive even in such challenging environments. By maintaining open communication, involving stakeholders, and adopting culturally sensitive practices, the school not only meets but exceeds the standards of financial governance typically expected in resource-constrained settings. This success provides a compelling case for other expatriate schools seeking to enhance their financial practices.

A key aspect of PPWNI's success lies in its culturally inclusive practices, which ensure that financial decisions resonate with the diverse community it serves. Regular consultations with parents, teachers, and local stakeholders help the school navigate cultural nuances and build trust among its community members. This approach aligns with Sharma et al. (2020), who argue that stakeholder engagement is particularly crucial in multicultural environments (Sharma et al., 2020). While Ahmed et al. (2022) found that cultural differences often hinder financial transparency in expatriate schools, PPWNI challenges this narrative by demonstrating how inclusive and culturally adaptive practices can overcome such barriers (Ahmed et al., 2022).

PPWNI's strategic management of limited resources further sets it apart from similar institutions. The school employs cost-effective digital tools and prioritizes essential expenditures, ensuring that its financial practices remain both transparent and impactful. Unlike larger institutions with more advanced systems, PPWNI proves that even basic tools can enhance financial governance when combined with strategic planning and strong stakeholder engagement. Nguyen and Nguyen (2023) emphasize that resource optimization is critical in constrained settings, and PPWNI exemplifies this principle by aligning its financial strategies with its mission to provide quality education (Nguyen & Nguyen, 2023). This balance of resource efficiency and governance excellence makes PPWNI a model for schools in similar contexts.

In conclusion, PPWNI's approach to financial governance offers a replicable model for other expatriate schools facing resource and cultural challenges. Its ability to integrate cultural sensitivity with strategic resource management and stakeholder engagement underscores the importance of adaptability and inclusivity in financial governance. By demonstrating that high standards of transparency and accountability are achievable even in resource-constrained environments, PPWNI provides valuable insights for educational institutions worldwide. This case study serves as a benchmark for schools aiming to enhance their financial practices while fostering trust and collaboration within diverse communities.

Broader Implications for Policy

The findings indicate that policies promoting financial transparency and accountability must prioritize stakeholder involvement and adaptability to local contexts. At PPWNI, inclusive governance practices that engage parents, teachers, and community members ensure that financial decisions reflect collective priorities, fostering trust and collaboration. These practices align with UNESCO's (2020) recommendations for sustainable education governance, which emphasize participatory approaches as essential for building resilient and effective educational systems (UNESCO, 2020). By demonstrating that adaptability to local cultural and socioeconomic conditions enhances financial governance, PPWNI offers a valuable blueprint for other educational institutions.

Incorporating adaptability into financial governance is particularly critical in diverse and resource-constrained environments. PPWNI's approach highlights the importance of customizing financial policies to address unique local challenges while maintaining universal standards of transparency and accountability. This adaptability is evident in its use of culturally sensitive communication practices and resource-efficient tools, which bridge the gap between global best practices and local realities. Sharma et al. (2020) support this perspective, noting that localized financial strategies are often more effective in achieving long-term educational goals (Sharma et al., 2020). PPWNI's success illustrates the potential of such tailored approaches to strengthen institutional trust and improve educational outcomes.

Overall, these findings reinforce the idea that financial governance in education must move beyond standardization to embrace flexibility and inclusivity. PPWNI demonstrates that integrating transparency and accountability with stakeholder engagement and cultural adaptability leads to better resource management and enhanced educational quality. This case study underscores the need for policymakers to adopt dynamic frameworks that prioritize collaboration and context-specific solutions. By aligning with global recommendations (UNESCO, 2020), PPWNI serves as a model for sustainable education governance, offering actionable insights for schools worldwide.

Contributions to Literature

This study contributes to the growing body of literature by illustrating how financial practices tailored to specific school contexts can effectively address challenges posed by cultural diversity and resource limitations. PPWNI's ability to maintain high standards of transparency and accountability while operating in a multicultural and resource-constrained environment provides a compelling case for context-sensitive financial governance. By engaging stakeholders, implementing strategic resource allocation, and adapting policies to local cultural dynamics, the school overcomes barriers that often hinder financial transparency in similar settings. These findings

build on prior works, which highlight the importance of inclusivity and resource optimization in enhancing financial governance (Nguyen & Nguyen, 2023; Sharma et al., 2020).

The emphasis on cultural adaptability is a notable addition to the literature. While studies like Ahmed et al. (2022) underline the difficulties cultural diversity poses for financial governance (Ahmed et al., 2022), this research demonstrates that such challenges can be addressed through culturally sensitive communication and participatory practices. PPWNI's efforts to include diverse stakeholder voices in financial decision-making exemplify how cultural differences can be transformed into a strength rather than a limitation. By fostering mutual understanding and trust, the school ensures that its financial policies are inclusive and reflective of its community's unique needs. This insight bridges a gap in the literature by showing that cultural diversity, when managed strategically, enhances rather than impedes financial governance.

Resource limitations, often cited as a barrier to effective financial governance, are addressed innovatively in this study. PPWNI's use of cost-effective digital tools and strategic prioritization of funds challenges the findings of Mestry (2016), who argues that limited resources often constrain transparency efforts. Instead, this study demonstrates that even basic tools can significantly improve financial accuracy and efficiency when combined with robust planning and stakeholder collaboration. Nguyen and Nguyen (2023) emphasize the role of resource optimization in educational governance (Nguyen & Nguyen, 2023), and PPWNI's approach aligns with this perspective, showcasing how strategic resource management can overcome financial constraints.

Another key contribution of this study is its focus on the interplay between transparency, accountability, and stakeholder engagement. While prior research, such as Bruns et al. (2011), argues that transparency alone is insufficient to improve educational outcomes (Bruns et al., 2011), PPWNI demonstrates how combining transparency with robust accountability mechanisms and participatory practices leads to measurable improvements in education quality. Teachers report better access to teaching resources, and parents observe enhanced student outcomes, highlighting the tangible impact of these integrated financial practices. This finding underscores the importance of holistic approaches that incorporate multiple dimensions of financial governance.

In conclusion, this study enriches the literature by offering a comprehensive view of how financial transparency and accountability can be effectively implemented in diverse and resource-constrained educational contexts. PPWNI's success serves as a model for schools worldwide, demonstrating that strategic adaptability, cultural sensitivity, and stakeholder engagement are key to overcoming common barriers in financial governance. By building on the works of researchers (Nguyen & Nguyen,

2023; Sharma et al., 2020), this research not only validates existing theories but also provides new insights into the transformative potential of context-sensitive financial practices. These findings contribute to a deeper understanding of how education systems can achieve sustainability and equity through innovative financial governance.

Practical Applications

The success of PPWNI's financial governance practices highlights the critical role of inclusive and transparent systems in fostering trust and optimizing resources. By actively involving stakeholders such as parents, teachers, and community members in budgeting and decision-making processes, PPWNI ensures that financial policies reflect collective priorities and address the community's unique needs. This inclusivity not only builds trust but also enhances accountability, as stakeholders feel a sense of ownership and responsibility for the school's financial management. Schools operating in diverse and resource-constrained environments can adopt similar participatory approaches to align resource allocation with educational goals effectively.

Moreover, PPWNI's emphasis on transparency and accountability demonstrates their direct impact on improving educational outcomes. Clear financial reporting, regular audits, and the use of digital tools ensure that resources are used efficiently and for their intended purposes, such as teacher training and facility upgrades. These practices contribute to better access to teaching resources, improved learning environments, and enhanced student performance. This model exemplifies how transparent systems combined with strategic planning can overcome challenges such as limited resources and cultural diversity, offering valuable lessons for other schools seeking to improve financial governance.

In a broader context, the case of PPWNI underscores the importance of tailoring financial governance practices to local contexts while adhering to global best practices. The school's ability to balance resource constraints and cultural complexities serves as a replicable model for other institutions facing similar challenges. By adopting policies that emphasize inclusivity, adaptability, and efficiency, schools can build trust among stakeholders, optimize resources, and ultimately improve the quality of education. PPWNI's approach provides actionable insights for policymakers and education leaders, showcasing how innovative financial governance practices can create sustainable and equitable educational systems.

D. Conclusions

This study addresses the research question by demonstrating that financial transparency and accountability significantly enhance educational quality at PPWNI through three key mechanisms: effective financial reporting, participatory budgeting,

and strategic resource optimization. Transparent reporting fosters trust among stakeholders, participatory budgeting ensures that resource allocation reflects collective priorities, and resource optimization maximizes the impact of limited funds on educational outcomes, such as improved teaching resources and facilities. These findings highlight the transformative potential of inclusive and transparent financial governance, particularly in culturally diverse and resource-constrained settings. Future research could investigate the scalability and adaptability of these practices in other expatriate and resource-limited schools, offering broader insights into their applicability across varying educational contexts.

E. Acknowledgement

We would like to express our sincere gratitude to the administration, teachers, parents, and students of Pusat Pendidikan Warga Negara Indonesia (PPWNI) for their invaluable support and cooperation throughout this study. Their willingness to share insights and provide access to relevant data was instrumental in the successful completion of this research. We also extend our appreciation to Dr. Nuphanudin whose prior work laid the foundation for this study. Lastly, we acknowledge the encouragement and guidance from supervisors who contributed to refining this research, as well as the unwavering support of our families, which made this endeavor possible.

References

- Ahmed, M., Kamal, S., & Khan, Z. (2022). Financial management practices in expatriate schools. *International Journal of Educational Studies*, 15(4), 341–356.
- Al-Thani, G. (2024). Comparative Analysis of Stakeholder Integration in Education Policy Making: Case Studies of Singapore and Finland. *Societies*, 14(7), 1–15. <https://doi.org/10.3390/soc14070104>
- Alam, A., & Mohanty, A. (2023). Cultural beliefs and equity in educational institutions: Exploring the social and philosophical notions of ability groupings in teaching and learning of mathematics. *International Journal of Adolescence and Youth*, 28(1), 577–599. <https://doi.org/10.1080/02673843.2023.2270662>
- Allioui, H., & Mourdi, Y. (2023). Exploring the full potentials of IoT for better financial growth and stability: A comprehensive survey. *Sensors*, 23(19), 1–68. <https://doi.org/10.3390/s23198015>
- Bouchetara, M., Zerouti, M., & Zouambi, A. R. (2024). Leveraging Artificial Intelligence (AI) in Public Sector Financial Risk Management: Innovations, Challenges, and Future Directions. *Edpacs*, 69(9), 124–144. <https://doi.org/10.1080/07366981.2024.2377351>
- Bracci, E., Humphrey, C., & Moll, J. (2021). Governing schools through financial transparency. *Public Money & Management*, 41(1), 31–40.
- Braun, V., & Clarke, V. (2022). Thematic analysis: A reflexive approach. *Qualitative Research in Psychology*, 19(1), 1–21.

- Bruns, B., Filmer, D., & Patrinos, H. A. (2011). *Making schools work: New evidence on accountability reforms*.
- Ghezal, R. (2024). Determinants of engagement with and of stakeholders in CSR decision-making: a stakeholder perspective. *European Business Review*, 36(5), 771–790. <https://doi.org/10.1108/EBR-03-2023-0085>
- Haghighi, H., & Takian, A. (2024). Institutionalization for good governance to reach sustainable health development: A framework analysis. *Globalization and Health*, 20(1), 1–12. <https://doi.org/10.1186/s12992-023-01009-5>
- Hasan, M. F., Monita, D., & Sukiman. (2024). Revitalisation of Rejang tribal local wisdom: Integration of cultural values in the operational curriculum innovation of elementary schools in Rejang Lebong, Indonesia. *Education*, 3(13), 1–18. <https://doi.org/10.1080/03004279.2024.2318246>
- Lansing, A. E., Romero, N. J., Siantz, E., Silva, V., Center, K., Casteel, D., & Gilmer, T. (2023). Building trust: Leadership reflections on community empowerment and engagement in a large urban initiative. *BMC Public Health*, 23(1), 1–25. <https://doi.org/10.1186/s12889-023-15860-z>
- Li, G., Zarei, M. A., Alibakhshi, G., & Labbafi, A. (2024). Teachers and educators' experiences and perceptions of artificial-powered interventions for autism groups. *BMC Psychology*, 12(1), 1–12. <https://doi.org/10.1186/s40359-024-01664-2>
- Liu, W., Yan, T., Li, Y., & Lv, W. (2024). International higher education as knowledge diplomacy: The role of Chinese universities in China's belt and road initiative. *Industry and Higher Education*, 0(0), 1–11. <https://doi.org/10.1177/09504222241271659>
- Liu, Y., Zhang, F., Li, B., Liu, P., Liu, S., & Sun, Q. (2024). Believing in the power of belief: A study on the formation mechanism of innovative behavior from the perspectives of intrinsic and extrinsic spiritual inspiration. *European Journal of Innovation Management*, 1–27. <https://doi.org/10.1108/EJIM-06-2023-0488>
- Merrill, M. D. (2007). First Principles of First Principles of Instruction: A synthesis. *Trends and issues in instructional design and technology*, 2, 62–71.
- Mestry, R. (2016). The role of governing bodies in the management of financial resources in South African public schools. *South African Journal of Education*, 36(2), 1–10.
- Nguyen, T., & Nguyen, M. (2023). Digital innovations in school financial management. *Asian Journal of Educational Management*, 7(3), 97–112.
- Nilendu, D. (2024). Enhancing forensic education: Exploring the importance and implementation of evidence-based education system. *Egyptian Journal of Forensic Sciences*, 14(1). <https://doi.org/10.1186/s41935-023-00375-w>
- Odden, A., & Picus, L. (2014). *School finance: A policy perspective*. McGraw-Hill Education.
- Saeed, U. F., Kamil, R., & Wiredu, I. (2024). The moderating role of technological innovation on ownership structure, financing decisions and environmental accounting disclosure. *Cogent Business and Management*, 11(1), 1–23. <https://doi.org/10.1080/23311975.2024.2396543>

- Sciulli, N., & Adhariani, D. (2023). The use of integrated reports to enhance stakeholder engagement. *Journal of Accounting and Organizational Change*, 19(3), 447–473. <https://doi.org/10.1108/JAOC-11-2021-0156>
- Sharma, R., Gupta, S., & Reddy, P. (2020). Participatory budgeting in education: Enhancing accountability and community involvement. *Journal of Educational Policy and Planning*, 35(2), 211–230.
- Steiner-Khamsi, G., Jóhannesdóttir, K., & Magnúsdóttir, B. R. (2024). The school-autonomy-with-accountability reform in Iceland: Looking back and making sense. *Nordic Journal of Studies in Educational Policy*, 10(3), 180–198. <https://doi.org/10.1080/20020317.2024.2375087>
- UNESCO. (2020). *Quality education for sustainable development*. <https://www.unesco.org>

Implementation of Sanctions for Problem Students at Islamic Boarding Schools Darul Hikmah Taman Pendidikan Islam Medan

Ardiansah Rambe¹, Azizah Hanum¹

¹Universitas Islam Negeri Sumatra Utara, Medan, Indonesia

Corresponding author e-mail: ardiansah0301201017@uinsu.ac.id

Article History: Received on 2 November 2024, Revised on 30 December 2024,
Published on 17 January 2025

Abstract: This study aims to analyze the implementation of sanctions for problematic students at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan. As an Islamic educational institution, Islamic boarding schools have an important role in shaping the character and morals of students. However, it is not uncommon to find students involved in violating existing rules. This study uses a qualitative approach with a case study method to explore the understanding of the implementation of sanctions applied in the Islamic boarding school. Data was collected through in-depth interviews with Islamic boarding school administrators, teachers, and students involved, as well as direct observation of the process of implementing sanctions. The results of the study show that the Darul Hikmah Islamic boarding school implements various types of sanctions, ranging from verbal sanctions to physical sanctions that aim to educate and improve student behavior. However, the implementation of these sanctions still faces several challenges, such as differences in perception of the fairness of sanctions and the psychological impact on students. This study suggests the need for periodic evaluation of the sanction system implemented to be more effective in educating students and creating an environment conducive to their spiritual and moral development.

Keywords: Implementation, Sanctions, Students with Problems

A. Introduction

Islamic boarding schools are Islamic educational institutions that have an important role in the formation of morals, character, and discipline of students. As a place to study religion, Islamic boarding schools also teach life values that include faith, devotion, and social ethics. In carrying out these educational activities, there are various rules that must be obeyed by every student. These rules aim to create an environment conducive to the formation of character and spirituality of students.

However, in practice, not all students can comply with the existing rules. Some of them are involved in violations that interfere with the educational process and common life at Islamic boarding schools. To deal with this problem, Islamic boarding schools usually impose sanctions as a form of disciplinary action. This

sanction is applied to provide a deterrent effect, return student behavior to the right track, and to educate students to understand the consequences of each action.

Islamic boarding schools as Islamic educational institutions have a very vital role in shaping the young generation who have noble morals and good religious knowledge. However, in every Islamic boarding school, including the Darul Hikmah Islamic Boarding School in Taman Pendidikan Islam Medan, it is inevitable that there are students who violate the applicable rules. These violations can vary, ranging from absenteeism, violations of order, to behavior that is contrary to the religious values taught.

To maintain order and create an atmosphere that supports the learning process, Islamic boarding schools need to impose sanctions on students who have problems. Sanctions are expected not only as punishments, but rather learning that can provide a deterrent effect and improve student behavior. In this context, it is important to know how sanctions are applied at the Darul Hikmah Islamic Boarding School and how it affects changes in student behavior.

An institution that maintains and preserves Islamic values by focusing on educational issues, Boarding can be referred to as *taffaqquh fi al-din* which shoulders the task of inheriting the treatises of the Prophet Muhammad Saw as well as preserving the teachings of Islam (Umi Kalsum, 2024). Thus, the existence of Islamic boarding schools is a phenomenon that will remain interesting to study (Hanum, 2022). In addition, Boarding is also an educational model that is only developing rapidly in Indonesia and is not found in other countries.

Islamic boarding schools are also the first and oldest education in Indonesia which is an inspiration for the current education model and system and is not affected by the changing times (Zaki, 2021). Where Islamic boarding schools have an inherent existence in society, also have a distinctive and unique education system, Islamic boarding schools are considered unique because they have special characteristics that are not owned by public schools (Rizki Inayah Putri, 2023). In addition, Boarding is also considered a place to study Islamic science and as a center for Islamic da'wah (Dalimunthe, 2020). Islamic boarding schools are a place to teach Islamic teachings where there are teachers, students, methods and learning materials (Neliwati, 2019).

Islamic boarding schools in terms of their role in education are also one of the many education sub-systems in Indonesia that have a very important role in the development and progress of national education in Indonesia (Putri Syahri, 2024). So it is undeniable that the role of Islamic boarding schools has a very important position and role in efforts to educate the life of a moral and cultured nation (Muhammad Yusup, 2023). This role is reflected in the process of implementing education, learning methods, and character development that takes place in Islamic boarding schools (Faridah, 2019).

It should be noted that in every Islamic boarding school cannot be separated from the various rules and regulations that have been implemented, and where each Islamic boarding school must impose sanctions (Saharso Saharso, 2024). Punishment is a punishment given to students for violating the regulations that have been set at the Islamic boarding school (Yanto Manurung, 2022). Sanctions in the world of education are punishments that are educational, because these punishments contain educational elements that have been decided together in the deliberations of the Boarding coaches for the good of students (Selvia, 2021).

Even in the Qur'an, Surah Al-Fath verse 16 Allah explains that people who violate their rules deserve to be punished:

قُلْ لِلْمُخَلَّفِينَ مِنَ الْأَعْرَابِ سُدْعَوْنَ إِلَى قَوْمِ أُولَىٰ بِأَنْسٍ شَدِيدٍ تَقَاتِلُوهُمْ أَوْ يُسْلِمُوا ۖ فَإِنْ تُطِيعُوا يُؤْتِكُمُ اللَّهُ أَجْرًا حَسَنًا ۖ وَإِنْ تَتَوَلَّوْا كَمَا تَوَلَّيْتُمْ مِّن قَبْلُ يُعَذِّبْكُمْ عَذَابًا أَلِيمًا ۝ ١٦ (الفتح/48: 16)

Meaning: Say to the abandoned Bedouin Arabs, "You will be invited to fight against the people who have great strength. You will fight them or they will give up. If you obey (the invitation), Allah will give you a good reward. However, if you turn away as you did before, He will punish you with a painful punishment." (Al-Fath/48: 16) (Kemenag RI, 2019).

In Tafsir Al-Misbah it is explained that the meaning of this verse is an invitation to exalt the word of Allah by the way you fight them or they convert to Islam. So if you obey the invitation, Allah will surely reward you with good rewards in the world in the form of glory and if you turn away, Allah will punish you with a painful punishment (Iskandar, 2022).

The hadith related to punishment is contained in a hadith narrated by Imam Abu Daud namely:

عن عبد الله بن عمرو بن العاص رضي الله عنهما: أن النبي صلى الله عليه وسلم قال: مُرُوا أَوْلَادَكُمْ بِالصَّلَاةِ وَهُمْ أَبْنَاءُ سَبْعِ سِنِينَ، وَاضْرِبُوهُمْ عَلَيْهَا وَهُمْ أَبْنَاءُ عَشْرٍ، وَفَرِّقُوا بَيْنَهُمْ فِي الْمَضَاجِعِ رَوَاهُ أَحْمَدُ وَأَبُو دَاوُدَ

From Abdullah bin Umar bin As Radiallahuanhuma, he said: The Messenger of Allah said: "Command your children to perform the prayer when they have reached the age of seven, and when they have reached the age of ten, beat them, if they do not perform it, and separate them in their beds (H.R. Abū Dāwūd).

This hadith explains that the purpose of ordering children to perform prayer is in the context of habituation. As for the government, it also includes teaching everything needed to make one's prayer valid, such as the conditions for prayer and also the harmony. Based on the hadith, it can be seen that the Prophet also taught Muslim parents to order their children to pray from the age of seven and to punish them if they neglect to perform prayers when they are ten years old. This shows that

the legality of punishment has been applied since the time of the Prophet Saw, of course, with provisions that result in a deterrent effect (Alfi, 2021).

Based on the Tafsir and explanation of the hadith above, it can be understood that every action must have consequences, both good and bad deeds are done. In addition, it can also be known that punishment is the cause of the violation committed.

The main purpose of sanctioning the students is to make them feel deterred and also prevent them from repeating the wrong deeds (Marwan, 2022). This sanction is expected to increase the discipline of students, as well as be able to control themselves in their behavior. In addition, these sanctions can be a motivation for students to learn, so that learning goals can be achieved optimally (Rukiyati, 2024).

However, based on the pre-research observations conducted by the researcher at the Darul Hikmah Islamic Boarding School, it is known that the sanctions applied are still not realized effectively as expected, so that they cannot provide a deterrent effect on students at the Darul Hikmah Islamic Boarding School, this can be known by the fact that there are still several students who often violate the rules. For example, there are still students who do not use the official language of the Boarding, are dating, and leave the Boarding without permission from the teacher or dormitory supervisor. This fact shows that the purpose of applying the sanctions has not been achieved.

Based on this, it shows that there is a gap where sanctions have been applied, but there are still students who violate the rules. So further research is needed to find out the application of sanctions that can have a deterrent effect on the students but are still acceptable so that they no longer repeat the same mistakes and make them disciplined in their every action.

To strengthen this research, it is evidenced by the existence of a previous study entitled "Punishment and Its Implications for the Formation of Student Discipline in Islamic Boarding Schools". The results of this study show that with the existence of the punishment program, students become more disciplined, orderly, and diligent in participating in boarding school activities and school activities, in addition to the recapitulation of student violations in a normal frequency every month (Musta'in Romli, 2023). In addition, there is also another research entitled "The Application of the Ta'zir Method as an Effort to Improve Student Discipline". The results of this study show that after the implementation of the ta'zir method, it has a positive impact and a great influence on students and many students feel deterred in violating regulations and make them more disciplined and obedient to regulations. Ta'ziran is given in accordance with the violations committed by the students, such as sweeping the dormitory, throwing garbage, cleaning the bathroom (Selvia, 2021).

Based on the background of the above problems, the researcher is interested in conducting research that examines several things, including how the regulations at

the Darul Hikmah Islamic Boarding School Taman Pendidikan Islam Medan are. What are the forms of sanctions at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan. How to apply sanctions at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan.

However, the implementation of sanctions in Islamic boarding schools does not always go smoothly. There are various factors that affect the effectiveness of sanctions, such as students' perception of the fairness of sanctions, the types of sanctions applied, and the psychological impact felt by students who are subject to sanctions. Therefore, this study focuses on exploring how the implementation of sanctions is carried out at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan, and to analyze the effectiveness of these sanctions in shaping the character and discipline of students.

This research is expected to provide a clear picture of the application of sanctions for problematic students and provide useful recommendations for Islamic boarding school managers in increasing the effectiveness of the sanctions system. Thus, it is hoped that the Darul Hikmah Islamic Boarding School can create a better environment and support the spiritual and moral development of students.

B. Methods

This study uses a qualitative approach with a case study method to analyze the implementation of sanctions for problematic students at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan. The case study method was chosen because it provides an opportunity to dig deeper into the application of sanctions in this Boarding comprehensively, focusing on the context, procedures, and impact on problematic students (Sugiyono, 2022). A qualitative approach is used to understand the phenomenon that occurs at the Darul Hikmah Islamic Boarding School in terms of the implementation of sanctions. This research does not focus on numbers or statistics, but rather on an in-depth understanding of sanctions practices and their impact on students. The qualitative approach allows researchers to explore perspectives from various related parties, such as Islamic boarding school administrators, teachers, and students.

This research uses a type of case study, which aims to deeply understand the phenomenon that occurs in the Darul Hikmah Islamic Boarding School. This case study allows researchers to examine in detail the implementation of sanctions against problem students in a specific context (Ismail S. , 2023). The researcher will investigate various aspects related to the application of sanctions, ranging from the reasons for the application of sanctions, the types of sanctions given, to the impact that arises after the sanctions are given. This research was conducted at the Darul Hikmah Islamic Boarding School in Taman Pendidikan Islam Medan, an Islamic boarding school that has the characteristics of modern and traditional Islamic education. This Islamic boarding school was chosen because of challenges related to

the application of sanctions for problematic students that are quite relevant to research.

The main data sources in this study consist of three main groups of informants, namely the head of the boarding school, the administrator responsible for discipline management, and the coach involved in the sanctioning process (Kusumastuti, 2019). Teaching staff who interact directly with students and have a role in monitoring student behavior and giving sanctions. Students who have been or are being sanctioned for violating rules at Islamic boarding schools. These students provided information related to their experiences about the application of sanctions and their impact on their behavior.

The data in this study was collected using several techniques, namely semi-structured interviews will be conducted with Islamic boarding school administrators, teachers, and students (Dahlia, 2024). This interview aims to explore the understanding of the reasons for the implementation of sanctions, the types of sanctions applied, and their impact on students. The interview also aims to gain views on the effectiveness of sanctions in changing student behavior. Researchers will make direct observations at Islamic boarding schools to see the process of implementing sanctions. This observation will include observation of the situation, atmosphere, and reaction of students and administrators to the implementation of sanctions. Secondary data collection through the study of documents related to the policy of Islamic boarding schools in implementing sanctions, such as Boarding regulation books, violation records, and reports related to the handling of student discipline problems.

Data collected from interviews, observations, and documentation will be analyzed using thematic analysis. The analysis process is carried out in several stages, namely interview and observation data will be encoded to identify the main themes related to the application of sanctions (Creswell, 2020). The codes that appear will be grouped into relevant categories, such as the type of sanction, the reason for the sanction, the impact of the sanction, and the effectiveness of the sanction. The researcher will interpret the data by relating the findings from these categories to relevant theories regarding discipline, character education, and the application of sanctions in educational institutions. To increase the validity of the results, data from various sources (administrators, teachers, and students) will be compared and checked for suitability and consistency.

To ensure the validity and reliability of the data, this study uses a triangulation technique, which is to compare findings obtained from various sources (interviews, observations, and documentation) and use two or more data collection methods (Sugiyono, 2022). In addition, to ensure the accuracy of the results, interviews will be conducted repeatedly if necessary, and the researcher will always record impressions or observations during the research process. This research follows the applicable principles of research ethics. Before conducting an interview or

observation, the researcher will first ask for permission from the authorities at the Darul Hikmah Islamic Boarding School. All participants in the study will be given an explanation of the purpose of the research and the confidentiality of the information provided is guaranteed.

This study only focuses on the implementation of sanctions for problematic students at the Darul Hikmah Islamic Boarding School in Taman Pendidikan Islam Medan, so the results of this study cannot be generalized to all Islamic boarding schools in Indonesia. This research is also limited to violations committed by students in the context of life in Islamic boarding schools. By using this method, it is hoped that this study can provide a clear and in-depth picture of the implementation of sanctions in the Darul Hikmah Islamic Boarding School and provide useful insights for the development of a more effective discipline system in Islamic boarding school education.

C. Results and Discussion

Regulations at the Darul Hikmah Islamic Boarding School, Taman Pendidikan Islam Medan.

A student in participating in learning activities at school will not be separated from the various rules and regulations imposed at school. Every student is required to be able to behave in accordance with the rules and regulations that apply at school. The regulations at the Darul Hikmah Islamic Education Park Islamic boarding school are implemented as a form of discipline for the existing students. As for the results of an interview with the principal:

"So the regulation is to discipline and discipline the existing students. So there are many regulations, especially in this dormitory, starting from the rules for the dormitory, then their discipline". (Umrah, S.Pd, M.Hum, May 13, 2024)

Based on this, the regulations at the Darul Hikmah Islamic Boarding School in Taman Pendidikan Islam Medan are divided into regulations for students when they are in the dormitory according to this table of dinawah.

Table 1. Student Regulations While in the Dormitory

No electronic devices must be carried.	It is not allowed to throw garbage, dirt or anything through the window and must be disposed of in a designated place.
It is not allowed to bring novels or books that contain pornographic elements.	It is not allowed to wear footwear in the room and on the veranda of the room.
All students have to go to bed at 23.00 WIB (except for night watchmen)	It is not allowed to play sounds and make noises except during certain training times/times and have been allowed.
Guests are not allowed in the room except	Each box/cabinet must be locked.

for a permission sign.

Clothes should be folded and placed in the designated place.

It is not allowed to use benches, tables and other tools outside the classroom/building unless permission is obtained.

It is not allowed to put up calendars, symbols and wear clothes that smell of politics or factions.

It is not permissible to wander around while a person is reading the Qur'an or performing prayers.

Suitcases/suitcases must be placed in a designated place, not on the closet.

When going to bed, you must wear trousers/nightgowns

It is not allowed to sleep using benches, chairs, tables in the room

Each room must use lights at night.

The regulation is in accordance with the results of an interview conducted with the principal of the Darul Hikmah Medan Islamic Boarding School:

"The rule is that if you are in the dormitory, you are not allowed to bring electronic devices, such as cellphones, even if we find electronic clocks, we do not allow them. Then books, novels, or books that contain pornographic elements in them are not allowed. It is not allowed to stay up outside of the time, because on Friday night they can do tahajud". (Umrah, S.Pd, M.Hum, May 13, 2024)

As for the disciplinary regulations, namely:

Disciplinary Rules

It is not allowed to damage the cottage facilities.

Leaving the hut must have a permit.

Parents' visiting hours are according to the specified time.

The regulation is in accordance with the results of an interview conducted with the principal of the Darul Hikmah Medan Islamic Boarding School:

"They are not allowed to graffiti on the walls of the Boarding or damage the facilities of the boarding school, they are not allowed to leave the Boarding without permission, they are not allowed to be visited by their families outside of operational hours to visit, well this includes disciplinary regulations". (Umrah, S.Pd, M.Hum, May 13, 2024)

In addition to the uniform dress code at school, the Darul Hikmah Islamic boarding school also implements regulations such as in the bathroom, rules at mealtimes, in the classroom, in the dormitory, and several other additional regulations have been explained when entering the Boarding, of course, these regulations are expected to bring benefits and goodness to students and students.

Forms of Sanctions at Darul Hikmah Islamic Boarding School Taman Pendidikan Islam

In the Boarding, of course, there are regulations to maintain the discipline of the students, students are expected to comply with the rules that have been set by the Boarding. Basically, violations in Islamic boarding schools are divided into three parts, namely: minor violations, moderate violations, and serious violations.

The levels of these sanctions as shown in an interview with the Principal of the Darul Hikmah Medan Islamic Boarding School are:

"There are various sanctions in our Boarding according to the level of the number of violations. There are remembrance sanctions, moderate sanctions, and heavy sanctions". (Umrah, S.Pd, M.Hum, May 13, 2024)

Lesser Punishment

The forms of violations committed at the Darul Hikmah Medan Islamic Boarding School so that they get light punishments are:

Form of Violation	Punishment
Taking a friend's belongings without permission.	Cleaning the bathroom or field.
Disturbing friends while sleeping.	Memorize some suroh or vocabulary
Late to the mosque.	

The form of the violation so that the sanction was given is in line with the results of an interview conducted with the principal of the Darul Hikmah Medan Islamic Boarding School:

"Light sanctions are cleaning the bathroom or field, besides that we also apply memorization such as memorizing suroh, vocabulary or others depending on the ustadz, not just memorizing because for the period it is at least one month. And examples of violations are such as taking friends' belongings in the mosque, then picking up their friends who are sleeping, being late to the mosque". (Umrah, S.Pd, M.Hum, May 13, 2024)

Moderate Sanctions

The forms of violations committed at the Darul Hikmah Medan Islamic Boarding School so that they get moderate sanctions are:

Form of Violation	Punishment
Committing a misdemeanor more than 2 times	In accordance with minor violations.
Saying dirty words.	Preparing the bathroom for two days in one week
Fight	

The form of the violation so that the sanction was given is in line with the results of an interview conducted with the principal of the Darul Hikmah Medan Islamic Boarding School:

"Medium sanctions, for example, if the student commits a minor violation several times, the punishment can be a light punishment, but it can also be according to the moderate sanction that is dependent on the coach ustadz. Then there is also cleaning the bathroom, because usually to clean the bathroom there is a picket officer, so if there are students who commit moderate violations, then they will clean the bathroom according to the specified time. For example, for example, saying dirty or fighting". (Umrah, S.Pd, M.Hum, May 13, 2024).

Severe Punishment

The forms of violations committed at the Darul Hikmah Medan Islamic Boarding School so that they get light sanctions are:

Form of Violation	Punishment
Dating.	Bald/shaved smooth.
Bringing a cellphone.	Fine Rp. 50,000
Steal.	Called by Parents
Withdraw from the Boarding.	In the score
Repeatedly committing minor violations.	

The form of the violation so that the sanction was given is in line with the results of an interview conducted with the principal of the Darul Hikmah Medan Islamic Boarding School:

"For the heavy sanctions, we put them bald, well after that we give them a fine. Well, this fine is based on the results of the teachers' meeting and security, he set a fine of Rp. 50,000. In addition, there is also a call to parents. Examples of violations are dating, especially up to two people, carrying cellphones, stealing, and revoking, then committing minor violations continuously until infinity. For example, he skips prayer too often. Then there is also a suspension if you have committed two serious violations". (Umrah, S.Pd, M.Hum, May 13, 2024)

The application of sanctions at the Darul Hikmah Islamic Boarding School

The application of witnesses for students with problems at the Darul Hikmah Medan Islamic boarding school is quite diverse depending on the violation committed. The problematic students faced the security department to confirm the type of violation committed, then only after that it was followed up. If the violation is still classified as a minor violation, it will be handled by the Boarding organization. However, if it has entered into a serious violation, it will be immediately handled by the ustad/zah supervisor.

According to Mr. Ahmad Rodfiakim Harahap as the Vice President of Student Affairs at the Darul Hikmah Medan Islamic boarding school, before sanctions are given to students who violate, the clarity of the violation is first confirmed.

"First the student is called first, then confirmed first, whether he did that, then there is a sanction, if he does it, we will give a punishment, if he does not confess and there are no

witnesses and we interrogate again. For example, minor violations are such as the time of late prayer, late entry to the mosque, not using the language of the Boarding, not using attributes, and not participating in extracurricular programs and Ospidah work activities. That's more focused on daily activities. And if for example, for minor violations that punish, it is still the student council in the Boarding. And the punishment has been with the approval of the tutor. But for severe sanctions, he has been handed over to the supervisor, that is why he was provided with a warning letter one, a warning letter two, a warning letter three and the last one was to return his custody to his parents or expel him from the Boarding". (AR. Harahap, May 25, 2024)

The statement of the Deputy Head of Student Affairs was also strengthened by a statement from one of the male students who stated:

"First the security department will be called, then it will be reconfirmed whether the mistake made is correct or not, then if it is true, the security department will give it to the ustadz". (Ibrahim Frandika, May 13, 2024)

The sanction began with a fairly long process, starting from the initial investigation to the confirmation of the truth of the case and witnesses who knew about the incident. This process is carried out so that there is no punishment given to innocent students or the punishment given is not in accordance with the violation committed.

The sanction based on the results of an interview with the Principal of Madrasah Aliyah is divided into three levels depending on the type of violation committed.

"The sanctions applied at this Islamic boarding school are in the form of various sanctions, categorized into three parts (light, medium, and severe), and applied according to the level of violation committed by the students. So, if the minor violation is committed repeatedly, we will not give a warning letter just as a light punishment, such as a general cleaning. Then if the violation is moderate, we will also look at the duration, if for example he does it in the first grade of Madrasah Tsanawiyah then does the same thing in the 3rd grade of Madrasah Tsanawiyah, now we will not give a warning letter at that time, but if he does it again then we will give a warning letter one, now we see the distance like that. Then from the warning letter that is a big violation, now if for example he does it once, we will give him a warning letter one, if he does it twice, he will be given a warning letter two, but first we will look at the records or data of students who have violated the rules, and when he gets a warning letter one, then he commits a moderate violation, Then he besides that also commits a serious violation, we will immediately give a warning letter three. He committed the smallest, medium and serious offenses at the same time, so he was not given a warning letter one, a warning letter two, we went straight to the warning letter three, we called his parents, we conveyed to his parents in other matters his mistakes, how many times he has repeated, how his response is here to learn then after that we will give it to his parents". (Umrah, S.Pd, M.Hum, May 13, 2024)

The sanction at the Darul Hikmah Islamic Boarding School in Medan has proven to be effective in disciplining students so that they do not do the same thing repeatedly and the students become more obedient to the regulations in the Islamic boarding

school. Although sometimes there are one or two who still commit violations. This is as stated in an interview by the Principal and the Vice President of Student Affairs:

"Yes, of course, the sanctions applied in Islamic boarding schools can help guide students not to repeat the same act". (Umrah, S.Pd, M.Hum, May 13, 2024)

"From my point of view, yes, of course, the sanctions applied in Islamic boarding schools can help guide students not to repeat the same act. Students become more obedient to existing regulations and carry out Boarding activities well. The sanctions applied have also succeeded in leading the students to be disciplined in carrying out the rules in the Boarding". (AR. Harahap, May 25, 2024)

Based on the description of the interview above, it can be concluded that the process of implementing sanctions carried out at the Darul hikmah Islamic Boarding School Taman Pendidikan Medan is in accordance with procedures and effective. Before punishing the students, the ustazah and the teachers' council first seek the truth of the violation. In addition, the sanction is not only in the form of punishment, but also contains elements of training to improve the character of students so that they do not continue with reprehensible or bad behavior patterns so that they understand their mistakes and improve their behavior. After the students received sanctions, they felt deterred and upset for the mistakes they made, and promised not to repeat the same mistakes or new mistakes. The sanctions at the Darul Hikmah Islamic boarding school are given according to the class of violations violated by the students, without differentiating between one student and another.

The problem of violation of rules by students, even though there have been sanctions implemented, can be explained from various perspectives, especially in the context of the implementation of sanctions at the Darul Hikmah Islamic Boarding School in Taman Pendidikan Islam Medan, some of the reasons that the researcher found from the research analysis are: Students may not fully understand the reasons behind the rules, or they may feel irrelevant to their daily lives. If the rules are only enforced without being explained in depth and given understanding, students may not feel that the violation has any meaningful consequences or relevance to their lives. One of the factors that can cause students to continue to violate the rules despite sanctions is inconsistency in the application of these sanctions. If students see that the violations they commit are not always followed by firm sanctions, they may feel that there are no serious consequences for their actions. The successful implementation of sanctions depends on consistency and seriousness in enforcing them.

Punishment alone is not enough to change student behavior. More holistic approaches, such as character development, mental and emotional mentoring, and training on religious and moral values, can be more effective. If the punishment is punitive and not balanced with a more in-depth coaching approach, students may not feel compelled to change. In Islamic boarding schools, the influence of peers is very large. If most of the student's peers tend to break the rules or don't respect the

sanctions, then other students may feel that breaking the rules is normal and doesn't matter. Therefore, if the social environment around students does not support good behavior, then the application of sanctions may not be effective enough.

If the sanctions applied do not have a significant enough impact on students' lives, they may not feel affected. For example, if the sanction is only a light warning or punishment that has no impact on their daily activities, then students may feel that breaking the rules is not a big deal. If students do not feel involved or do not have the motivation to follow the rules, then they will be more likely to break the rules despite the sanctions. Strengthening students' motivation, by involving them in decision-making related to rules or creating a more supportive environment for their personal development, can help reduce violations.

Some students experience social or personal pressures that can affect their behavior. Stress, anxiety, or other personal issues can encourage students to break the rules as a form of escape or to get attention. In the context of Boarding, a more empathetic-based approach and psychological support may be needed to deal with this problem. Overall, while the application of sanctions is an important part of discipline, the management of rule violations must involve a broader approach, including a deep understanding of the reasons behind the violations, consistency in rule enforcement, and a more comprehensive coaching system. If students feel that the rules and sanctions are meaningful and can help them grow, they are more likely to comply with the rules that have been set.

One of the main reasons why students or students continue to violate the rules despite sanctions is their perception of the effectiveness of the sanctions themselves. According to research by (Nasir, 2021), Many violators feel that the sanctions applied are not harsh enough or inadequate to have a deterrent effect. If the sanction is perceived as mild or inconsistent, they may feel that the risk of breaking the rule is lower than complying with the rule. In Islamic boarding schools, sanctions are often educational in nature and aim to provide learning to students. However, if the sanctions are not in accordance with the behavior violated or are not applied consistently, students can feel that violating the rules has no real consequences.

In some cases, violations of the rules occur due to cultural and social factors that exist in the Boarding itself. For example, in the context of a very close Boarding community, it is possible that some students violate the rules due to the influence of certain peers or cultures that support such behavior. A journal by (Jauhari, 2019) It shows that peer influence in the Boarding environment can play a big role in student behavior. When transgressions are committed collectively or accepted in groups, individuals tend to feel more pressured to join the group, even though they know that it is against the rules. This reflects that the social aspect is stronger in some situations than the pressure from the sanctions imposed by the Boarding authorities.

Some students may have difficulty in internalizing the moral and religious values that are the basis of the rules at the Boarding School. A study by (Aditya, 2023)

reveals that the gap between the understanding of religious values taught and their application in daily life can lead to inconsistencies between behavior and rules. If students do not really understand or believe in the importance of existing rules, they may not feel compelled to comply with these rules, despite the threat of sanctions. This factor leads to the importance of an educational approach that touches more on the aspects of understanding and internalizing religious values, not just sanctioning as a form of punishment.

Research by (Rahman, 2020) It shows that the involvement of students in the process of making and establishing rules can increase their awareness and discipline in complying with these rules. When they feel they have the right to participate in rule-making, they are more likely to respect the rules. On the other hand, if the rules are felt to come from the authorities without discussion or mutual understanding, violations can occur more frequently. Good implementation of sanctions must be supported by a dialogical approach, where students are given the opportunity to speak and understand why these rules exist, as well as how sanctions can function as a learning tool, not just a punishment.

One of the factors that makes sanctions ineffective is the lack of supervision in their implementation. Research by (Haris, 2020) shows that sanctions given without adequate supervision often do not have a significant impact on student behavior. Without a good evaluation, Boarding may not know how much impact the sanctions are given in the long term. Therefore, it is important for Boarding not only to provide sanctions but also to conduct periodic evaluations of their effectiveness, as well as to improve approaches that do not bring about the desired behavioral changes.

Students who often violate the rules can get a negative stigma that actually worsens their behavior. In some cases, the sanctions provided even add to feelings of isolation or discrimination, which triggers further rebellious behavior. Research by (Ismail, 2022) It shows that insensitive handling of the psychological and social conditions of problematic students can worsen their behavior. Therefore, a more holistic approach, such as psychological assistance and social empowerment, is needed to help students change their behavior.

Based on several studies and journals, it can be concluded that there are various factors that cause students to continue to violate the rules despite the application of sanctions. Factors such as perceptions of inadequate sanctions, peer influence, mismatch between moral values taught and individual understanding, lack of involvement in the rule-making process, as well as weak supervision of the application of sanctions, all contribute to this problem. Therefore, to reduce violations of rules, Boarding need to pay attention to a more comprehensive approach and is based on understanding and changing behavior, not just punishment.

The researcher suggested that for further studies that need to be considered is the

psychological impact of the application of sanctions on students, especially those who often violate the rules. This is important because the impact of sanctions is not only physical, but can also have an impact on the mental and emotional condition of students. To better understand the effectiveness of sanctions applied in Islamic boarding schools, a comparative study between the Islamic boarding school discipline system and the discipline system in non-Islamic educational institutions is very important. The social and family background of the students also contributes greatly to how they comply with or violate the rules at the Boarding. Therefore, further studies can examine the influence of family background and socioeconomic factors. Social changes and technological developments can also affect student behavior. Therefore, further studies can pay attention to the impact of technology and social media on disciplines and changes in social values in the context of globalization.

D. Conclusions

Based on the results of the research on the implementation of sanctions for problematic students at the Darul Hikmah Boarding Pond of Taman Pendidikan Islam Medan, several important conclusions can be drawn as follows. Pondok Boarding Darul Hikmah implements various types of sanctions against students who violate the rules, which include verbal, administrative, physical, and social sanctions. Each type of sanction is given according to the level of violation committed by the student, with the aim of educating and returning them to the right track, not just to provide punishment. The procedure for sanctioning at the Darul Hikmah Boarding Pond is carried out through clear stages, starting from the identification of violations, explanations by violating students, to the determination of appropriate sanctions. The sanction also pays attention to the principle of justice and aims to educate students to be more disciplined and responsible.

The psychological impact of sanctioning varies from student to student. Some students felt embarrassed and disappointed after being sanctioned, but many admitted that they learned important lessons about discipline and morals. Social sanctions, although they provide a deterrent effect, are sometimes felt to be too stressful for some students, especially those who are sensitive to feelings of shame. Sanctions have proven to be effective in educating students and improving their behavior, despite differences of opinion about the most effective type of sanction. Physical sanctions, although they have a deterrent effect on some students, are seen as needing to be further evaluated because they risk lowering confidence and can cause unwanted psychological impacts.

There are several challenges in the implementation of sanctions, such as differences in perception of the fairness of sanctions between administrators and students, as well as difficulties in maintaining a balance between the effectiveness of sanctions and a harmonious relationship between students and boarding administrators. Based on the findings of the research, it is recommended to strengthen the student

character development system with a restorative approach that is more based on dialogue and understanding. In addition, there is a need for periodic evaluations of the types and effectiveness of sanctions applied, as well as the development of an approach that emphasizes more on moral education and responsibility in daily life at Boarding.

E. Acknowledgement

Thanks to all parties who help us in this article.

References

- Aditya. (2023). Character Education Approach in the Implementation of Sanctions in Islamic Boarding Schools. *Journal of Education and Development*, 24(1), 80-95.
- Alfi. (2021). A Review of Types of Sanctions in Modern Islamic Boarding Schools. *Journal of Education and Society*, 20(1), 75-90.
- Aslam. (2023). The Role of Caregivers in Discipline Enforcement in Islamic Boarding Schools. *Indonesian Journal of Islamic Education*, 17(4), 400-415.
- Creswell, J. W. (2020). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Dahlia, T. I. (2024). The Strategy of the Head of Madrasah in Improving Teacher Discipline in the Private Tsanawiyah Madrasah Tahfidzul Quran Tanjungbalai City. *Journal of Multidisciplinary Scientific Studies (IJOMSS)*, 2(5), 12-21.
- Dalimunthe, R. A. (2020). *Learning Strategies of the Yellow Book In Pesantren*. Perdana Publishing.
- Fadil. (2022). The Application of Sanctions in Overcoming Violations in Islamic Boarding Schools. *Journal of Education and Islam*, 25(2), 140-155.
- Faridah. (2019). PESANTREN, History and Learning Methods In Indonesia. *Al-Mabsit: Journal of Islamic and Social Studies*, 13(2), 78-90.
- Hanum. (2022). IQAB in the pesantren tradition, an effort to form the morals of al-karimah students. CV. Nusantara Literacy.
- Haris. (2020). Types of Sanctions in Islamic Boarding Schools: An Analysis. *Journal of Islamic Education*, 19(1), 45-60.
- Hendri Yahya Sahputra, S. W. (2024). The use of social media as a means of supporting the success of education at SMP Bumi Qur'an Siantar. *Journal of Mudarrisuna: Islamic Religious Education Study Media*, 14(4), 476-487.

- Guidance. (2019). Sanctions as a Tool for Student Character Education. *Journal of Islamic Education and Learning*, 18(3), 250-265.
- Iskandar, T. (2022). Monotheistic Education On Life Motivation In The Perspective Of The Quran. *Reflexes*, 397-412.
- Ismail. (2022). The Role of Sanctions in the Formation of Student Morals in Islamic Boarding Schools. *Journal of Islamic Education*, 18(2), 100-110.
- Ismail, S. (2023). Creativity of PAI Teachers in Improving the Quality of Islamic Religious Education Learning in Elementary Schools. *Journal on Education*, 5(3), 10399-10408.
- Jauhari. (2019). The Effectiveness of Sanctions in Changing the Behavior of Problem Students. *Journal of Islamic Educational Psychology*, 21(2), 190-200.
- Kusumastuti, A. &. (2019). *Qualitative Research Methods*. Sukarno Pressindo Educational Institute (LPSP).
- Marwan. (2022). Parenting Strategies in Sanction Development in Islamic Boarding Schools. *Journal of Islamic Education*, 23(1), 80-95.
- Muhammad Yusup, M. M. (2023). The Influence of Learning Attitudes and Motivation on Students' Learning Achievement. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(1), 1-14. doi: <https://doi.org/10.31851/jmksp.v8i1.9844>
- Musta'in Romli, H. K. (2023). Punishment in the World of Islamic Perspective Education (Didikan Vis-a-vis Human Rights). *JIE : Journal of Islamic Education*, 9(2), 1-15.
- Nasir. (2021). Sanctions and Discipline in Islamic Boarding Schools: A Review of Practice. *Journal of Educational Sciences*, 28(1), 22-35.
- Neliwati. (2019). *Modern Islamic Boarding School Education, Management, and Leadership System Equipped with Concepts and Case Studies*. Rajawali Press.
- Putri Syahri, S. S. (2024). The implementation of religious modernization at the UIN Raden Fatah Palembang Campus aims to be able to respect each other between cultures and religions. *Academy of Education Journal*, 15(1), 278-287. doi: <https://doi.org/10.47200/aoej.v15i1.2171>
- Rahman. (2020). Humanist Approach in Enforcement of Sanctions in Islamic Boarding Schools. *Journal of Character Education*, 22(3), 150-160.
- Rizki Inayah Putri, T. I. (2023). Development of Inquiry Learning-Based Fiqh Module In Class VIII Madrasah Tsanawiyah Negeri II Mandailing Natal. *Edu Global: Journal of Islamic Education*, 4(1), 54-62.

- Rukiyati, D. (2024). Punishment received by students at the pesantren. *Humanities, Scientific Studies of General Courses*, 24(1), 79-88. doi: <https://doi.org/10.21831/hum.v24i1.70669.79-88>
- Safitri. (2020). Implementation of Sanctions in Islamic Boarding Schools: A Case Study in Islamic Boarding Schools X. *Journal of Islamic Education Studies*, 30(4), 310-325.
- Saharso Saharso, M. F. (2024). The Influence of Transformational Leadership Style, Work Environment, Job Satisfaction and Work Discipline on Employee Performance. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(1), 1-14. doi: <https://doi.org/10.31851/jmksp.v9i1.13760>
- Selvia, S. (2021). The Application Of The Ta' Zir Method As An Effort To Improve. 16(1), 50-59.
- Sugiyono. (2022). *Quantitative, Qualitative, and R&D Research Methods*. Alfabeta.
- Umi Kalsum, Z. Z. (2024, 01 14). The Strategy of the Head of the PAI Department of Ahmad Dahlan University Campus in Developing an Independent Campus for Graduate Quality. *Journal of Education Research*, 5(1), 76-83. doi: <https://doi.org/10.37985/jer.v5i1.764>
- Yanto Manurung, H. S. (2022). Kogabwilhan's Determination Strategy in Keeping the Security of the Border Areas In South China Sea Defense Management Perspective. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 7(2), 528-543. doi: <https://doi.org/10.31851/jmksp.v7i2.7958>
- Zaki. (2021). Implementation of Sanctions and Their Influence on Student Behavior. *Journal of Islamic Education*, 14(2), 105-120.

The Influence of Students' Initial Knowledge and Students' Learning Motivation on the Learning Outcomes

Ike Pratiwi Br Limbong¹, Toni Nasution¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: ikepratiwilimbong22@gmail.com

Article History: Received on 11 November 2024, Revised on 19 December 2024,
Published on 17 January 2025

Abstract: This research aims to analyze the influence of prior knowledge and learning motivation on the learning outcomes of class VII students at SMP IT Al Ikhwan Tanjung Morawa. Carried out in May-June 2024 with a population of 126 students, the research used a total sampling method. Data analysis includes validity, reliability, normality, correlation, regression and hypothesis tests. The research results showed that all measurement instruments for initial knowledge and learning motivation were declared valid and reliable. The normality test shows that the data is normally distributed. The correlation test revealed a significant relationship between prior knowledge ($r = 0.601$) and learning motivation ($r = 0.486$) on learning outcomes. Multiple linear regression analysis produces the equation $Y = 32.638 + 0.393X_1 + 0.259X_2$, which shows that both prior knowledge and learning motivation have a significant positive influence on student learning outcomes. Hypothesis testing shows that the t-values for prior knowledge and learning motivation are 6.017 and 3.172 respectively, with a significance of 0.000 and 0.002, both of which are smaller than 0.05. The F test shows that the simultaneous influence of the two independent variables on learning outcomes is also significant, with an F-calculated value of 42.662. These results emphasize the importance of prior knowledge and motivation in improving student learning outcomes.

Keywords: Initial Knowledge, Learning Motivation, Learning Outcomes

A. Introduction

Education has an important role in forming a quality generation, where the success of the learning process is very dependent on various factors. One important factor is students' initial knowledge, which is the basis for understanding subsequent learning material. Good initial knowledge allows students to more easily link new concepts with the understanding they already have, thereby increasing the effectiveness of learning (Buchari, 2018). Apart from that, learning motivation is also a key factor that determines the extent to which students are able to strive to achieve optimal learning outcomes (Cook & Jr, 2016). Learning motivation, both intrinsic and extrinsic, encourages students to be more active and enthusiastic in participating in the learning process (Khasanah, 2019; Fen & Ng, 2015).

In the modern educational era, relevant and effective learning approaches increasingly demand attention to these factors. However, in reality, not all students have an adequate level of initial knowledge and motivation to learn (Vhalery et al., 2022). This is a challenge for teachers, especially at the junior high school level, where students are in the transition phase from primary to secondary education, which requires academic and emotional adaptation (Zaim, 2020).

Learning outcomes play an important role in the entire learning process. Learning outcomes are used as a benchmark to assess the degree of student development that occurs as a result of their learning (Lina, 2013). The transformation process can be monitored and measured in terms of knowledge, attitudes and abilities (Raradhita et al., 2022). Therefore, learning outcomes are used as a benchmark. Legal case. According to (Rusman, 2015), learning outcomes can be interpreted as the peak of students' educational experience (Damanik et al., 2023). This experience includes cognitive, emotional, and physical dimensions. Furthermore, as stated by (Hamzah B. Uno and Satria Koni, 2013), learning outcomes are related to lasting modifications of individual behavior that arise from interactions with the surrounding environment. This change is caused by the process of acquiring knowledge or skills.

While these learning outcomes are important, as previously determined, there is still potential for improvement. Based on program research, points are compared to previous years. When one considers the very important function played by mathematics, this situation is very concerning. Therefore, at Al Ikhwan IT Middle School there is a problem that must be resolved in order to improve student learning outcomes in social studies subjects. Based on the findings of a preliminary study conducted by the author at SMP It Al Ikhwan Tanjung Morawa, researchers found that student learning results in social studies courses were still classified as poor. It is clear from the table provided below.

Table 1. Class VII Student Learning Results SMP IT Al Ikhwan Tanjung Morawa

Class	> 70	< 70	Number of Students	Grade Average
VII-1	22 (68,75%)	10(31,25%)	32	69,9
VII-2	31(100%)	0(0%)	31	74,80
VII-3	22 (68,75%)	10 (31,25%)	32	68,25
VII-4	20(64,51%)	11 (35,48%)	21	69,61
Total	95 (45,72%)	31(735,89%)	126	282,56

Of all Class VII-1 students, there were 22 students out of 31 Class VII-2 students who achieved scores exceeding the minimum completion score (KKM), all 31 students received a perfect score, namely 100%. Otherwise, the same value. 31.25 percent. In addition, of the 31 Class VII-4 students who achieved scores above the minimum passing threshold (KKM), 20 students obtained a percentage of 64.51%, while 11 students obtained scores below the KKM. Based on my observations of daily test scores, there are many Al Ikhwan IT SMP students whose scores are below the KKM.

From the author's observations on May 20 2024 at SMP IT Al Ikhwan Morawa, the following conclusions can be drawn. Regarding learning outcomes, students in social studies subjects still show a level of proficiency that is below standard.

In a preliminary investigation conducted by the author at SMP IT Al Ikhwan Tanjung Morawa, the researcher found that initial understanding in the field of social studies was still relatively low. In accordance with the findings of observations made by the author on 30 and 31 May 2024 at SMP IT Al Ikhwan Tanjung Morawa school regarding the beginning of students' understanding, especially in the field of social studies, can be described as follows: rather low. It can be seen from the observation table above that the initial knowledge of class VII-1 students has the highest score on the question Students Can Answer the Influence of Climate on Cultural Diversity. This score is based on a percentage of 37.5% and a frequency of 12 students.

Class VII-2 has the highest score on the indicator that students are able to answer questions about the importance of social change with a percentage of 32.25 percent and a student frequency of 10 percent. The indicator that students were able to answer questions on examples of social change received the highest score, namely VII3 which had a presentation of 28.125% and a student frequency of 20, so there were 20 students. For Student Indicators, VII4 has the highest score. They are able to provide answers to questions about examples of societal change. because the presentation rate is 32.258% and the frequency of students is 10. Based on the findings. Based on the author's observations on May 20 2024 at the Al Ikhwan Tanjung Morawa IT SMP school, it appears that students' basic abilities in social studies subjects are still relatively lacking.

Various factors influence the rise of activity, including the existence of students who lack motivation to learn. There are allegations that the level of good student learning outcomes in class VII SMP IT Al Ikhwan Tanjung Morawa is still low, while the level of negative student learning outcomes is still high. In addition, the teaching methodology used by educators in the learning process mostly relies on a lecture-based approach, especially because there is no effective collaboration in the existing learning model. As a result, teachers take a more proactive role, while students have fewer opportunities to provide input. Often, instructors will have students take written notes on the material being taught, and during explanations, they will prioritize the content in the textbook. Sometimes, students face challenges in understanding the intended meaning of questions asked by teachers during the teaching and educational process. This is the result of the students. not understanding the questions asked, which causes them to be afraid to express their thoughts for fear of being wrong. The following table is a compilation of data that provides support for the concept of learning motivation.

**Table 2. Learning Motivation for Class VII Students
at SMP IT Al Ikhwan Tanjung Morawa**

Class	Motivation To Learn	Frequency	Percentage
VII-1	1. There is high learning activity	6	18,75%
	2. There is passion and desire to succeed	8	25%
		3	9,375%
	3. Be tenacious when facing difficulties	4	12,5%
		11	34,375%
VII-2	4. There is a conducive learning environment		
	5. Prefer to work independently		
	1. There is high learning activity	3	8,108%
	2. There is passion and desire to succeed	5	16,129%
		5	16,129%
VII-3	3. Be tenacious when facing difficulties	6	19,354%
		11	35,483%
	4. There is a conducive learning environment		
	5. Prefer to work independently		
	1. There is high learning activity	3	9,375%
VII-4	2. There is passion and desire to succeed	13	40,625%
		0	0%
	3. Be tenacious when facing difficulties	16	50%
		0	0%
	4. There is a conducive learning environment		
VII-4	5. Prefer to work independently		
	1. There is high learning activity	24	77,419%
	2. There is passion and desire to succeed	0	0%
		5	16,123%
	3. Be tenacious when facing difficulties	1	3,225%
		1	3,225%
	4. There is a conducive learning environment		
	5. Prefer to work independently		

Based on the observation table previously displayed regarding student learning motivation that the author carried out on May 20 2024 at the Al Ikhwan Tanjung Morawa IT SMP school, especially in the field of social studies subjects, it is still relatively low. The observation table shows that class VII-1 students have the greatest score on the student indicator, namely that they prefer to work alone. This is a high score, with a percentage of 34.375% and a frequency of 11 people. This indicates that the children in this class have a strong desire to learn. Class VII-2 students indicated that they liked working alone the most with a percentage of 35.483% and a frequency of 11 students. This is the most common student indicator. With a percentage of 40.625% and a frequency of 13 students, high enthusiasm and desire are indicators of students who have the highest proportion in class VII-3. Meanwhile, for students in class VII-4, the highest indicator is high learning activity.

SMP IT Al Ikhwan Tanjung Morawa as an educational institution has special attention to student learning outcomes. However, there is still variation in academic achievement that requires further analysis to understand influencing factors. Therefore, this research was conducted to answer the main question: "How do students' initial knowledge and learning motivation influence the learning outcomes of class VII students at SMP IT Al Ikhwan Tanjung Morawa?"

B. Methods

The location of this research was at Al Ikhwan Tanjung Morawa IT Middle School, which is located on Jalan Location No. 549, Tanjung Morawa, Deli Serdang Regency, North Sumatra. This research will take place from May to June 2024. The selection of this location is based on the relevance of the school to the research objectives which want to explore the influence of students' initial knowledge and learning motivation on their learning outcomes. The population in this study were class VII students at SMP IT Al Ikhwan Tanjung Morawa, with a total of 126 students consisting of four classes. In sampling, the total sampling method was applied, considering the small population size. By using total sampling, the entire population is sampled to ensure that the data obtained can accurately represent students' conditions, so that the research results can provide a comprehensive picture of the influence of initial knowledge and learning motivation on student learning outcomes.

This research used quantitative methodology to analyze the influence of students' initial knowledge and learning motivation on student learning outcomes (Sugiyono, 2023). In this quantitative approach, the data analysis techniques used include validity, reliability, normality, correlation, regression and hypothesis testing. Validity tests are carried out to ensure that the measurement instrument can accurately measure what it is supposed to measure, while reliability tests measure the consistency of the results obtained from the instrument (Sugiyono., 2019). The normality test is used to evaluate whether the data is normally distributed, which is an important requirement for further statistical analysis.

Next, the correlation test analyzes the relationship between the independent variables (initial knowledge and learning motivation) and the dependent variable (learning outcomes), while the regression test is used to measure the magnitude of the impact of the independent variable on the dependent variable. Finally, hypothesis testing is carried out to determine whether there is a significant relationship between these variables. This combination of techniques ensures that the research produces valid and reliable data, thus providing an accurate picture of the influence of initial knowledge and learning motivation on the learning outcomes of class VII students. This quantitative approach allows researchers to identify patterns, relationships, and the impact of variables in an objective and measurable manner.

C. Results and Discussion

Test Research Instruments

Before the actual research is carried out, a trial of the research instrument is first carried out to determine the validity and reliability of the research instrument. The research instrument was tested on 32 students in class VIII-1 of SMP IT Al-Ikhwan Tanjung Morawa. The instrument in the form of a questionnaire used for research data was designed with 10 items for Student Initial Knowledge (X_1) and 10 items for Student Learning Motivation (X_2). Testing the validity and reliability of this research questionnaire was carried out using Product Moment and Cronbach's Alpha with the provisions that if $r_{\text{count}} > r_{\text{table}}$ then the question items were considered valid and reliable at a significance level of 95% or ($\alpha = 0.05$) with $N = 32$.

Based on the results of the validity test of the student initial knowledge variable questionnaire (X_1), it was concluded that of the 10 questionnaire items that were tested, all the questions in the questionnaire were declared valid because after the data was processed all the statement items had a calculated $r_{\text{value}} > r_{\text{table}}$. In this way, all statement items will be used for the data collection process in the research. Below we will present a table of calculation results for the validity test of students' initial knowledge (X_1).

Table 3. Validity Test of Students' Initial Knowledge (X_1)

No	r_{count}	r_{table}	Information
1	0,813	0,3494	Valid
2	0,380	0,3494	Valid
3	0,600	0,3494	Valid
4	0,466	0,3494	Valid
5	0,685	0,3494	Valid
6	0,543	0,3494	Valid
7	0,464	0,3494	Valid
8	0,571	0,3494	Valid
9	0,513	0,3494	Valid
10	0,367	0,3494	Valid

Based on the results of the validity test of the student learning motivation variable questionnaire (X_2), it was concluded that of the 10 questionnaire items that were tested, all the questions in the questionnaire were declared valid because after the data was processed all the statement items had a calculated $r_{\text{value}} > r_{\text{table}}$. In this way, all statement items will be used for the data collection process in the research. Below we will present a table of calculation results for the validity test of student learning

motivation (X_2)

Table 4. Validity Test of Student Learning Motivation (X_2)

No	r_{value}	r_{table}	Information
1	0,401	0,3494	Valid
2	0,600	0,3494	Valid
3	0,387	0,3494	Valid
4	0,600	0,3494	Valid
5	0,389	0,3494	Valid
6	0,780	0,3494	Valid
7	0,725	0,3494	Valid
8	0,593	0,3494	Valid
9	0,780	0,3494	Valid
10	0,454	0,3494	Valid

Table 5. Reliability Test of Student Initial Knowledge Questionnaire (X_1)

Reliability Statistics	
Cronbach's Alpha	N of Items
.711	10

The minimum requirement that is considered to meet the requirements is if the Cronbach's Alpha coefficient obtained is 0.6, if the coefficient obtained is less than 0.6 then the research instrument is declared unreliable. If the Cronbach's Alpha coefficient obtained is greater than 0.6 then it is declared reliable. From the results of the reliability testing in table 4.6, it can be seen that, in the student initial knowledge questionnaire (X_1) using the Cronbach's Alpha formula, a value of 0.711 was obtained. This figure shows that the questionnaire is proven to be reliable because the coefficient value is greater than 0.6 ($0.711 > 0.6$).

Normality Test

One of the conditions that must be met in regression analysis is that the data and regression model must have a normal distribution. The normality of the data can be seen from the Kolmogorov-Smirnov normality test for each research variable. Data were analyzed with the help of the SPSS 26 program. The basis for decision making was based on significance. If $\text{sig} > 0.05$, then the research data from each variable is

normally distributed. Complete normality test results can be seen in the following table.

Table 6. Normality Test Using the Kolmogrov-Smirnov Test
One-Sample Kolmogorov-Smirnov Test

N		Unstandardized Residual
		126
Normal	Mean	.0000000
Parameters ^{a,b}	Std. Deviation	5.76986140
Most Extreme Differences	Absolute	.059
	Positive	.048
	Negative	-.059
Test Statistic		.059
Asymp. Sig. (2-tailed)		.200 ^{c,d}

1. Test distribution is Normal.
2. Calculated from data.
3. Lilliefors Significance Correction.
4. This is a lower bound of the true significance.

As can be seen from the table in the One-Sample Kolmogrov Smirnov Test, it is known that the asymp. Sig (2 tailed) value is 0.200. As explained above, if sig > 0.05 then the research data is normally distributed. Thus, it can be concluded that sig 0.200 > 0.05, so this data is normally distributed. Normal distribution results can also be seen in the P-Plot graph. If the points are spread around the diagonal line and the distribution follows the direction of the diagonal line, then the data is said to be normally distributed as shown in the following picture:

Table 7. Correlation Test Bivariate Pearson

		Correlations		
		Initial Knowledge (X1)	Motivation to Learn (X2)	Learning Outcome (Y)
Initial Knowledge (X1)	Pearson Correlation	1	.489**	.601**
	Sig. (2-tailed)		.000	.000
	N	126	126	126
Motivation to Learn (X2)	Pearson Correlation	.489**	1	.486**
	Sig. (2-tailed)	.000		.000
	N	126	126	126
Learning Outcome (Y)	Pearson Correlation	.601**	.486**	1
	Sig. (2-tailed)	.000	.000	
	N	126	126	126

** . Correlation is significant at the 0.01 level (2-tailed).

Correlation Test

Correlation analysis is a study that focuses on significant correlations between variables expressed in correlation coefficients. The relationship between two variables can be positive or negative. Obviously, there are no independent and dependent variables in correlation analysis (X, Y). Due to the clear relationship between the independent and dependent variables, the dependent and independent variables will also have the same relationship. However, in practice, many of us immediately conclude that there is a relationship between the independent and dependent variables. This is not a problem because, apparently, the purpose of the naming above is only to serve as a guide so that readers can more easily understand the relationships that researchers want to convey during their research.

Researchers will carry out regression analysis based on the output table above, specifically focusing on the fourth basis of the regression decision in the bivariate Pearson analysis above. Based on the significance level (Sig 2-tailed), between initial knowledge (X1) and learning outcomes (Y) is $0.000 < 0.05$, meaning that there is a significant correlation between the initial knowledge variables and learning outcomes. Based on the level of significance (Sig 2-tailed), between learning motivation (X2) and learning outcomes (Y) is $0.000 < 0.05$, meaning that there is a significant correlation between the learning motivation variables and learning outcomes.

Based on Pearson Correlation (calculated r value): As can be seen, the correlation coefficient between initial knowledge (X1) and learning outcomes (Y) is $0.601 > r_{table} 0.1757$. This shows that there is a relationship between initial knowledge variables and learning outcomes. Furthermore, it can be observed that the correlation coefficient between learning motivation (X2) and learning outcomes (Y) is $0.486 > r_{table} 0.1757$. This shows that there is a relationship or correlation between learning motivation variables and student learning outcomes. Because the calculated r, or Pearson Correlation, in this analysis is positive, this shows that there is a positive correlation between the two variables, or in other words, the higher the initial knowledge and learning motivation, the higher the student learning outcomes.

Multiple Linear Regression Analysis Test

Multiple linear analysis functions to determine the direction and influence between the variables studied, namely variables X1 and X2 on variable Y, whether each variable X1 and X2 has a positive or negative effect on variable Y. The results of multiple linear analysis between the variables of student initial knowledge and student learning motivation on student learning outcomes can be seen in the table below.

Table 8. Multiple Linear Regression Analysis

Model	Coefficients ^a				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	32.638	6.300		5.180	.000
Initial Knowledge (X1)	.393	.065	.478	6.017	.000
Motivation to learn (X2)	.259	.082	.252	3.172	.002

a. Dependent Variable: Learning outcomes (Y)

Based on the results of multiple linear regression calculations with the help of the SPSS 26 program in the table above, the multiple regression coefficient for X1 = 0.393 and X2 = 0.259 is obtained, while the regression constant is 32.638, so the multiple linear regression equation is:

$$Y = a + b_1 X_1 + b_2 X_2$$

$$Y = 32.638 + 0.393 X_1 + 0.259 X_2$$

The multiple linear regression calculation is explained as follows:

1. The constant (a) of 32.638 states that if the variables of student initial knowledge (X1) and learning motivation (X2) are assumed to have a value of zero, then the student learning outcome variable (Y) still has a value of 32.638.
2. The regression coefficient (b1) of 0.393 states that if the student's initial knowledge variable (X1) experiences an increase of 1 percent, while the learning motivation variable (X2) is considered constant, then the student learning outcome variable (Y) will experience an increase in value of 39.3 %.

The regression coefficient (b2) of 0.259 states that if learning motivation (X2) experiences an increase of 1 percent, while the student's initial knowledge variable (X1) is considered constant, then the student learning outcome variable (Y) will experience an increase in value of 25.9%.

Hypothesis Testing

a. Partial Test (t-test)

Partial hypothesis testing (t test) was carried out to determine the partial influence of students' initial knowledge (X₁) and learning motivation (X₂) on student learning outcomes (Y). With the criteria if $t_{\text{count}} > t_{\text{table}}$ with a significance level of 0.05 then the hypothesis is accepted. And vice versa, if $t_{\text{count}} \leq t_{\text{table}}$ with a significance level of 0.05 then the hypothesis is rejected. Test results using the SPSS 26 program, obtained the following results:

Table 9. Partial Test (t test)

		Coefficients ^a			t	Sig.
Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
	(Constant)	32.638	6.300		5.180	.000
1	Initial Knowledge (X1)	.393	.065	.478	6.017	.000
	Motivation to learn (X2)	.259	.082	.252	3.172	.002

a. Dependent Variable: Learning outcomes (Y)

Based on the results obtained above, the student's initial knowledge t_{value} (X1) is 6.017 with a significance value of 0.000. Meanwhile, the t_{table} value with degrees of freedom (dk) = $126 - 3 = 123$ is 1.65714 at a significance level of 0.05. So, from these results the value of $t_{\text{count}} > t_{\text{table}}$ ($6.017 > 1.65714$) and the significance value is $0.000 < 0.05$. Thus, there is a positive and significant influence between students' initial knowledge on the learning outcomes of class VII SMP IT Al Ikhwan students.

For the student learning motivation variable (X_2), the t-count value was 3.172 and the significance value was 0.002. Meanwhile, the t_{table} value with degrees of freedom (dk) = $126 - 3 = 123$ is 1.65714 at a significance level of 0.05. So, from these results the value of $t_{\text{count}} > t_{\text{table}}$ ($3.172 > 1.65714$) and the significance value is $0.002 < 0.05$. Thus, there is a positive and significant influence between student learning motivation on the learning outcomes of class VII SMP IT Al Ikhwan students.

b. Simulation Test (F Test)

Simultaneous hypothesis testing (F Test) was carried out to determine the effect of students' initial knowledge (X1) and students' learning motivation (X2) on student learning outcomes (Y) simultaneously. With the help of SPSS 26 the test results are as follows:

Table 10. Simultaneous Test (F Test)

		ANOVA ^a			
Model		Sum of Squares	df	Mean Square	F
1	Regression	2886.746	2	1443.373	42.662
	Residual	4161.413	123	33.833	
	Total	7048.159	125		

a. Dependent Variable: Learning outcomes (Y)

b. Predictors: (Constant), Motivation to learn (X2), Initial Knowledge (X1)

From the results of the calculation above, an f_{count} of 0.05 is obtained, then this value is compared with the f_{table} at the 95% significance level or $\alpha = 0.05$ and $df_1 = 3-1 = 2$, df_2

= $126 - 3 = 126$, the f_{table} is 3.07. So $f_{count} > f_{table}$ or $42.662 > 3.07$ with a significant value of $0.000 < 0.05$, so it can be concluded that there is a positive and significant influence between students' initial knowledge and students' learning motivation simultaneously on the learning outcomes of class VII SMP IT AL Ikhwan students.

Observation of Student Learning Results

The results of observations carried out during the period 3 June 2024 to 29 June 2024 provide a comprehensive picture of the influence of initial knowledge and learning motivation on student learning outcomes in social studies lessons. Based on observations, it appears that students who have stronger initial knowledge regarding the subject matter tend to grasp the new concepts being taught more quickly. This initial knowledge provides a solid foundation for students to link new information with the understanding they already have, so they are better able to follow the learning flow.

These students also showed higher self-confidence in interacting in class, both in answering teacher questions and participating in group discussions. They are able to cope with assigned tasks more efficiently and consistently demonstrate more critical and analytical thinking abilities. Researchers noted that students who had good initial knowledge were more often able to provide precise and in-depth answers, and demonstrated more mature problem-solving skills.

On the other hand, learning motivation, whether it comes from within students (intrinsic motivation) or from outside (extrinsic motivation), also plays a very significant role in determining their learning outcomes. Researchers found that students who had high motivation to learn, either due to strong curiosity or encouragement from the environment such as teachers or parents, seemed more enthusiastic about taking social studies lessons.

On the other hand, students who have limited initial knowledge appear to have more difficulty following the lesson material. They often take longer to understand new concepts and tend to be more passive in class participation. When given assignments or questions, they appear hesitant and often wait for help from teachers or friends. However, researchers note that high learning motivation may be a key factor that helps these students catch up. Even though their initial knowledge may be limited, students who have the drive to study seriously still show significant progress.

During observations, researchers also noted that the student attendance rate was quite high, with an average of 90%. This consistent level of attendance shows good commitment from students to teaching and learning activities. This high attendance also has a positive impact on student engagement in class. Their enthusiasm is clear, especially when involved in activities that involve interactive learning media, such as

group discussions or the use of technology in learning. These activities not only attract students' attention, but also help them focus better and understand the material presented in more depth. The use of visual media and interactive technology has proven to be very helpful, especially for students who are more responsive to visual stimuli. Some students who previously seemed passive in learning began to show greater interest and became more active after varied learning media were introduced

**Table 11. Learning Results for Class VII
SMP IT Al-Ikhwan Tanjung Morawa Students**

Class	≥ 70	≤ 70	Number of Students	Grade Average
VII-1	32 (100%)	0 (0%)	32	87,4688
VII-2	31 (100%)	0 (0%)	31	87,1935
VII-3	32 (100%)	0 (0%)	32	87,9063
VII-4	31 (100%)	0 (0%)	21	83,7742
Total	126 (100%)	0 (0%)	126	346,343

The results of the formative evaluation carried out in the middle of the observation period also confirmed this finding. Researchers noted a significant increase in class average scores, with the majority of students scoring above average. In fact, students who were initially below class standards showed quite significant improvements in their evaluation results. This shows that interactive learning and the use of visual media and group discussion methods are successful in helping students improve their understanding of the material. Students who initially experienced difficulties were able to improve their learning outcomes through this approach. Researchers noted that students who were more responsive to visual media showed more rapid progress, especially when the material was presented through images, graphics and videos that were relevant to the lesson topic. Apart from improvements in cognitive aspects, researchers also observed positive changes in students' attitudes and engagement during the learning process. Students appear to collaborate more actively with each other, help each other understand difficult material, and are more open to discussions. The classroom atmosphere becomes more dynamic and conducive to learning, with more intensive interaction between students and teachers.

Overall, the results of these observations show that the learning approach implemented during June 2024 has succeeded in improving student learning outcomes, both in terms of understanding the material, active participation, and attitudes towards learning. The combination of strong initial knowledge and high learning motivation creates optimal conditions for students to achieve better achievements. Researchers emphasize the importance of maintaining students' learning motivation through interactive and interesting learning methods, as well as paying special attention to students with lower initial knowledge to ensure they get the necessary support to progress well in the learning process.

This research was conducted to determine the influence of students' initial knowledge

and students' learning motivation on the learning outcomes of class VII students at SMP IT Al-Ikhwan Medan. The results of this study show that partially there is a positive and significant influence between students' initial knowledge and student learning outcomes, there is a positive and significant influence between student learning motivation and student learning outcomes, and simultaneously there is a positive and significant influence between students' initial knowledge and learning motivation students on the learning outcomes of class VII SMP IT Al-Ikhwan Medan.

The research results showing that initial knowledge has a significant influence on student learning outcomes are very relevant to the theory of initial knowledge put forward by experts such as Piaget. In the learning context, students' initial knowledge functions as the main capital for understanding new concepts. Dochy, (2001) stated that the information previously possessed by students plays a big role in learning, because this knowledge becomes the basis for the process of constructing new knowledge.

The finding that students with better initial knowledge have higher learning outcomes is also consistent with research Susilo, (2016), which shows that initial knowledge can improve students' independent thinking abilities and learning skills. Hikmah, (2018) and Astuti, (2020) support these findings, stating that students' initial knowledge and desire to learn positively influence their academic achievement. This confirms that initial knowledge is not only an important prerequisite for learning, but also contributes to the development of lifelong learning abilities.

Apart from that, the finding that learning motivation has a significant influence on student learning outcomes is also consistent with the motivation theory put forward by (McClelland, 1987). Motivation to learn is the main driver that makes students more active, have clear goals, and try harder to understand the material. Wulandari, (2019) research shows that students with high learning motivation tend to have better learning outcomes because they show a higher level of participation in the learning process. Arifin's research (Arifin, 2021) also confirms that intrinsic and extrinsic motivation simultaneously make a significant contribution to student learning outcomes.

Combining these findings, it is important for educators to utilize students' initial knowledge as a basis for planning learning and creating an environment that can motivate students in a sustainable manner. Strategies such as pre-tests, initial discussions, and giving rewards can be used to increase learning effectiveness (Mumtaza, 2023).

The research results demonstrate a significant relationship between students' initial knowledge and learning motivation on their academic performance, observed both individually (partially) and collectively (simultaneously). Specifically, initial

knowledge contributes to shaping students' foundational understanding, enabling them to grasp new concepts more effectively, while learning motivation acts as a driving force that sustains their engagement and effort throughout the learning process. Together, these factors create a synergistic effect, enhancing students' ability to achieve better learning outcomes. The findings highlight the importance of designing instructional strategies that not only build on students' existing knowledge but also foster intrinsic and extrinsic motivation, thereby optimizing educational results across diverse learning environments (Ratu Meri Agust et al, 2024). This is strengthened based on research conducted by (Jainiyah, Jainiyah, Fuad Fahrudin, Ismiasih Ismiasih, 2023) which states that there is a positive influence on students' initial knowledge and student learning motivation in social studies subjects by using the question and answer strategy at State Elementary School 136 Palembang simultaneously or partially.

D. Conclusions

Based on the results of the validity test, all questionnaire items for the variables initial knowledge (X1) and learning motivation (X2) were declared valid because the calculated r-value was greater than r-table. The reliability test shows Cronbach's Alpha coefficients of 0.711 and 0.775 respectively, which indicates good reliability. Kolmogorov-Smirnov normality test with Asymp value. Sig. of 0.200 indicates the data is normally distributed, and the P-Plot graph confirms the distribution of data that is close to the diagonal line. The correlation test results found a significant relationship between initial knowledge and learning motivation and student learning outcomes. Pearson correlation coefficient shows that initial knowledge has a stronger positive correlation with learning outcomes than learning motivation. Multiple linear regression analysis shows that both variables influence learning outcomes significantly, with regression coefficients of 0.393 for initial knowledge and 0.259 for learning motivation, respectively. Hypothesis testing shows the t-count value is greater than t-table with significance below 0.05, indicating a positive and significant influence. The F test shows a significant simultaneous influence between initial knowledge and learning motivation on learning outcomes. During the period 3 to 29 June 2024, students with strong initial knowledge achieved an average score of 87.47, while students with high motivation recorded scores above 85. The increase in the average score from 83.77 to 87.91 shows significant progress, confirms the significant influence of initial knowledge and learning motivation on student learning outcomes simultaneously and partially.

E. Acknowledgement

Thanks to all parties who help us in this valuable article.

References

- Arifin, Z. (2021). Learning Motivation as a Determining Factor for Student Academic Success. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 25(2).
- Astuti, P. (2020). The Influence of Initial Knowledge and Interest in Learning on Students' Academic Achievement. *Jurnal Inovasi Pendidikan*, 7(3).
- Buchari, A. (2018). The Role of Teachers in Learning Management. *Jurnal Ilmiah Iqra'*, 12(2), 106. <https://doi.org/10.30984/jii.v12i2.897>
- Cook, D. A., & Jr, A. R. A. (2016). the cross-cutting edge Motivation to learn: an overview of contemporary theories. *Medical Education*, October, 997-1014. <https://doi.org/10.1111/medu.13074>
- Damanik, M. H., Wahyuni, D., & Andini, M. (2023). Application of a Scientific Approach to Indonesian Language Learning in MI / Elementary School. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(November), 8543-8551.
- Dochy, F. (2001). A New Assessment Era: Different Needs, New Challenges. *Learning and Instruction*, 10(2).
- Fen, C., & Ng, P. K. N. (2015). A Review of Intrinsic and Extrinsic Motivations of ESL Learners. *International Conference on Culture, Languages and Literature*, June.
- Hamzah B. Uno & Satria Koni. (2013). *Learning Assessment*. Bumi Aksara.
- Hikmah, F. (2018). The Relationship between Initial Knowledge and Learning Motivation on Academic Achievement. *Jurnal Ilmu Pendidikan*, 19(1).
- Jainiyah, Jainiyah, Fuad Fahrudin, Ismiasih Ismiasih, and M. U. (2023). The Role of Teachers in Increasing Student Learning Motivation. *Jurnal Multidisiplin Indonesia*, 6(2).
- Khasanah, K. (2019). Concept Maps as a Strategy to Improve Primary School Student Learning Outcomes. *Jurnal Edutrained : Jurnal Pendidikan Dan Pelatihan*, 3(2), 152-164. <https://doi.org/10.37730/edutraind.v3i2.8>
- Lina, U. (2013). Using the Number Line in the Elementary School Teacher Education Study Program. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, 02(01).
- McClelland, D. (1987). *Human Motivation*. Cambridge University Press.
- Mumtaza, N. R. (2023). Effectiveness of Learning Multiple Intelligences Using the TGT Learning Model to Improve Maharah al-Kalam. *An Najah*, 02(04), 2-6.
- Raradhita, A., Sukanto, S., & Wakhyudin, H. (2022). Development of Class IV Flat Building Material Learning Tools Using a Tpack-Based Open Ended Approach to Improve Higher Level Thinking Abilities of Elementary School Students in Batang Regency. *Wawasan Pendidikan*, 2(1), 126-136. <https://doi.org/10.26877/wp.v2i1.9779>
- Ratu Meri Agust, Asti Hardianti, Rena Komalasari, R. S. D. (2024). The Impact of Differentiated Learning on Motivation and Learning Outcomes of Elementary School Students. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 09(04). <https://doi.org/10.23969/jp.v9i04.20410>
- Rusman. (2015). *Integrated Thematic Learning of Theory, Practice and Assessment*. Rajawali Pers.
- Sugiyono. (2019). *Quantitative, Qualitative, and R&D Research Methods* (Ed. II, Ce).

Alfabeta.

Sugiyono. (2023). *Quantitative research methods and R&D*,. Alfabeta.

Susilo, H. (2016). The Influence of Initial Knowledge on the Ability to Think Independently. *Jurnal Pendidikan Dan Pembelajaran*, 23(4).

Vhalery, R., Setyastanto, A. M., & Leksono, A. W. (2022). Independent Campus Learning Curriculum: A Literature Review. *Research and Development Journal of Education*, 8(1), 185. <https://doi.org/10.30998/rdje.v8i1.11718>

Wulandari, F. (2019). The Influence of Learning Motivation on Student Learning Outcomes in Junior High Schools. *Jurnal Pendidikan Dan Pembelajaran*, 26(3).

Zaim, M. (2020). Islamic Learning Media in the Millennial Era 4.0. *Potensia: Jurnal Kependidikan Islam*, 6(1), 1. <https://doi.org/10.24014/potensia.v6i1.9200>

Teacher's Professionalism in Teaching Social Sciences

Hafizza Azahra¹, Eka Susanti¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: hafizza0309202043@uinsu.ac.id

Article History: Received on 12 November 2024, Revised on 21 December 2024,
Published on 17 January 2025

Abstract: This research examines the professionalism of teachers in teaching social studies at the SMP Cerdas Murni. The aim is to describe how professional teachers teach social studies at this school. Using a qualitative approach, the research applies an analytical descriptive method with data collection through observation, interviews, and documentation. The findings show that social studies teachers at the SMP Cerdas Murni demonstrate strong mastery of the four key competencies: pedagogical, personality, social, and professional. These competencies are critical in creating an effective learning atmosphere, sparking student interest in learning, developing their potential, and motivating achievement, thereby significantly contributing to the success of the learning process. The professionalism of these teachers is influenced by input factors, such as educational background and teaching experience, and output factors, including facilities and a supportive work environment. The principal actively enhances teacher professionalism through several strategies: involving teachers in professional development activities, holding regular performance evaluations, encouraging innovative teaching practices, and providing both formal and emotional support. These efforts aim to continuously improve teaching quality, positively impact student achievement, and raise overall educational standards.

Keywords: Teacher's Professionalism, Teaching, Social Sciences

A. Introduction

Education is an important element in nation building, and in it, teachers play a central role as main actors in the learning process (Intan Kusumawati, 2023). In the context of Social Sciences education, the teacher's task is not only limited to transferring knowledge, but also building students' awareness of social, political, cultural and economic issues that occur in their environment (Damanik, 2020). This is becoming increasingly important in facing the challenges of the 21st century, where critical thinking skills, collaboration and diversity are key elements in building a competitive and tolerant society.

However, one of the main challenges in social studies learning in schools is ensuring that teachers are able to carry out their duties with a high level of professionalism (Yusnaldi, 2019). Teacher professionalism involves a combination of various

competencies, including mastery of subject matter, application of appropriate learning methods, ability to utilize educational technology, and a reflective attitude to continuously improve the quality of learning (Budiman et al., 2020). Without adequate professionalism, the goal of social studies learning, namely forming students who think critically, have social empathy, and are able to face global change, is difficult to achieve (Jahro et al., 2023).

In the era of education that continues to develop, the professional competence of teachers in teaching Social Sciences subjects to students is becoming increasingly important (Sulastri et al., 2020). Teacher professional competence is one of the factors that has a significant impact on achieving learning and education goals in the school environment (Hartanti & Yuniarsih, 2018). This illustrates that teachers' professional abilities in creating quality learning have a major impact on overall educational success. The success and efficiency of the learning process is very dependent on the teacher's professional competence, especially in providing a supportive learning environment for students (Nirmayanthi, 2023).

Social studies learning has unique characteristics because it involves many multidimensional aspects, such as history, geography, economics, and sociology. Professional teachers must deeply master these materials to prevent the dissemination of superficial or erroneous information (Eka Yuliana Rahman & Abdulkarim, 2024). In addition, interactive learning methods such as case studies, group discussions, simulations, and research-based projects need to be applied to make learning more relevant and engaging for students. In today's digital era, the use of technology such as digital maps, video documentaries, and simulation tools enriches the learning experience, requiring teachers to integrate technology effectively (Rahmadani et al., 2024), (Milidar et al., 2024). Social studies learning also aims to shape students' attitudes toward diversity, social justice, and global responsibility, which necessitates teachers serving as role models for these values (Asta Jaya, 2021).

Compared to other disciplines, the challenges of teacher professionalism in social studies are distinct. Unlike mathematics or science, which often have standardized frameworks and tools, social studies require teachers to address dynamic and context-specific issues such as cultural diversity and historical interpretation. These complexities demand a balance between theoretical depth and practical application. Additionally, while all subjects face resource limitations, the integration of contemporary issues such as climate change or social conflict into social studies curricula places unique demands on teachers (Pinto & Cervantes, 2024).

The context of the SMP Cerdas Murni is particularly unique due to its emphasis on developing both cognitive and character aspects through social studies learning. Teachers here not only focus on delivering curriculum-based knowledge but also prioritize fostering students' moral and social awareness. Despite challenges such as limited resources and high administrative burdens, the school's commitment to

integrating values of diversity, equity, and global responsibility into its social studies program highlights its distinctive approach. This positions the school as a model for addressing the complexities of modern social studies education while promoting 21st century skills (Rachmat Panca Putera, Royan Rosyadi, 2023).

Professional competence refers to a teacher's ability to understand learning material thoroughly, deeply and contextually, as well as the ability to deliver material using effective, relevant and interesting methods. This competency includes the skills to analyze student needs, use educational technology, and facilitate active learning so that students are able to understand and solve various academic problems well (Rahmawati & Salehudin, 2021). This is the basis of the teacher's role as a quality educator. According to Saphire as explained by Liu, Conner, & Li explains: Saphire describes the foundations of teacher professionalism as teaching expertise, knowledge foundations, and cultural proficiency, and describes the fully professional teacher as supporting individual student learning and acting as a team player to improve schools as a whole. She adds that professionalism recognizes multiple approaches to attaining objectives, and that skillful practice means choosing well from one's repertoire to match the student, the situation, or the curriculum (Liu et al., 2023).

From the explanation above, the author concludes that teacher professionalism is a teaching skill and a foundation of knowledge. A truly professional teacher will pay attention to various approaches to achieving student needs. To achieve the status of a professional teacher, mastery of several special competencies is required (Jamin, 2018). This competency includes skills and knowledge obtained from experience in various social and professional environments, which are then internalized, mastered and applied as a means of creating value through the optimal implementation of tasks and work. Assessment of a teacher's competency is a marker of the extent to which the educator can be considered a professional (Pingkan Imelda Wuisan, Atwi Suparman, 2023). In fact, the level of competence of a teacher plays an important role in determining the success that can be achieved by the students being taught.

According to Minister of National Education Decree Number 16 of 2007 stated by Sudrajat emphasizes the criteria for abilities that a teacher must have, namely: Pedagogical competence: Pedagogical competence refers to a teacher's ability to master the theoretical and practical aspects related to the learning process, including planning and implementing learning, assessing learning outcomes, and developing students' potential to achieve optimal performance. Personality competence: Personality competence involves attributes that are steadfast, consistent, mature, wise, authoritative, an example to students, and moral. Professional competence: Professional competence includes career development, conceptual understanding and mastery of academic material. Social competence: Social competence is a teacher's ability to communicate and interact effectively with various individuals, including learners, parents, fellow teachers, and the surrounding community (Sudrajat, 2020).

A teacher must have all these competencies when teaching at school. A professional teacher always tries to improve his abilities. Thus, teachers must have sufficient ability to master all these skills so that students can easily understand the subject matter. Teachers are expected to have adequate qualifications so that learning objectives can be achieved effectively. Teacher competency is the key in carrying out the learning process. Therefore, demanding teacher competency is a natural thing to ensure the effectiveness of learning in schools. Hilmi stated the aim of learning Social Sciences is to create responsible citizens, who have the awareness to obey the law, and understand and respect applicable regulations (Hilmi, 2017).

Teacher professional competence plays a crucial role in achieving Social Sciences learning objectives. Teachers who have a deep understanding of social studies material can convey information clearly, support the development of students' critical thinking, and design appropriate learning strategies. The teacher's skills in carrying out classroom management effectively create a supportive learning atmosphere, allowing students to feel comfortable and involved in learning. Comprehensive and constructive learning evaluation by teachers helps measure students' understanding of social studies concepts. In this way, developing teachers' professional competence creates meaningful learning experiences, motivates students, and encourages the achievement of social studies learning goals

Observation results show that the implementation of learning activities by teachers is still not fully in line with the four basic competencies that an educator must have. Teachers appear not to be using a variety of learning media, which is important for increasing student involvement and making it easier to understand the material. Apart from that, teachers' mastery of learning material also appears to be less than optimal, thus potentially hampering the effectiveness of conveying information to students. In the technological aspect, teachers have not demonstrated the ability to utilize the latest technology as a learning support tool, which should be part of modern educational innovation. Teachers also appear not to pay enough attention to emotional aspects and students' needs, which are important elements in creating an inclusive and conducive learning environment. Apart from that, the behavior of teachers who should be role models for students still does not seem to reflect professional values. Based on these problems, the researcher was interested in researching further about the professionalism of teachers in teaching social studies, especially in the SMP Cerdas Murni environment, to contribute to improving the quality of learning in the school.

B. Methods

This research uses a qualitative approach by applying analytical descriptive methods. According to Moleong, qualitative research is research that aims to gain a comprehensive understanding of the phenomena experienced by research subjects, such as behavior, perceptions, motivations, and actions, through descriptions using

words or language and involving other aspects holistically (Moleong, 2017). According to the analytical descriptive method is a research method that involves collecting data in accordance with the actual situation, then the data is organized, processed, and analyzed to provide an overview of the problem being studied (Anggoro et al., 2013). In other words, in analytical descriptive research, the focus is on the problems that exist when the research is conducted, where the results are then processed and analyzed to reach relevant conclusions.

The qualitative approach was chosen because it is suitable for exploring in-depth information about the phenomenon that is the focus of the research, namely teacher professionalism in social studies learning at SMP Cerdas Murni. The analytical descriptive method is used to provide a comprehensive and systematic description of how teachers apply their professionalism, both from the aspect of mastery of material, use of learning methods, utilization of technology, to the ability to build relationships with students. The researcher aims not only to describe the existing situation, but also to analyze the factors that influence the level of professionalism, so as to provide more in-depth and relevant insights in the context of improving the quality of social studies learning in the school.

This research was conducted at SMP Cerdas Murni, located at Gg. Education, Jl. Beringin No.33, Pasar V, Medan Tembung District, Deli Serdang Regency, North Sumatra. The sampling technique in this study used purposive sampling technique. The main informant in this research is the principal at the SMP Cerdas Murni. The key informants consisted of Mrs. Rahmi Nurdin Tanjung and Mrs. Afrida Nasution. In addition, there were 17 additional informants, consisting of 15 students and 2 teachers at the school. The data collection techniques used in this research include observation, interviews, and documentation. To ensure the validity of the data in this study, triangulation techniques were used, including source triangulation, technique triangulation, and time triangulation. This approach helps in obtaining a more comprehensive picture. In addition, this study adhered to the principles of research ethics by ensuring that each participant gave informed consent to participate.

C. Results and Discussion

Test Research Instruments

Professional competence refers to a teacher's ability to understand subject matter deeply and thoroughly, and to teach that material in a way that helps students understand academic problems. This ability is very important for teachers in carrying out their duties as effective educators. Teacher competency includes four main aspects that support each other in improving the quality of education. Each competency has a significant role in creating a learning environment that is effective, interactive, and supports student development. The following is a further discussion regarding the four competencies possessed by social studies teachers at the SMP Cerdas Murni:

1. Pedagogical Competence

Pedagogical competence is one of the important aspects that a teacher must have to achieve effectiveness in the learning process. This competency refers to the teacher's ability to understand the characteristics of students, design, implement and evaluate the learning process effectively and educationally. Based on the results of research conducted through interviews and observations at the SMP Cerdas Murni, there are several interesting findings regarding the pedagogical competencies possessed by social studies teachers, which will be described as follows:

a) Teacher Education Background

Based on the results of interviews with two social studies teachers, Mrs. Rahmi Nurdin Tanjung and Mrs. Afrida Nasution, it is known that both of them have educational backgrounds that are not completely linear with the subjects taught. Mrs Rahmi is a graduate of Bachelor of Accounting Education from Medan State University, while Mrs Afrida is a graduate majoring in Economic Education. The principal, Mr. Dede Noviandi, also confirmed that the social studies teacher at the school came from an accounting and economics educational background, not specifically from the social studies study program. Even though it is not completely linear, the observation results show that both teachers are able to adapt and teach social studies competently. They rely on additional training and external resources such as books and the internet to deepen their understanding of social studies material. This shows that even though their academic backgrounds are not completely compatible, both teachers are trying hard to master the material being taught.

b) Mastery of Study Material

Mastery of subject matter is a crucial aspect of pedagogical competence. Based on the results of an interview with Mrs. Rahmi Nurdin Tanjung, she stated that she was actively improving her competence by participating in training and reading various literature and internet sources. This is also supported by a statement from the English teacher, Mrs. Miranti, who witnessed the way Mrs. Rahmi taught well in class. A statement from a class VII student, Dea Angelina Ramadhani, also shows that Mrs. Rahmi is able to explain the material well without always relying on textbooks, especially on memorized topics such as the names of provinces. Observations made by researchers also show that Mrs. Rahmi masters social studies material well when teaching in class. This confirms that even though their educational background is not from social studies, their ability to master the material is still maintained.

c) Learning Planning and Syllabus

Teachers' pedagogical competence can also be seen from their ability to plan learning through creating Learning Implementation Plans and syllabi. Based on the results of the interview, Mrs. Rahmi emphasized that making lesson plans and syllabi is an obligation set by the school. This is supported by the principal's statement which states that every teacher is obliged to prepare lesson plans and syllabi as part of their responsibilities. Observation results show that teachers at the SMP Cerdas Murni do prepare lesson plans and syllabus before carrying out learning. With good planning, it is hoped that the learning process can take place in a more structured manner and achieve the desired goals.

d) Motivation and Support to Learners

Another aspect of pedagogical competence is the teacher's ability to provide motivation and support to students. Based on the results of interviews, both with Mrs. Rahmi and several students, it appears that the social studies teacher at the SMP Cerdas Murni consistently gives praise and support to students for their achievements. For example, Mrs. Rahmi gave her appreciation to student Zahra who managed to get a high score in the social studies subject, which then increased the student's enthusiasm for learning. This approach is very important in creating a conducive learning atmosphere and building student self-confidence. By rewarding effort and achievement, teachers not only help students understand the subject matter but also motivate them to continue to excel.

e) Use of Learning Media

However, in terms of the use of learning media, the results of observations show that the social studies teachers at this school have not optimally utilized various learning media. Mrs. Rahmi revealed that the use of media, such as projectors (in focus), was only done alternately due to limited school facilities. Class VII student, Syakira, said that the teacher sometimes brought pictures as visual aids, but the frequency was not consistent. In fact, the use of learning media can help increase students' interest in learning and make it easier to understand the material, especially on abstract or complex topics. Thus, this aspect is an area that needs to be improved by social studies teachers at the Smart Middle School Foundation School so that learning becomes more interactive and effective.

Based on the findings of this research, it can be concluded that the social studies teacher at the Smart Middle School Foundation School has demonstrated good mastery of pedagogical competencies, especially in terms of mastery of material, lesson planning, and providing motivation to students. However, there are still weaknesses in terms of using more diverse and interactive learning media. Therefore, further efforts are needed to increase the use of learning media to create

a more interesting and effective learning atmosphere for students. Overall, the pedagogical competencies possessed by social studies teachers at the SMP Cerdas Murni contribute positively to the creation of a conducive learning environment, although there is still room for improvement, especially in maximizing the use of learning media.

2. Personality Competencies

Personality competency is a key quality that enables teachers to be role models with strong, wise, and ethical characteristics, positively influencing students' character development alongside academic success. At the SMP Cerdas Murni, Mrs. Rahmi Nurdin Tanjung, a social studies teacher with over 10 years of experience, exemplifies excellent personality competence. Observations and interviews with colleagues highlight her role as a respected figure. Mrs. Miranti, an English teacher, describes her as a role model, while Mrs. Fariza, a Mathematics teacher, notes her ability to create a cheerful and engaging learning atmosphere. Her simple and honest nature is well-liked by students, further reflecting her outstanding personality competence.

Further observations showed that Mrs. Rahmi not only taught the subject matter, but also set a real example in behavior and appearance. Mrs. Rahmi's way of dressing, which is always neat and polite, is one of the aspects that stands out, reflecting the professionalism of an educator. Her clothing choices not only conform to modesty standards, but also provide an example to students about the importance of maintaining an appropriate appearance in an educational environment. Apart from that, his attentive and wise attitude in interacting with students makes him a role model who is respected by his students.

Mrs. Rahmi's personality competence is further reflected in her good morals and discipline. According to colleagues Mrs. Miranti and Mrs. Fariza, she consistently demonstrates respect and politeness both in and out of the classroom, speaking softly, treating all students fairly, and adhering to rules. Observations reveal her objective assessment of students' work, making students feel valued for their efforts. Additionally, her discipline is evident in her punctuality and adherence to teaching schedules, as highlighted by interviews and research observations. This professionalism serves as a positive example for students, emphasizing the importance of time management and respect for others.

Mrs. Rahmi's demonstrates a strong, thoughtful and authoritative character in her interactions with students, balancing firmness with caring, earning their respect. She emphasizes academic success and positive character building through advice, motivation and recognition of achievements, positioning herself as both teacher and mentor. Interviews and observations highlighted her mastery of personality competencies, which was evident in her exemplary behavior, good morals, and mature character. Her consistency in teaching duties and time discipline further

contribute to a conducive learning atmosphere, fostering academic excellence and student character development.

Based on the results of interviews and observations, it can be concluded that social studies teachers at the Cerdas Junior High School Foundation School, especially Mrs. Rahmi, have shown good mastery of personality competence. This is evidenced by her ability to be a role model for students, show good morals, and have a strong, mature, wise and authoritative character. In addition, her consistency in carrying out teaching duties and time discipline are important aspects that contribute to creating a conducive learning atmosphere. Mrs. Rahmi's personality competence plays a major role in building a learning environment that not only focuses on academic achievement, but also on positive character building among students.

3. Social Competence

Social competence is essential for educators to foster an inclusive and supportive learning environment. It encompasses the ability to interact effectively with students, colleagues, parents, and the community, as well as proficiency in information and communication technology in the digital era. At the SMP Cerdas Murni, research highlights that social studies teacher Mrs. Rahmi Nurdin Tanjung demonstrates exceptional social competence. She fosters student social interactions by creating an environment that encourages communication, collaboration, and mutual respect for diverse perspectives, as revealed through interviews.

As stated by Mrs. Rahmi, she often uses the group discussion method which requires students to share ideas and work together to complete assignments. This strategy not only improves understanding of the material, but also develops students' social skills, such as the ability to communicate, work together, and respect other people's opinions. This is in accordance with the findings obtained from observations, where Mrs. Rahmi always gives full attention when students speak, so that students feel appreciated and heard. The empathetic attitude shown by Mrs. Rahmi makes her a teacher who is liked by students, because they feel comfortable and supported in the learning process.

A teacher's social competence is reflected in their ability to build relationships with colleagues, parents, and the community. Based on interviews, Mrs. Rahmi is described as humble and approachable, fostering harmonious working relationships and a collaborative atmosphere among colleagues. This support enhances teacher professionalism through knowledge and experience sharing, benefiting both classroom teaching and broader school activities. Additionally, Mrs. Rahmi demonstrates effective communication with parents, actively engaging in discussions about students' development to foster strong school-family collaboration, which supports student success. Her ability to connect with the community helps build a positive school image and create wider social networks to support educational

initiatives.

Based on the results of interviews and observations, it can be concluded that the social studies teachers at the SMP Cerdas Murni, especially Mrs. Rahmi, have demonstrated good mastery of social competencies. This can be seen from his ability to develop social interaction in the classroom environment through group discussion activities, as well as his ability to communicate effectively with students, colleagues, parents and the community. Mrs. Rahmi's humble attitude, empathy and listening skills create an inclusive and supportive learning environment, which ultimately improves the quality of social studies learning in schools. Thus, the social competence possessed by teachers is not only important for creating a conducive learning atmosphere, but also has an impact on good relations with various parties who support the educational process. This proves that social competence is one of the keys to improving teacher professionalism and the quality of education at the SMP Cerdas Murnis.

4. Professional Competence

Professional competence is a teacher's ability to master subject matter in depth and the ability to convey this material in a way that is relevant and interesting to students. This competency includes a comprehensive understanding of academic material, career development, and the ability to align learning concepts with the real life needs and context of students. At the SMP Cerdas Murni, this ability is reflected in the teaching practices of social studies teachers, especially Mrs. Rahmi Nurdin Tanjung.

The research results show that social studies teachers at the SMP Cerdas Murni, like Mrs. Rahmi, actively participate in various training to improve their professional competence. Based on interviews, Mrs. Rahmi revealed that she had participated in a number of trainings, such as KTSP 2006 training, Curriculum 2013 (K13) training, as well as the Merdeka Curriculum training which she recently participated in. These trainings help him understand changes in the curriculum and update teaching strategies according to the demands of the times.

Support from the school is also very important in teacher professional development. Based on an interview with the principal of the SMP Cerdas Murni, Mr. Dede Noviandi, the school regularly holds training and workshops aimed at strengthening teachers' mastery of the material. One of the mandatory programs that is emphasized is the Independent Learning Platform (PMM), which requires teachers to issue certificates at least twice a year as proof of increased competency. These activities not only help teachers understand the new curriculum but also equip them with the skills needed to implement more effective and relevant learning.

Professional competence is not only seen from participation in training, but also from the teacher's ability to convey material contextually. Mrs. Rahmi shows this ability by relating social studies material to everyday life. In the interview, he gave an example

of how topics such as socializing can be linked to the importance of maintaining good relationships and working together in everyday life. Apart from that, he also instills practical values, such as maintaining cleanliness and carrying out religious obligations, as part of learning in Islamic-based schools.

Mrs. Rahmi effectively enhances students' understanding by connecting theoretical material with real-life examples, such as teaching social interaction skills for both school and home settings, as noted by class IX student Khaidir Al Azam. Her professional competence is further demonstrated by her ability to maintain students' focus through varied teaching methods, including ice-breaking, educational games, and outdoor learning, creating a dynamic and engaging classroom atmosphere. Observations reveal her interactive teaching style, using a clear, expressive, and enthusiastic voice. Class VIII student Ci Kesya Lufita highlights her humor and storytelling skills, which keep students focused and enjoying the learning process, making her a respected and well-liked teacher.

The social studies teacher at the Smart Middle School Foundation School demonstrates strong professional competence, as evidenced by participation in relevant training and the ability to present material connected to real life. Their creative and interactive teaching methods effectively maintain students' focus, contributing to improved learning quality and academic achievement. By continuously enhancing contextual teaching skills and attending training, the teacher equips students with both academic knowledge and practical life skills.

Overall, the mastery of pedagogical, personality, social, and professional competencies is crucial to a successful learning process. Teachers with these competencies create effective learning environments, inspire student interest, and help develop their cognitive, affective, and psychomotor potential. The social studies teacher at this school exemplifies these qualities, making a significant impact as a competent educator who motivates students to learn and excel.

Factors that can influence teacher professionalism in teaching social studies at the SMP Cerdas Murni

Factors that influence teacher professionalism can be differentiated/grouped into two parts, namely from an input perspective and an output perspective. What is meant by input perspective are things that exist within the teacher's personality. Apart from that, there are also output factors that come from the environment around the teacher. The following are factors that can influence teacher professionalism in teaching social studies at the SMP Cerdas Murni.

1. Input Perspective

The following is an input perspective that can affect the professionalism of teachers in teaching social studies learning at the SMP Cerdas Murni:

a) Educational Background

Based on the results of interviews with teachers and school principals, it is known that the social studies teachers at this school have educational backgrounds that do not directly come from the social studies field of study. For example, Mrs. Rahmi Nurdin Tanjung has a Bachelor of Education degree in Accounting from Medan State University. Likewise with Mrs. Afrida Nasution, who graduated with a Bachelor of Education in Economics. This was confirmed by the school principal, Mr Dede Noviandi, who stated that the social studies teachers at his school had an educational background in economics and accounting, because most of them were senior teachers who had been teaching at the school for a long time.

Even though they do not have a direct background in the field of social studies, the competence of teachers at the SMP Cerdas Murni is still supported by additional training and professional certification. Observation results show that Mrs. Rahmi, for example, has obtained an educator certificate since 2015. This certificate is formal proof that a teacher has met the competency standards set by the government and is fit to teach. This kind of certification is very important because it shows that a teacher not only has theoretical knowledge, but also practical skills to deliver the material effectively,

b) Teaching Experience

Teaching experience is the amount of time and various situations that a teacher has experienced while carrying out his profession in educating and teaching students inside or outside the classroom. Teaching experience is also an important factor in teacher professionalism. Mrs. Rahmi Nurdin Tanjung has been teaching for 19 years. This experience gives him an edge in creating an effective learning atmosphere, understanding students' emotional needs, and adapting learning strategies to classroom situations. Mrs. Afrida Nasution has experience teaching in several schools before joining the SMP Cerdas Murni. He seems skilled in managing class dynamics to maintain a conducive learning atmosphere.

The results of observations show that the long experience of these two teachers helps them in implementing varied and adaptive learning methods. This experience also increases their sensitivity to students' needs and their ability to face various learning challenges. The teaching experience possessed by the two social studies teachers at this school has made a major contribution to their professionalism, especially in terms of classroom management, application of

learning methods, and adaptation to curriculum changes.

The following is an output perspective that can influence teacher professionalism in teaching social studies at the SMP Cerdas Murni:

2. Input Perspective

The following is an output perspective that can affect the professionalism of teachers in teaching social studies learning at the SMP Cerdas Murni:

a) School Facilities and Environment

School facilities and environment refer to the facilities and infrastructure available at the school as well as the physical and social conditions that influence the learning process. The availability of complete facilities and a supportive school environment greatly influences the learning process. Good facilities and environments have benefits, namely: increasing students' motivation to learn through a comfortable and interesting atmosphere, encouraging creativity and innovation in teachers' teaching methods, facilitating access to various learning resources, such as technological devices or textbooks, creating a comfortable learning atmosphere, so that student concentration is more optimal.

Based on the results of the interview, the facilities available at the SMP Cerdas Murni support teachers to teach professionally. The school principal, Mr Dede Novianti, stated that facilities such as teaching equipment, in focus and learning media are always provided according to teacher needs. The social studies teacher, Mrs. Afrida Nasution, also confirmed that the school was able to meet the needs of teacher facilities to support the teaching and learning process. Mrs Rahmi Nurdin Tanjung highlighted facilities such as buildings, in focus and the internet, which were considered to be very helpful in the teaching process.

The results of the researcher's observations show that the SMP Cerdas Murni has facilities such as comfortable classrooms, a computer laboratory, sports fields (basketball, futsal, badminton, volleyball), as well as a multimedia language laboratory. In addition, an organized school layout, a clean physical environment, and friendly social relations among students, teachers, and staff create a positive learning atmosphere.

Based on the description above, the researcher concludes that the complete facilities and supportive physical and social environment at the SMP Cerdas Murni have created a conducive learning atmosphere, thereby supporting teachers to carry out their duties professionally. This support also has a positive impact on student motivation and comfort during learning.

b) Supportive Work Environment

A supportive work environment at the SMP Cerdas Murni plays an important role in improving teacher professionalism. With a positive atmosphere and support from colleagues and leaders, teachers feel motivated and appreciated. Access to adequate facilities and opportunities to take part in training encourage teachers to continue developing their teaching skills. All this not only increases teacher confidence, but also has a positive impact on the quality of learning in the classroom, creating a productive and inspiring educational atmosphere.

Based on the results of the interview, Mrs. Rahmi Nurdin Tanjung said that support from the school principal, such as providing facilities and training opportunities, is one of the motivations for teachers to continue to improve their professionalism. Mrs. Afrida Nasution emphasized that good working relationships with fellow teachers help overcome difficulties in the teaching and learning process, both through input and motivation.

The results of the researcher's observations show that the working relationship between teachers and staff at the SMP Cerdas Murni is very good. Teachers share learning materials, teaching strategies, and creative ideas. This collaborative work environment supports the development of teacher competency and creates a productive work atmosphere.

Based on the description above, the researcher concludes that the work environment at the SMP Cerdas Murni allows teachers to carry out their roles professionally. Support from fellow teachers, principals, and staff increases teachers' motivation and confidence, which directly positively impacts the quality of their teaching in the classroom.

Based on the description above, the author concludes that the factors that influence teacher professionalism in teaching social studies at SMP Cerdas Murni can be categorized into two perspectives: Namely the input perspective which includes educational background and teaching experience, and the output perspective which includes facilities and a supportive school and work environment. All of these factors are interrelated and influence teachers' ability to teach effectively and professionally, as well as create an optimal learning environment for students at SMP Cerdas Murni.

Efforts Made to Improve Teacher Professionalism in Teaching Social Studies at the SMP Cerdas Murni

Various steps and efforts taken by the principal of the SMP Cerdas Murni in increasing teacher professionalism in teaching social studies are as follows:

1. Involving Teachers in Teaching Potential and Ability Development Activities

Involving teachers in activities that support their potential and abilities in teaching is an important strategic step to improve the quality of education. This strategy not only improves teachers' professional competence, but also has an impact on the effectiveness of the learning provided to students. At the SMP Cerdas Murni, the principal plays a key role in ensuring teachers are actively involved in various development programs.

Teacher participation in development activities, such as training, seminars, workshops, or professional conferences, has a number of benefits, including: Teachers gain knowledge about the latest teaching methods, classroom management strategies, and learning evaluation techniques, Teachers can deepen their understanding of the subject matter, especially in the field of social studies, providing teachers with the opportunity to build networks, share experiences, and increase self-confidence in teaching. Teachers who participate in training tend to be more creative and innovative in designing learning.

Based on interviews conducted, the school principal, Mr. Dede Noviandi, provided support in the form of transportation facilities for teachers attending training or technical guidance. The social studies teacher, Mrs. Rahmi Nurdin Tanjung, appreciated the role of the school principal in providing information and encouragement to attend training, such as the Olympics or similar activities, as well as providing the necessary facilities.

Based on the results of observations, the principal not only provides facility support but also time flexibility for teachers participating in training. This can be seen from the school principal's policy of giving special permission to teachers to attend training without disturbing their teaching duties. Apart from that, the school principal also arranges substitute schedules or assigns other teachers temporarily, so that tasks at school continue to run smoothly.

From the results of interviews and observations, it can be concluded that the principal at the SMP Cerdas Murni actively involves teachers in various activities to develop their potential and abilities. This support includes providing transportation facilities, information about training programs, and arranging flexible work schedules. This strategy shows the school's commitment to improving teacher professionalism, which ultimately has a positive impact on the quality of learning. With this policy, the SMP Cerdas Murni has created a conducive environment for developing teacher competency, so that it can support the maximum achievement of educational goals.

The principal's policy in supporting teacher professional development is in line with (Guskey, 2002) research, which states that professional training has a significant impact on changes in teacher behavior and effectiveness in teaching. Additionally,

(Desimone, 2009) emphasized the importance of institutional support in facilitating teacher training, as was done by the principal of SMP Cerdas Murni. This approach also supports the principles of continuous professional learning as explained by (Timperley, 2011), which highlights the importance of continuous learning to improve teacher competence and its impact on the quality of learning.

2. Hold a Teacher Performance Evaluation Meeting

Holding evaluation meetings at schools is one of the strategic steps aimed at improving the quality of education. In this forum, teachers and school management can discuss achievements that have been achieved, obstacles faced in the classroom, and design solutions to existing problems. This evaluation not only helps identify the strengths and weaknesses of the learning process, but also functions as a means of coordination that strengthens relationships between school principals, teachers and students.

Benefits of teacher performance evaluation meetings: Evaluation meetings provide teachers with the opportunity to express the challenges they face, such as difficulties in delivering material, less than optimal student responses, or limited facilities. Principals can monitor teacher performance directly through discussions in meetings, evaluating their achievements, as well as providing constructive feedback to increase professionalism. This forum allows teachers and school management to find joint solutions to existing problems, such as innovation in teaching methods, curriculum adjustments, or increasing the use of learning technology. With regular meetings, teachers feel supported and appreciated for having space to express their aspirations. This can increase their enthusiasm for teaching.

Based on the results of the interview, Mr. Dede Noviandi, principal of the SMP Cerdas Murni, evaluation meetings are held every year as a form of assessment of teacher performance. The principal, together with the deputy principal for curriculum, is responsible for evaluating subject teachers, including social studies teachers. The social studies teacher, Mrs. Afrida Nasution, explained that the school principal also directly monitors the learning process in class through an observation schedule, ensuring that each teacher carries out their duties well. After monitoring, the principal holds a discussion to provide input and develop improvement strategies.

Based on the results of observations, researchers directly observed the implementation of evaluation meetings involving school principals and teachers. This meeting discussed various issues faced by teachers in the classroom, as well as providing recommendations to improve the quality of teaching. This shows that evaluation meetings are not just an administrative routine, but also a moment of constructive reflection and coordination.

From the results of interviews and observations, it can be concluded that the principal

at the SMP Cerdas Murni actively carries out regular teacher performance evaluation meetings. Through this activity, obstacles faced by teachers in the classroom can be identified and overcome together. Apart from that, this evaluation also creates a good coordinating relationship between the principal and teachers, as well as between teachers and students.

Teacher performance evaluation meetings as held at the SMP Cerdas Murni are in line with the concept put forward by (Danielson, 2007), which emphasizes the importance of performance evaluation as an integral part of teacher professional practice. Additionally, (Glickman, C. D., Gordon, S. P., & Ross-Gordon, 2014) explained that the principal's role as an instructional leader is very important in providing constructive feedback to support teacher professional development. This strategy not only improves teacher performance, but also has a direct impact on the quality of student learning.

3. Give encouragement to teachers

Providing encouragement to teachers is a strategic step taken by school principals to increase professionalism and motivation in carrying out their duties. This encouragement not only creates a positive work environment, but also encourages teachers to continue to develop and improve the quality of teaching. This form of support can be provided through formal awards, such as financial incentives, or appreciation in non-material forms such as recognition of teacher contributions.

Based on the results of the interview, the Principal of the SMP Cerdas Murni, Mr. Dede Noviandi, explained that the teacher appreciation program does not only come from the school but is also supported by the foundation. The incentives provided include cash awards with varying amounts depending on the level of achievement of the students being supervised by the teacher, from district to international level. A similar thing was expressed by Mrs. Fariza, a Mathematics teacher, who stated that awards in the form of cash incentives were given to teachers who successfully guided students to win competitions, including district and national Olympiads.

Based on the results of observations, researchers noted that formal awards in the form of cash and certificates are often given directly by the foundation to teachers who succeed in scoring student achievements, such as in district-level Olympic competitions in 2023. This support shows that recognition and appreciation for teacher performance is part of integral to the foundation's policy to motivate teaching staff.

Based on interviews and observations, it can be concluded that SMP Cerdas Murni actively provides encouragement to teachers through formal recognition and awards. Financial incentives and moral appreciation have a positive impact on teachers' professionalism and dedication in carrying out their duties. This step creates a

conducive work environment, where teachers feel valued and supported, so they are able to provide higher quality teaching and have an impact on student achievement.

The Principal of the SMP Cerdas Murni has succeeded in implementing various strategies that support increasing teacher professionalism, especially in social studies learning. Various steps are taken to create a conducive work environment, starting from encouraging teacher participation in training and workshops with the support of transportation facilities and flexible time arrangements, to holding regular meetings to evaluate performance and find solutions to obstacles faced during the learning process. Apart from that, awards and appreciation in the form of formal rewards and verbal recognition are given to teachers who excel, especially those who are able to guide students to achieve achievements at various levels. This effort not only increases teacher motivation but also creates a positive and appreciative work atmosphere. The principal's commitment to supporting teacher professional development has been proven to contribute to improving the quality of education in schools, especially in social studies learning. Giving rewards to teachers, as explained in this research, in line with the motivation theory expressed by (Deci, E. L., & Ryan, 2000), which states that external incentives, such as financial awards, can motivate individuals to achieve better performance. In addition, research by (Aydin, A., Sarier, Y., & Uysal, 2013) shows that a school principal's supportive and rewarding leadership style can increase teachers' organizational commitment and their job satisfaction, which ultimately has an impact on the quality of learning in the classroom.

D. Conclusions

Teacher professionalism in teaching social studies at the SMP Cerdas Murni is influenced by four main competencies: pedagogical, personality, social, and professional. Teachers at this school demonstrate good mastery of these competencies, though there is room for improvement, particularly in utilizing innovative learning media. Pedagogical competence is shown through thorough preparation and strong understanding of materials, while personality competence is reflected in wise attitudes and moral character as role models for students. Social competence involves effective interaction with stakeholders, and professional competence includes active participation in training and the relevance of learning to everyday life. Key factors affecting teacher professionalism include input and output perspectives. From an input perspective, educational background and teaching experience significantly influence teacher abilities. From an output perspective, facilities, a supportive environment, and leadership play vital roles. Efforts by school principals include participation in training, regular performance evaluations, and providing motivation, demonstrating the importance of supportive leadership in fostering teacher development. To further enhance teacher professionalism, national-level teacher competency frameworks should be implemented. These frameworks could include clear standards for developing competencies, mandatory training on innovative teaching methodologies, funding for professional development, and consistent

performance evaluations. These measures aim to create a conducive work environment for continuous improvement in teaching quality, ultimately benefiting student achievement and overall educational standards. With ongoing efforts from schools and policymakers, it is hoped that teacher professionalism will be elevated, ensuring a positive impact on education quality.

E. Acknowledgement

Thanks to all stakeholders from Universitas Islam Negeri Sumatera Utara, Medan and respondents in SMP Cerdas Murni.

References

- Anggoro, M. T., Andriani, D., Puspitasari, K. A., Belawati, T., Kesuma, R., & Wardani. (2013). *Research methods*. 324.
- Asta Jaya, I. K. M. (2021). The Role of Social Studies Teachers in Improving Students' Critical Thinking Skills Through Inquiry Learning Methods. *Sang Acharya : Jurnal Profesi Guru*, 2(1), 22. <https://doi.org/10.25078/sa.v2i1.3235>
- Aydin, A., Sarier, Y., & Uysal, Ş. (2013). The effect of school principals' leadership styles on teachers' organizational commitment and job satisfaction. *Educational Sciences: Theory & Practice*, 13(2). <https://doi.org/10.12738/estp.2013.2.1274>
- Budiman, A., Sabaria, R., & Purnomo, P. (2020). Dance Training Model: Strengthening Pedagogical Competence and Teacher Professionalism. *Jurnal Panggung*, 30(4), 532-548. <https://doi.org/10.26742/panggung.v30i4.1370>
- Damanik, M. H. (2020). *Integration of Religious Values in Social Science Learning at Bustanul Ulum Elementary School, Batu City*. Universitas Islam Negeri Maulana Malik Ibrahim Malang.
- Danielson, C. (2007). *Enhancing Professional Practice: A Framework for Teaching* (2nd ed.). ASCD.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4). https://doi.org/10.1207/S15327965PLI1104_01
- Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3). <https://doi.org/10.3102/0013189X08331140>
- Eka Yuliana Rahman, & Abdulkarim, A. (2024). Increasing Cultural Literacy in Social Studies Learning Through an Inquiry Reflective Thinking Approach. *Jurnal Pendidikan Ips*, 14(1), 155-163. <https://doi.org/10.37630/jpi.v14i1.1631>
- Glickman, C. D., Gordon, S. P., & Ross-Gordon, J. M. (2014). *Supervision and Instructional Leadership: A Developmental Approach* (10th ed.). Pearson Education Inc. <https://doi.org/10.4324/9780203496490>
- Guskey, T. R. (2002). Professional development and teacher change. Teachers and Teaching: Theory and Practice. *Teachers and Teaching: Theory and Practice*, 8(3). <https://doi.org/10.1080/135406002100000512>

- Hartanti, A. S., & Yuniarsih, T. (2018). The effect of the professional competence of teachers and motivation of work on teacher performance in school high school. *Jurnal Pendidikan Manajemen Perkantoran*, 3(1), 167–175.
- Hilmi, M. (2017). Implementation of social studies education in elementary schools. *JIME: Jurnal Ilmiah Mandala Education*, 3(2), 164–172.
- Intan Kusumawati, et al. (2023). *Introduction to Education*. CV Rey Media Grafika.
- Moleong, L. J. (2017). *Qualitative Research Methods*. PT Remaja Rosdakarya.
- Jahro, E. N., Nurasih, I., & Sutisnawati, A. (2023). Improving Social Studies Knowledge Through Picture In The Box Learning Media for Elementary School Students. *Jurnal Pendidikan*, 32(3), 359–368. <https://doi.org/10.32585/jp.v32i3.4214>
- Liu, L. B., Conner, J. M., & Li, Q. (2023). Cultivating teacher professionalism in Chinese and U.S. settings: contexts, standards, and personhood. *Education Inquiry*, 14(1), 22–39. <https://doi.org/10.1080/20004508.2021.1950274>
- Milidar, K., Interaktif, P., & Milenial, G. (2024). Innovation of PAI Learning with Interactive Approach for Millennial Generation. *Jurnal Review Pendidikan Dan Pengajaran*, 7(2), 6275–6284. <https://doi.org/10.31004/jrpp.v7i2.36365>
- Nirmayanthi, A. (2023). Implementation of School-Based Strategic Management. *Cognoscere: Jurnal Komunikasi Dan Media Pendidikan*, 2(3), 1–10. <https://doi.org/10.61292/cognoscere.214>
- Pingkan Imelda Wuisan, Atwi Suparman, B. W. (2023). *Electronic-Based Teacher Professional Competency Assessment System: Concept and Application*. PT Bumi Aksara.
- Pinto, L., & Cervantes, Y. (2024). Integrating geoethics in tertiary education : a strategy for sustainable development in Latin America and the Caribbean. *Journal of International Geoscience*, 47(4), 733–751. <https://doi.org/10.18814/epiiugs/2024/02404s02>
- Rachmat Panca Putera, Royan Rosyadi, K. I. A. (2023). *Social Studies Learning Concept "Social Studies Theoretical and Applied Approaches."* Yayasan Drestanta Pelita Indonesia.
- Rahmadani, S., Tinggi, S., Islam, A., Bengkalis, N., & Bengkalis, K. (2024). Islamic Religious Education Learning Strategies in the Digital Era: Qualitative Literature Review. *Jurnal Media Akademik (JMA)*, 2(6).
- Rahmawati, Y. P., & Salehudin, M. (2021). Optimizing 21st century learning in junior high and high schools. *Journal of Instructional and Development Researches*, 1(3), 112–122. <https://doi.org/10.53621/jider.v1i3.67>
- Sudrajat, J. (2020). Teacher Competence During the Covid-19 Pandemic. *Jurnal Riset Ekonomi Dan Bisnis*, 13(2), 100. <https://doi.org/10.26623/jreb.v13i2.2434>
- Sulastri, Happy, F., & Alfroki Martha. (2020). Teacher Professional Competence in Improving the Quality of Education. *Journal of Education Research*, 1(3), 258–264.
- Timperley, H. (2011). *Realizing the power of professional learning*. McGraw-Hill Education.
- Yusnaldi, E. (2019). *New Portrait of Social Studies Learning*. Perdana Publishing.

Point Counter-Point Learning Strategy on the Subject of Social Sciences to Improve the Learning Achievement

Nurhalimah¹, Ponidi¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: nurhalimah0309201069@uinsu.ac.id

Article History: Received on 14 November 2024, Revised on 4 January 2025,
Published on 17 January 2025

Abstract: This research aims to see how the Point Counter-Point learning strategy in social studies subjects can improve student learning achievement at Al-Hidayah Medan Private Junior High School (SMP). By focusing on social studies learning, where the points in the curriculum are key in understanding various social, economic and political aspects, this learning strategy becomes very relevant. This research uses a qualitative methodology using descriptive methods. This approach aims to provide a systematic, accurate and factual description of the phenomenon being studied. The results of this research show that the Point Counter-Point learning strategy makes a significant contribution to increasing student learning achievement. This is reflected in increased student involvement in discussions, development of critical thinking skills, as well as improvements in the way students organize and convey their ideas. This research provides in-depth insight into how this strategy functions in the learning context in class VII, as well as how it can improve students' understanding and learning achievement in social studies subjects.

Keywords: Learning Achievement, Point Counter-Point Strategy, Social Sciences

A. Introduction

Education is a conscious and planned effort to create an active learning atmosphere and process for students so that they are able to develop the potential that exists within them, such as good personality, self-control, noble character, intelligence and the skills needed by them and public. From this understanding, it can be seen that education is an important process in life to find out the abilities and behavior of each student in doing good or bad things. In Indonesia, especially in the field of education, it is starting to be improved, one of which is the use of strategies in teaching and learning activities.

According to (Muwally, 2019) the majority of educators currently tend to use conventional teaching methods which are often monotonous and less interesting. As a result, the learning process can hinder students' creativity and active participation. Therefore, educators need to have a broad understanding of various learning models

that can arouse students' interest and involvement in learning. One learning model that can be used is the Point-Counter-Point model (Idrus & Raksun, 2023). This model involves argumentation according to different points of view, and is an effective technique for stimulating discussion and gaining a deeper understanding of complex issues (Jannah & Khoiroh, 2023). The aim of using the Point-Counter-Point strategy is to train students to develop strong arguments in solving problems that are relevant to people's lives, according to the role they play in the discussion (Dany Miftah Ula, 2019). Thus, the Point-Counter-Point learning model provides opportunities for students to actively participate in conveying their thoughts and ideas in learning, in accordance with existing guidelines.

Learning is central to a person's growth and development process, enabling them to acquire the knowledge, skills and understanding necessary to reach their maximum potential. Strategy refers to a general plan or guide of action to achieve a specific goal. In the learning context, strategies can be interpreted as patterns of teacher and student activities designed to achieve predetermined learning goals (Saiful Bahri, 2010). Kozna also describes a learning strategy as any action chosen to help students achieve certain learning goals. According to (Pritandhari, 2017), learning strategies are the methods chosen to implement learning in a special learning environment (Zuliana, Nurul, 2022). Dick and Carey define learning strategies as all components of learning materials and procedures used by teachers to help students achieve learning goals. Through learning, individuals can broaden their horizons, develop creativity, improve critical thinking skills, and prepare themselves to face the challenges of an ever-changing world. Apart from that, learning also provides the foundation for innovation, technological development and socio-economic progress of a nation. Therefore, investment in education and learning is key to creating a better future for individuals and society as a whole.

In social studies learning at Al-Hidayah Medan Private Middle School, one of the main problems often faced is the lack of involvement and active participation of students in the learning process. Many students tend to be passive and simply receive information without engaging in in-depth discussion or critical analysis. Rehani & Mustofa stated that monotonous traditional learning methods are often unable to stimulate students' interest and creativity, so they are less motivated to learn more deeply and question the material being taught (Rehani & Mustofa, 2023).

Learning strategies in social studies subjects are very important because they help students understand the complexity of social, political, economic and cultural issues which often have many points of view. This subject requires students to not only memorize facts, but also develop critical, analytical and reflective thinking skills. By implementing appropriate learning strategies, such as discussion, problem solving, and collaboration, students can be actively involved in the learning process, understand the material better, and are able to relate theory to real situations (Damanik et al., 2023). This not only increases students' understanding of social

studies topics, but also equips them with the skills needed in everyday life, such as communicating, working together, and making decisions based on deep thought.

Learning strategies have an important role in Social Sciences (IPS) learning because they help create effective and meaningful learning experiences for students. Social studies as a subject aims to develop students' understanding of society, social interactions, culture, economics and the environment. Therefore, appropriate learning strategies can help students understand these concepts contextually and applied.

Learning strategies help teachers design approaches that suit student characteristics, such as learning styles, interests and abilities. For example, using group discussion strategies or simulations can help students learn social concepts through direct interaction, so that they not only understand theory but also practice social values such as cooperation, tolerance and communication.

Varied learning strategies can increase student motivation and participation. In IPS, themes such as history, geography, or economics can be presented in an interesting way through interactive media, case studies, or project-based learning. This not only makes learning more dynamic but also helps students connect the material to real life, thereby increasing the relevance of learning.

This study aims to see how the Point Counter-Point learning strategy in social studies subjects can improve student learning achievement at Al-Hidayah Medan Private Junior High School (SMP). By focusing on social studies learning, where the points in the curriculum are key in understanding various social, economic and political aspects, this learning strategy becomes very relevant. Today, the learning process often involves the dominance of certain roles of students in the classroom, where some may be more active in leading and others in supporting.

The Point Counter Point (PCP) learning model is a learning approach that uses discussion techniques to produce a deeper understanding of various complex issues. Meanwhile, according to (Suprijono, 2011), the point counter point learning model is a technique used to stimulate students to think from various points of view. Therefore, the aspect that needs further emphasis is the lesson content itself. This is a method where students are given the opportunity to actively express their arguments about problems that arise or are deliberately raised in the learning process, in accordance with applicable regulations.

By implementing the Point Counter-Point learning strategy, it is hoped that this can change and provide opportunities for all students to be actively involved in leading and supporting according to learning needs. Thus, the aim of this strategy is to create an inclusive and supportive learning environment (Ramadhani, 2023), which can help reduce the potential for inequality or jealousy among students, as well as

improve their overall learning achievement (Sumiati, 2021).

By implementing the Point Counter-Point learning strategy in social studies subjects, it is hoped that student learning achievement will increase, so it is important that learning design must provide equal opportunities for all students, regardless of their gender. The learning process must be designed in such a way that boys and girls have equal opportunities to engage and develop. This includes creating a liberating learning environment and providing opportunities for every student to contribute actively. The goal of this learning strategy is to ensure that all students have equal opportunities to learn and grow, regardless of their gender, thereby increasing overall learning achievement.

Based on the problems described above, the researcher is interested in conducting this research with the title Point-Counter-Point Learning Strategy in Social Sciences Subjects to Increase the Learning Achievement of Class VII Students at Al-Hidayah Private Middle School, Medan.

B. Methods

In this research, the approach adopted is qualitative research using descriptive methods. This approach aims to provide a systematic, accurate and factual description of the phenomenon being studied. According to (Moleong, 2017), qualitative methods place emphasis on description, where the research process is considered more important than the final results. This research is focused on a specific area, with predetermined criteria to ensure the validity of the data obtained. Qualitative research designs are flexible, allowing for necessary adjustments during the research process. Research results were obtained through interviews, observation and documentation to gain an in-depth understanding of the subject under study. By using this approach, researchers aim to obtain detailed and clear answers to the problems faced in the context of this research.

Observation is observation to find out research facts from close range in order to obtain relevant information. According to (Sugiyono, 2017), observation is a specific data collection technique. Interviews are data collection through direct questions and answers with clear objectives. Sugiyono (2012) states that interviews are used when researchers want to conduct a preliminary study or obtain more in-depth information from a small number of respondents. Documentation is data collection in the form of notes, books or written documents, as explained by (Moleong, 2014).

Data collection in this research was carried out through three main techniques, namely observation, in-depth interviews and documentation. Observations were carried out to directly observe social studies learning activities in class VII at Al-Hidayah Private Middle School, Medan. Through this observation, researchers recorded various aspects of learning, such as interactions between teachers and

students, the use of learning media, and class dynamics during the teaching and learning process. In addition, in-depth interviews were conducted with the main informant, namely the class VII social studies teacher, to obtain detailed information regarding the learning strategies used. Questions in the interview included the choice of teaching methods, challenges faced, the impact of the strategy on student learning achievement, as well as the teacher's views regarding the effectiveness of the strategy. Meanwhile, documentation is used to complement data from observations and interviews. Documentation data includes learning implementation plans (RPP), student attendance records, learning outcome evaluation scores, as well as other relevant documents, such as photos of learning activities. With the combination of these three techniques, research is able to produce valid and in-depth data regarding the implementation of social studies learning strategies, as well as providing a comprehensive understanding of the learning process in class VII.

Researchers analyzed data using the Miles, Huberman, and Saldana approach through three stages: first, data reduction, namely simplifying the information obtained to facilitate understanding; second, data presentation, namely compiling data systematically based on the results of research on the Point Counter Point (PCP) strategy to make it easier to draw conclusions; and third, drawing conclusions, namely comparing the collected data to produce final conclusions regarding the problems studied

C. Results and Discussion

Point Counter-Point Learning Strategy in Social Sciences Subjects in Improving Learning Achievement of Class VII Students

Learning strategies are a series of methods chosen and used by a teacher to deliver learning material effectively, with the aim of making it easier for students to receive, understand and internalize the material. Choosing the right strategy not only supports the achievement of learning objectives, but also plays an important role in creating a conducive, interactive and enjoyable learning atmosphere. This ensures that students can achieve the expected competencies at the end of learning activities.

In the learning context, a teacher must have the ability to design effective strategies so that the student learning process takes place optimally. This strategy includes mastery of presentation techniques, teaching methods, as well as the use of relevant media and technology. Teachers also need to consider student characteristics, such as learning styles, level of understanding, and individual needs, to ensure the approach used is appropriate to the students' conditions.

The teaching and learning process is an educational activity that not only focuses on the transfer of knowledge, but also on instilling educational values that influence interactions between teachers and students. This interaction is educational because it

is directed at achieving predetermined learning goals. In this interaction, the teacher acts as a facilitator, guide and motivator, while students are expected to actively participate in the learning process.

In order for learning to be effective, teachers need to plan activities in a structured manner by setting learning objectives, compiling materials, choosing teaching methods, and utilizing various available resources, such as learning media, technology, and the learning environment. This careful planning allows teachers to face various challenges during the teaching and learning process and ensures that each student gets a meaningful learning experience. Thus, appropriate learning strategies are the main foundation in creating a quality learning process and have a positive impact on student development.

Based on the explanation from Mr. Jeremy as a social studies teacher regarding the application of the point counter point strategy in social studies subjects, based on the results of the interview, the teacher explained that before implementing the Point Counter-Point strategy, he first made thorough preparations so that learning was effective and directed. This preparation begins with selecting a topic that is relevant and appropriate to the social studies material being taught. Teachers pay great attention to choosing topics that have the potential to give rise to discussions with two different points of view, such as social, economic or historical issues that are often controversial. For example, topics such as colonialism, environmental policy, or different systems of government provide opportunities for students to think critically and develop arguments from multiple perspectives.

The topic chosen should have clear pros and cons, because the main aim of this strategy is to encourage students to consider various views, as well as develop their ability to form and defend arguments logically. Teachers ensure that students are equipped with sufficient basic knowledge so that they can be actively involved in discussions. Apart from that, teachers also design supporting materials, such as reading texts or other sources of information, which can strengthen students' understanding of the topics to be discussed.

In this preparation stage, teachers also think about how to divide students into small groups that represent different points of view. Group division was carried out carefully, ensuring that each group had an even composition of students in terms of critical thinking and communication skills, so that discussions could take place in a balanced manner. The teacher also plans discussion scenarios by considering the time available, as well as how he can facilitate the discussion so that it remains productive and focused. All of these preparations aim to ensure that when the Point Counter-Point strategy is implemented, students can be actively involved and gain maximum benefit from this interactive learning.

Mr. Jeremy also added that during the learning process, the teacher starts the session

by providing an introduction to the topic to be discussed, building context so that students understand the relevance of the material to everyday life. This topic was chosen because it has two opposing points of view, which then become the basis for discussion. After giving an introduction, the teacher explains in detail the Point Counter-Point method that will be applied, including how each group will play a role in defending their argument, as well as the rules that must be followed during the discussion. Teachers emphasize the importance of being open to differences of opinion, as well as using supporting data or facts in constructing arguments.

The teacher then divides the students into small groups, each group is responsible for preparing an argument based on the position given, whether for or against the topic being discussed. Each student is expected to contribute to this process, both in formulating arguments and expressing their opinions during discussions. The teacher provides sufficient time for groups to collect data, construct arguments, and develop their debate strategies, while directing them to stay focused on key aspects of the topic being debated.

When discussions take place, the teacher acts as a facilitator, directing the conversation to keep it focused on the learning objectives and encouraging active participation from all students. He also monitors the dynamics between students, ensuring that every opinion is respected even if the views are different. If necessary, the teacher provides intervention to clarify poorly understood points or to keep the discussion from going off topic. Teachers also encourage more passive students to participate, creating an inclusive and productive discussion atmosphere. Ultimately, the teacher helps students draw conclusions from the discussion, providing reflections on the importance of listening and considering different points of view in achieving a broader understanding of an issue.

The interview results showed that the implementation of the Point Counter-Point strategy was welcomed by most students. They said they felt more actively involved in the learning process, especially because this method gave them the opportunity to express opinions directly and engage in in-depth discussions. This is different from traditional learning methods which are more passive, where students tend to only receive information. In Point Counter-Point discussions, students are encouraged to not only understand the material conceptually, but also analyze and consider different points of view.

Students feel that this method really helps them understand social studies subject matter more deeply and contextually. By learning two different points of view, they are trained to see social issues from different perspectives, which enriches their way of thinking. For example, when discussing topics about government policy or social conflict, students not only study the existing facts, but also critically analyze and explore arguments from both sides. This process helps students understand the complexity of a social problem and fosters analytical thinking skills and the ability to

make decisions based on in-depth understanding.

Teachers also noted that implementing these strategies significantly improved students' communication skills. In discussions, students are challenged to organize arguments systematically, support them with relevant facts, and defend their opinions logically in front of classmates. This not only trains critical thinking skills, but also builds students' confidence in public speaking. More than that, structured discussions give students the opportunity to learn how to communicate their ideas effectively, listen attentively to the opinions of others, and respond to different arguments in a manner that is polite and respectful of differences. These skills are important provisions for students to face social and academic challenges in the future, while supporting their development into more confident, tolerant and open-minded individuals.

In addition, this method has proven effective in encouraging the participation of students who are usually passive in class. Students who tend to be silent or less active in traditional learning methods begin to engage more in discussions. With the opportunity to debate and express opinions, they feel more confident and motivated to participate. Teachers note that the classroom atmosphere has become more dynamic and interactive, where all students, both active and previously passive, contribute to the learning process.

Although the implementation of the Point Counter-Point strategy proved effective in increasing student engagement, teachers revealed that there were several obstacles faced during its implementation. One of the main challenges is time constraints. Discussions in this strategy often require a longer allocation of time compared to traditional teaching methods, because students need to prepare arguments, listen to opposing points of view, and respond to the arguments presented. Teachers must be able to manage time well so that discussions run effectively without disrupting the overall flow of learning, but this is sometimes difficult to do, especially if the lesson schedule is limited.

In addition, this method has proven effective in encouraging the participation of students who are usually passive in class. Students who tend to be silent or less active in traditional learning methods begin to engage more in discussions. With the opportunity to debate and express opinions, they feel more confident and motivated to participate. Teachers note that the classroom atmosphere has become more dynamic and interactive, where all students, both active and previously passive, contribute to the learning process.

Although the implementation of the Point Counter-Point strategy proved effective in increasing student engagement, teachers revealed that there were several obstacles faced during its implementation. One of the main challenges is time constraints. Discussions in this strategy often require a longer allocation of time compared to

traditional teaching methods, because students need to prepare arguments, listen to opposing points of view, and respond to the arguments presented. Teachers must be able to manage time well so that discussions run effectively without disrupting the overall flow of learning, but this is sometimes difficult to do, especially if the lesson schedule is limited.

Not all students have the same ability in composing and conveying arguments, thus creating their own challenges in discussion-based learning. Some students may find it difficult to formulate their opinions clearly and logically due to a lack of critical thinking skills or public speaking experience. On the other hand, there are students who are more skilled in debate and have good communication skills, so they are more dominant in discussions. This difference in ability requires the teacher's active role as a wise facilitator. Teachers must ensure that every student, regardless of ability level, has an equal opportunity to participate and contribute to discussions. This can be done by providing additional guidance to struggling students, such as guiding them in formulating arguments or giving them more time to prepare opinions. Apart from that, teachers also need to encourage students who tend to be passive to be more involved by asking questions that encourage their participation or creating a supportive discussion atmosphere.

Interviews with teachers and students revealed that the use of this strategy was able to increase student participation, especially in expressing their opinions more confidently. The teacher stated that through the Point Counter-Point strategy, students who were initially passive in the learning process became more enthusiastic about contributing to class discussions. This was acknowledged by students who felt that this method encouraged them to understand the material better and learn to express their opinions better. Some students stated that they were more interested in social studies subjects because they could see an issue from various perspectives, which they were previously unaware of.

From the documentation, such as recordings of class discussions and student reflection notes, it appears that the learning process using the Point Counter-Point strategy allows students to solve problems collaboratively, consider various points of view, and formulate their own conclusions. This process encourages students to connect the theory learned with real situations, so that they are able to develop a more comprehensive understanding of social studies material.

The Point Counter-Point strategy is a learning method that encourages active interaction between students and learning material (Nurleli, 2018). In this approach, students not only act as passive recipients of information, but also become active main subjects in the learning process. This is very relevant for social studies subjects which often discuss social, political and economic issues that have many points of view. Through this strategy, students are faced with two opposing views or positions regarding an issue, where they are expected to be able to analyze and

criticize each point of view in depth.

By implementing this strategy, students learn to not only receive information directly, but also research and understand the reasons behind different points of view. They are invited to develop logical arguments based on available facts and data, and defend their position during the discussion. This process involves critical thinking skills, where students must consider various aspects and possibilities related to the issue being discussed.

Through learning that involves analyzing and evaluating two different points of view, students can broaden their understanding of the topics discussed in social studies lessons. They become better able to see a problem from various perspectives and learn how to organize and express their opinions in a more structured manner. In the end, the Point Counter-Point method not only improves students' understanding of the subject matter, but also helps them hone critical thinking skills which are very important in the learning process and in everyday life.

One of the main advantages of the Point Counter-Point strategy is its ability to encourage active student participation in learning. Each student is given the role and responsibility to compose and convey arguments based on a predetermined position, either supporting or opposing a topic. This makes students more emotionally and intellectually engaged, because they have to process information, analyze points of view, and present arguments in a logical and structured manner. Different from traditional lecture methods, this strategy forces students to think more deeply and actively participate.

Additionally, these strategies help students develop important skills such as interpersonal communication, critical thinking, and problem solving. Students learn to express opinions confidently, listen to opposing arguments, and respond in a constructive way. This discussion process increases the sense of responsibility and involvement, creating an interactive and collaborative classroom atmosphere. Thus, Point Counter-Point not only strengthens understanding of the material, but also prepares students to become more independent, critical, and open learners to new ideas.

Research conducted by (Aliza, 2013) shows that the Point Counter-Point strategy is effective in improving student learning outcomes in natural and artificial appearance material in Indonesia. Wulan, (2020) also expressed the same thing, who found that this strategy had a significant impact on the integrated social studies learning outcomes of class VII students. Apart from that, research conducted by (Aini, 2021) explained that the application of this method was able to improve students' speaking skills in social studies subjects at the madrasah ibtidaiyah level. Other research by (Sari, 2021) emphasizes that learning strategies that involve active interaction between students and material can improve learning achievement based

on student learning styles. This is confirmed by (Hidayah, 2018), who shows that the application of cooperative learning methods such as Point Counter-Point significantly improves students' cognitive learning outcomes.

Furthermore, (Astuti, 2021) found that the use of the Point Counter-Point model with technological support such as Google Meet increased student participation and learning outcomes at the high school level. Research conducted by (Sarumaha, 2021) shows that implementing the Point Counter-Point strategy can improve student learning outcomes in Pancasila and Citizenship Education subjects. The results of this study show a significant increase in student learning outcomes after implementing these strategies. In addition, research by (Sumiati, 2021) found that the implementation of the Point Counter-Point model could increase students' motivation and learning outcomes in Indonesian at SMP Negeri 4 Mataram. These findings support the importance of integrating interactive learning methods in improving the quality of learning.

Implementation of this strategy is generally carried out in several main stages. The teacher first prepares an issue or topic that has two opposing points of view, then students are divided into groups to analyze, develop, and defend arguments based on the given perspectives. After the group discussion process, students present the results of their analysis to the class, which is then evaluated together to encourage reflective thinking. This process not only improves students' understanding of the material, but also trains their communication skills.

With empirical evidence from various studies, the Point Counter-Point strategy has been proven to be able to have a positive impact on the learning process. These strategies not only help students understand course material in depth, but also prepare them to face real-world challenges that require strong critical thinking, communication, and collaboration skills.

Overall, this research shows that the Point Counter-Point learning strategy makes a significant contribution to increasing student learning achievement. This is reflected in increased student involvement in discussions, development of critical thinking skills, as well as improvements in the way students organize and convey their ideas. This research provides in-depth insight into how this strategy functions in the learning context in class VII, as well as how it can improve students' understanding and learning achievement in social studies subjects.

D. Conclusions

The Point Counter-Point learning strategy has proven effective in encouraging students' active participation by engaging them deeply in discussions, critical analysis, and the development of logical arguments. This approach successfully transforms students from passive recipients of information into active participants

who are able to better analyze, understand, and communicate their ideas. In this process, students are not only invited to understand social studies subject matter, but are also trained to think critically by considering various points of view, disseminating facts, and compiling strong and structured arguments. This implementation strategy has a significant positive impact on students' critical thinking abilities, which is not only relevant for social studies learning but also in the context of everyday life. The ability to understand and disseminate information, as well as convey ideas effectively, are important skills developed through this strategy. Additionally, the Point Counter-Point strategy helps improve students' interpersonal, communication, and problem-solving skills, all of which are essential competencies in 21st century education. The results of this research show that the Point Counter-Point strategy not only improves students' understanding of the subject matter, but also improves their overall learning achievement. By encouraging active involvement and the development of higher-order thinking skills, this method deserves to be widely applied in social studies learning and other subjects. This strategy is an innovative alternative that is not only relevant to the modern curriculum, but is also effective in forming students who are critical, creative and highly competitive.

E. Acknowledgement

We thank to all respondents and stakeholders who have helped us in this project.

References

- Aini, E. N. (2021). *Implementation of Point Counter Point Learning Method to Improve Students' Speaking Skills in Social Studies Subjects in Grade 5 MI*. Universitas Islam Negeri Sunan Gunung Djati Bandung.
- Aliza, N. (2013). *Implementation of Point Counter Point Strategy to Improve Social Science Learning Outcomes on Natural and Artificial Appearances in Indonesia for Grade IV Students of State Elementary School 012 Senama Nenek, Tapung Hulu District, Kampar Regency*. Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Astuti, D. (2021). *Implementation of the Point Counter Point Model with Google Meet Media to Improve Participation and Learning Outcomes of Class XII IPS 2 Students of SMA Negeri 6 Semarang*. Universitas Islam Sultan Agung.
- Damanik, M. H., Wahyuni, D., & Andini, M. (2023). Implementation of Scientific Approach to Indonesian Language Learning in MI / SD. *JlIP - Jurnal Ilmiah Ilmu Pendidikan*, 6(November), 8543–8551. <https://doi.org/10.54371/jlIP.v6i11.2510>
- Dany Miftah Ula, M. N. A. (2019). Implementation of Point-Counter-Point Learning Model for Students of IKIP Budi Utomo Malang. *Jurnal Edukasi*, 5(2), 35–42. <https://doi.org/10.51836/je.v5i2.5>
- Hidayah, N. (2018). *Improving Students' Cognitive Learning Outcomes in Social Studies Subjects through the Point Counter Point Type Cooperative Learning Method at MI Ibrahim Ulul Azmi*. Universitas Islam Negeri Sunan Gunung Djati Bandung.

- Idrus, A. Al, & Raksun, A. (2023). Point Counter Point (PCP) Learning Model on Student Activities and Learning Outcomes in Biology Subjects at SMAN 1 Parado. *Jurnal Ilmiah Profesi Pendidikan*, 8, 65–71. <https://doi.org/10.29303/jipp.v8i1.1092>
- Jannah, R., & Khoiroh, M. (2023). The Influence of the Point Counterpoint Method on Students' Critical Thinking Skills in the Subject of Aqidah and Akhlak. *Ebtida': Jurnal Pendidikan Dasar Islam*, 03(1). <https://doi.org/10.33379/ebtida.v3i1.2754>
- Moleong, L. J. (2014). *Qualitative Research Methods*. Remaja Rosdakarya.
- Moleong, L. J. (2017). *Qualitative research methods*. Remaja Rosdakarya.
- Muwally, W. & F. (2019). Improving Teacher Competence Through Training in the Use of Technology as a Learning Support Media at MAN 1 Pidie. *Jurnal Sosiologi USK*, 13(2), 167–183. <https://doi.org/10.24815/jsu.v13i2.16422>
- Nurleli. (2018). The Influence of Point Counter Point Strategy on Speaking Skills in Thematic Learning. *Terampil: Jurnal Pendidikan Dan Pembelajaran Dasar*, 5(2), 247–257. <https://ejournal.radenintan.ac.id/index.php/terampil/article/view/3119>
- Pritandhari, M. (2017). Implementation of Direct Instruction Learning Model to Improve Students' Creative Thinking Skills. *Jurnal Pendidikan Ekonomi UM Metro*, 5(1), 47–56. <http://dx.doi.org/10.24127/ja.v5i1.845>
- Ramadhani, M. M. (2023). Analysis of Science and Technology-Based Inclusive Education Strategy in Supporting the Achievement of Sustainable Development Goals (SDGs) 2030 in Indonesia. *Prosiding Seminalu*, 1(1), 433–441. <https://prosiding.unipar.ac.id/index.php/seminalu/article/view/86>
- Rehani, A., & Mustofa, T. A. (2023). Implementation of Project Based Learning in Improving Students' Critical Thinking Patterns at SMK Negeri 1 Surakarta. *Didaktika: Jurnal Kependidikan*, 12(4), 487–496. <https://doi.org/10.58230/27454312.273>
- Sari, B. K. (2021). *Teacher Learning Strategies in Improving Student Learning Achievement Based on Learning Styles at MIN 1 Kediri*. Universitas Islam Negeri Sayyid Ali Rahmatullah Tulungagung.
- Sarumaha, D. (2021). Implementation of Point-Counterpoint Learning Strategy in Pancasila and Citizenship Education Subjects. *Jurnal Education and Development*, 9(2), 643–644.
- Sugiyono. (2017). *Research and Development Methods*. Alfabeta.
- Sumiati, S. (2021). Implementation of the Point Counter Point Model to Improve Motivation and Learning Outcomes of Indonesian Language Students at SMP Negeri 4 Mataram. *Jurnal Teknologi Pendidikan: Jurnal Penelitian Dan Pengembangan Pembelajaran*, 6(2), 208. <https://doi.org/10.33394/jtp.v6i2.4216>
- Wulan, T. (2020). *The Influence of Point Counter Point Learning Method on Integrated Social Studies Learning Outcomes of Class VII Students of SMP Negeri 8 Batanghari*. Universitas Jambi.
- Zuliana, Nurul Zahriani Jf, M. H. D. (2022). Teacher Professionality Development Strategy In Basic Education Units. *Al-Fikru: Jurnal Ilmiah*, 2(16), 200–211.

Local Government Financial Performance: Good Governance, the Effectiveness Internal Control and Competence

Roy Budiharjo¹, Dudi Pratomo¹, Dini Wahjoe Hapsari¹

¹Universitas Telkom, Bandung, West Java, Indonesia

Corresponding author e-mail: roybudiharjo@telkomuniversity.ac.id

Article History: Received on 20 October 2024, Revised on 17 January 2025,
Published on 28 January 2025

Abstract: Good governance is an important foundation in creating transparency, accountability, and integrity in organizational management. This study aims to analyze how the principles of good governance, internal control and competence of the financial performance of the Bekasi City local government are moderated by internal control. This study uses a quantitative methodology with a sample of 41 respondents who are financial employees in the Bekasi City government with statistical testing using Smart PLS 3.0. The results of the study found that (1) good governance, internal control and competence have a positive effect on the financial performance of the local government. (2) Good governance contributes to creating transparency and accountability. (3) Internal control in good financial reporting can prevent deviations. In addition, this study also found that the competence of human resources in the financial sector plays an important role in effective budget management. This study provides recommendations that the importance of improving governance, internal control, and human resource competence as a strategic effort to improve the financial performance of the local government.

Keywords: Competence, Good Governance, Internal Control, Local Government Financial Performance

A. Introduction

The public finance literature emphasizes the financial performance of local governments in developing countries (Kapidani, 2018). Public sector reforms are carried out by governments in various countries to encourage privatization of the public sector through increased financial autonomy (Thoa & Nhi, 2022). Local autonomy allows local governments to improve public services, improve responsiveness and efficiency, and strengthen their role in the economy and intergovernmental systems (Prabowo & Rafli, 2020). Sustainability, financial responsibility, and quality of public services will improve with local authorities, especially in terms of finance (Hartley et al., 2016).

Table 1. Bekasi City Local Government Effectiveness Ratio

Year	Effectiveness
2019	74,60%
2020	67,91%
2021	99,94%
2022	92,52%
2023	87,74%

Source: (SIKD Pemkot Bekasi, 2024)

The budget is made by the local government after the implementation of regional autonomy according to their capabilities and potential (Christia & Ispriyarso, 2019). As the fiscal year draws to a close, budget absorption is one of the topics that is often discussed. The budget absorption rate in this area is low. Table 1 shows that, based on the effectiveness ratio, from 2019 to 2023, it was classified as ineffective because the percentage was less than 100%. As the resulting performance realization was less than expected, the effectiveness level also dropped. As a result, the goals and performance targets of the local government of Bekasi City have not been achieved. After receiving a Fair with Exception (WDP) opinion from the Audit Board (BPK) on the Audit Report (LHP) of the 2022 Bekasi Regency Regional Government Financial Statements (LKPD), the performance of Bekasi Regent Dani Ramdan is increasingly becoming a concern. Soleman, Deputy Chairman of the Bekasi Regency DPRD, was disappointed with the opinion of the WDP from the BPK RI, which according to his assumption showed the poor performance of the Regent of Bekasi (Sadat, 2023).

A strategy to improve performance is good governance, according to (Zhang, 2019). This study shows that good governance is crucial for the government to regain public trust. In addition, good performance is crucial for local governments to regain public trust, which has declined due to the many cases of mismanagement related to local governments. According to (Said et al., 2016; Sevigo & Lathifah, 2024; Babinski et al., 2018), organizations must understand clean and authoritarian governance mechanisms along with public sector governance systems if they want to improve the performance of local governments. The high demands of the public for state administrators, both in the government, legislature, and judiciary, to run good government reflect the prominent problem in the management of public administration (Hartanto et al., 2021; Setyaningrum et al., 2017).

According to (Indriana & Nasrun, 2019) found that financial performance is influenced by good governance. This is different from the findings of other studies (Setyaningrum et al., 2017; Wardhani et al., 2017), which found that the performance evaluation indicators of local governments are still not appropriate to measure the quality of government. The ability to manage risks and organizational governance systems depends on internal control. It creates, enhances, and protects stakeholder value and guarantees the achievement of organizational goals (IFAC, 2012). If an organization wants to succeed and achieve its goals, the main problem is internal

control. Internal controls can be clarified as actions taken by organizations to increase the likelihood of actualization of their goals. According to a study that investigated the relationship between performance and internal control systems (Waromi et al., 2024), some parts of the control system were not implemented properly. Internal control helps the utilization of resources and helps management achieve the company's goals, according to other researchers (Koeswayo et al., 2024); (Knechel & Vanstraelen, 2007); (Mattoasi et al., 2021) investigated the relationship between internal control elements and local government financial performance, which has a positive impact.

Competence refers to the expertise or knowledge demonstrated by professionalism in a particular domain. This ability is considered the most significant or superior in the domain (Augustine, 2009). Ability refers to an individual's capacity to excel at work, which includes the application of skills and knowledge in new contexts to optimize improving mutually recognized excellence. Another study shows that competence does not affect the performance of local government (Rosnidah et al., 2022). Based on this background, a formulation of the problem can be submitted, namely: (1) Does good governance affect the financial performance of local governments? (2) Does internal control affect the financial performance of local governments? (3) Does competence affect the financial performance of local governments?.

This study has several important benefits, both theoretical and practical: (1) This study helps the development of research on the relationship between good governance, internal control, and competence and local government financial performance. It is important to improve academic understanding of how good governance principles and functioning internal control systems can improve the financial performance of the public sector. (2) This research can help local governments, especially the City of Bekasi, improve their financial performance by applying the principles of good governance, better internal control, and improving the capabilities of employees. Other local governments can also use these findings as a reference to improve their financial management performance. (3) This study can also be useful as a basis for formulating policies related to improving the financial performance of local governments. By understanding the influencing factors, policymakers can design effective strategies to maximize governance and efficient use of local budgets.

B. Methods

This study uses a quantitative methodology rooted in positivist philosophy. This method is used to test a certain population or sample, supported by the use of research instruments for data collection, which is then processed quantitatively and statistically to evaluate the hypothesis that has been determined. According to positivism theory, reality, symptoms, and phenomena can be categorized as causal, relatively permanent, concrete, observable, and measurable (Sugiyono, 2017). The questionnaire survey was distributed to financial employees of the Bekasi city local

government. The data collection method is through an online questionnaire sent via email. The questionnaire uses a measurement interval scale to collect data. The instrument of each variable is measured using five (5) Likert scale points as below: 1 - Strongly disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly agree.

The population and sample in this study are several employees (heads and staff) of the finance department in the local government of Bekasi city. The number of samples used was 41 local government employees. As explained (Sugiyono, 2017), the appropriate sample size in this study, which is 30 to 500, then the number of samples can still be used.

Variables in this study include: (1) Good Government Governance is the safeguarding of reciprocal relationships between organizational elements formed by the government, which is aimed at achieving policy objectives efficiently and effectively, as well as communicating openly and providing accountability to stakeholders (Pelu et al., 2023). The Questionnaire on the Application of Good Government Governance Principles includes 20 questions adopted from the research (Wardhani et al., 2017). The application of Good Government Governance principles is developed from indicator items: transparency, independence, accountability, accountability, and fairness, measured on a likert scale of 1-5 (strongly disagree - strongly agree). (2) Internal Control: Government Regulation of the Republic of Indonesia No. 60 of 2008 concerning the Government Internal Control System (SPIP) conveys that SPIP is a comprehensive process of actions and activities that are carried out continuously by the leadership and all central and regional government apparatus. The goal is to provide adequate certainty regarding the achievement of organizational goals through effective and efficient operations, reliability of financial reporting, security of state assets, and compliance with laws and regulations. The Internal Control Questionnaire obtained from the study (Reding et al., 2013) included 25 questions, which the researcher measured using a likert scale of 1 to 5 (strongly disagree - strongly agree). (3) Human resource competence refers to the ability of employees to carry out their responsibilities, thus requiring growth to obtain satisfactory performance. The human resource competency indicator as presented (Rosnidah et al., 2022), has four items that are assessed on a Likert scale of 1-5 (strongly disagree to strongly agree). (4) The financial performance of local governments is determined by the extent to which government apparatus achieves organizational goals and objectives so as to indicate the success or failure of the implementation of activities. The performance proxy concerned is managerial performance, which is assessed through the instruments used in the study (Carmeli, 2002) including nine indicator items: planning, coordination, evaluation, supervision, staffing, negotiation, representation, and investigation, which is assessed using a likert scale of 1-5 (strongly disagree - strongly agree).

This study uses the structural-partial least square equation (SEM-PLS) model by utilizing SmartPLS for data analysis. Structural equation modeling (SEM) is divided

into two types: covariance-based SEM (CB-SEM) and variance-based SEM, which is often referred to as the partial least squared (SEM-PLS). CB-SEM originated as software as a result of Lisrel's development in the 1970s, although SEM-PLS was later developed and designed by Herman Will, Karl Joreskog's academic mentor (Sugiyono, 2017).

SEM-PLS operates effectively when using limited sample sizes and complex models. The assumption of data distribution in SEM-PLS tends to be looser than CB-SEM. CB-SEM estimation requires adherence to certain assumptions, including multivariate data normality, minimum sample size, and homoscedasticity. The estimation findings of the two methods are similar, which shows that SEM-PLS can function as an effective proxy for CB-SEM. SEM-PLS is able to obtain estimates despite the limited number of samples and the assumption of distorted multivariate normality (Sugiyono, 2017).

SEM-PLS can thus be considered a nonparametric methodology for CB-SEM. Furthermore, when it is not able to meet the CB-SEM assumptions, SEM-PLS can serve as a suitable approach for theoretical testing. If the data meets the CB-SEM assumptions, including the minimum sample size and is normally distributed, CB-SEM is chosen. If it is inadequate, you can choose SEM-PLS. SEM-PLS is a nonparametric methodology that works effectively even with abnormal data (Sugiyono, 2017).

Convergent validity is a component of the measurement model or external model in SEM-PLS and as a confirmatory factor analysis (CFA) in a covariance-based SEM. There are two conditions in evaluating whether the outer model (measurement model) meets the convergent validity requirements for reflective construction: (1) the loading must exceed 0.7, and (2) the p-value must be significant (<0.05). However, under certain conditions, the requirements for loading more than 0.7 are often not met, especially for newly conducted surveys. As a result, a loading that ranges from 0.40 to 0.70 is considered acceptable.

Loading indicators less than 0.40 need to be removed from the model. However, for indicators with loading ranging from 0.40 to 0.70, it is important to evaluate the effect of the decision to remove these indicators on the average extracted variance (AVE) and composite reliability. Indicators with a load between 0.40 and 0.70 can be eliminated if their removal maximizes the average extracted variance (AVE) and composite reliability exceeds the respective thresholds. The threshold for AVE is 0.50, while the reliability of the composite is 0.70. Another factor to consider in eliminating indicators is their effect on the validity of the construct content. Indicators with minimal loading are sometimes maintained due to their contribution to building content authenticity (Hair et al., 2020).

Influence Significance Test (Bootstrapping) (Hypothesis Test) (Inner Model) (Hair et al., 2020) showed that the evaluation of the structural model (inner model) can be done

by testing the r-square value that connects the latent variable construct. This test intends to find out the extent to which the independent variable model is able to explain the bound variable. The r-square value assesses the degree of variation of the bound variable resulting from the change of the independent variable. A higher R^2 indicates a superior prediction model within the recommended research framework. The limiting parameters of the R^2 value are categorized into three classifications, namely 0.67 (substantial), 0.33 (moderate), and 0.19 (weak). This study utilizes an adjusted R-Square value (R^2) due to the existence of several independent variables (Hair et al., 2020). The last stage is to test the hypothesis with the SmartPLS application by analyzing the bootstrapping findings. Testing is carried out by accessing the compute menu, followed by selecting the bootstrapping option, which will then display the desired data.

Hypothesis Development

H1: Good Governance Affects the Financial Performance of Local Governments

In order to meet the objectives of establishing a public sector organization, effective management seeks to apply the principles of private sector management into public sector operations. Key characteristics of public sector management include transparency and diligence in the execution of duties, as well as a strong dedication to integrity, ethical standards, and legal compliance. The main goal of good governance is to ensure that public sector organizations consistently operate for the benefit of society (Indriana & Nasrun, 2019). Studies (Maimanah & Nurdiono, 2024) show that effective governance runs efficiently. This makes it clear that the concept of effective governance, including participation, transparency, and accountability, has been successfully implemented. Improving good governance is positively correlated with maximizing local government financial performance.

H2: Internal Control Affects the Financial Performance of Local Governments

An active action called internal control allows for remediation if something goes wrong with plan occurs. It is used to increase productivity and efficiency, prevent assets from being lost, improve the accuracy and reliability of financial statements, and ensure everyone complies with laws and regulations (Triono & Dewi, 2020). Through the findings of (Mattoasi et al., 2021), it was found that the government's internal control system is very helpful for the financial performance of local governments.

H3: Competence Affects Local Government Financial Performance

According to (Sukarno et al., 2020) apparatus competence is the ability to complete tasks that are based on knowledge and skills and supported by the work behavior and attitude required by the task. There are three indicators of competence: knowledge,

skills, and behavior (Sukarno et al., 2020). Apparatus competence and local government financial performance are positively correlated, according to behavioral indicators. Only one of the four variable indicators of apparatus competence at the beginning of the test, behavioral indicators, reached the value of external load; Other indicators, knowledge, abilities and skills, achieve values under external loads. Behavior is a term that refers to the way government officials carry out their duties and responsibilities.

C. Results and Discussion

The results of the research were obtained through primary data processing, namely the distribution of questionnaires in Bekasi City. The questionnaire that the researcher processed in this study amounted to 41 questionnaires. The research variables used amounted to four variables: good governance variables, internal control, competence, and government financial performance variables. The number of indicators in this study is 58 indicators.

Description of The Research Respondents

Respondents Based on Gender: In the Bekasi City Regional Apparatus Organization, male respondents amounted to 21 people (51.22%), while female respondents amounted to 20 people (48.78%). Respondents Based on Education Level: The diversity of education of respondents to the Bekasi City Regional Apparatus Organization included seventeen people with accounting majors of 41.46%, 22 people with management majors representing 51.66%, and 22 people with law majors. Two respondents, namely 4.88%. Respondents Based on Position: The Bekasi City Regional Apparatus Organization amounted to 6 respondents with the position of head of accounting amounting to 14.63%; 14 respondents held senior accounting positions, representing 34.15%; and 21 respondents in junior accounting positions, accounting for 51.22%.

Evaluation of the Outer Model (Measurement Model): Validity and Reliability Test

The outside loading validity test in Figure 1 shows that if the total outer loading value exceeds 0.7, it shows that it meets the validity criteria based on the outer loading value. Next, a validity test was carried out based on the average variance extract (AVE) value. Recommends an AVE value exceeding 0.5. All AVE values exceeded 0.5, indicating that they met the validity criteria based on the AVE. Furthermore, a reliability test was conducted based on the composite reliability (CR) value. Table 2 illustrates the reliability test based on composite reliability (CR), where the recommended CR value is more than 0.7. All CR values are known to exceed 0.7, which indicates compliance with reliability standards based on cronbach's alpha (CR). Next, a reliability test is carried out using the CA value.

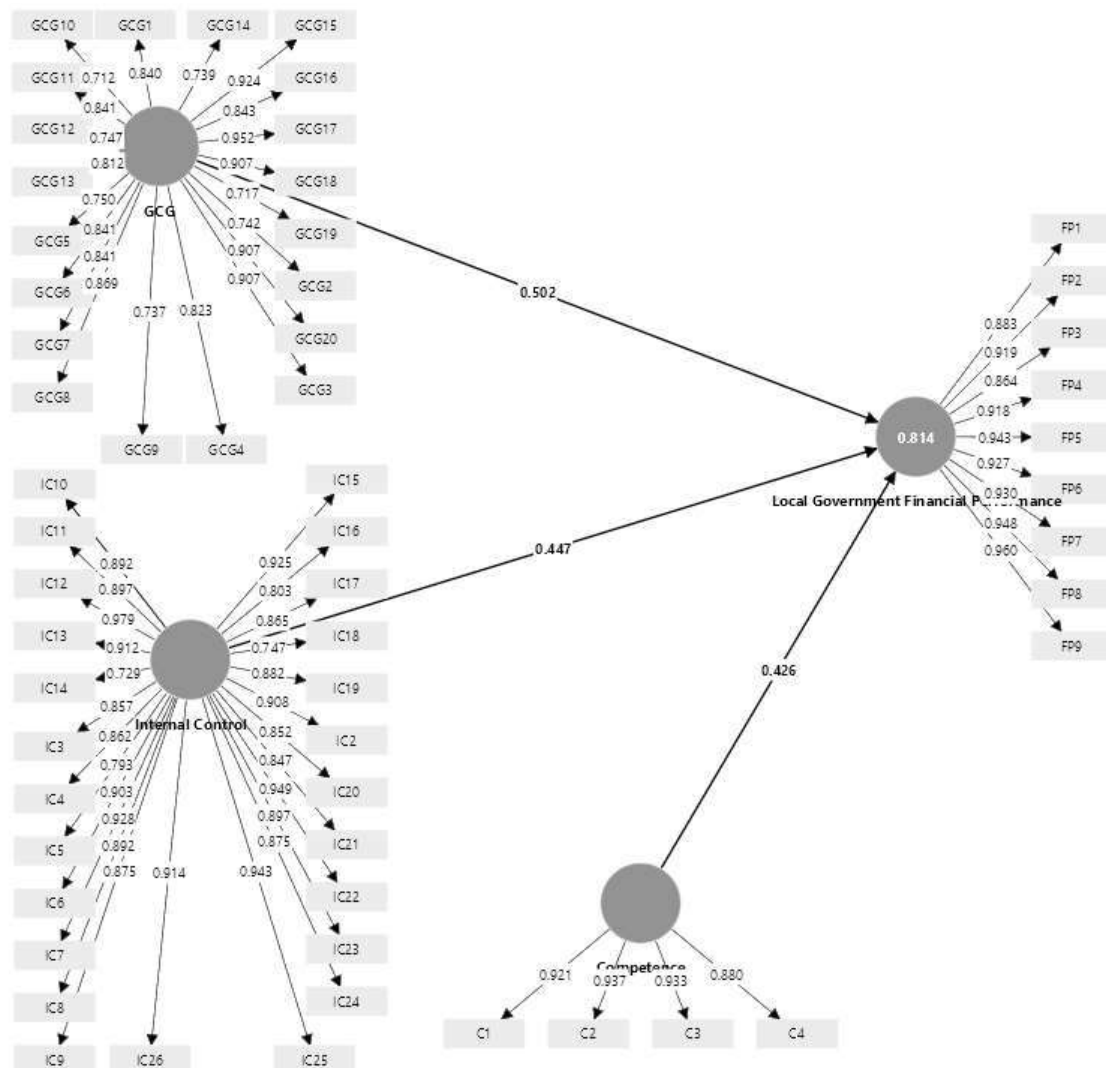


Figure 1. Validity Test

Table 2. Reliability test as per Cronbach's Alpha (CA)

	Cronbach's alpha
Competence	0,939
GCG	0,975
Internal Control	0,988
Local Government Financial Performance	0,978

Influence Significance Test (Bootstrapping) (Hypothesis Test) (Inner Model)

Table 3. Path Coefficient Test & Significance of Influence

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Good Governance	0,349	0,335	0,138	2526,000	0.012
Internal Control	0,310	0,272	0,138	2241,000	0.025
Competence	0,296	0,272	0,137	2170,000	0.030

Based on the above results, the findings were obtained: (1) Good governance positively affects local government financial performance, with coefficient values (original sample column) = 0.502, and significant, with T-Statistics = 2.526 > 1.96 and p-values = 0.012 < 0.05 (accepting hypothesis). (2) Internal control positively affected local government financial performance, with coefficient values (original sample column) = 0.447, and significant, with t-statistics = 2,241 > 1.96 and P-values = 0.025 < 0.05 (accepting hypothesis). (3) Competence positively affected local government financial performance, with coefficient values (original sample column) = 0.426, and significant, with t-statistics = 2,170 > 1.96 and p-values = 0.030 < 0.05 (accepting hypothesis).

Good Governance Affects the Financial Performance of Local Governments

The regression analysis carried out in this study shows that effective governance significantly improves the financial performance of local governments. The principles of good governance have a significant impact on the performance of government employees. As a result, the response to effective governance has increased rapidly, and government employees have shown great concern about this. The implementation of good governance aims to improve the financial performance of local governments. According to the findings of a study (Indriana & Nasrun, 2019), the independent variable of good governance separately has a considerable positive influence on the financial performance of local governments.

Internal Control Affects the Financial Performance of Local Governments

The regression analysis carried out in this study shows that internal control substantially maximizes the financial performance of local governments. Internal control is a proactive action that can carry out corrective actions in reaction to non-conformities. These internal controls are established to reduce deviations from the plan, increase efficiency and effectiveness, prevent asset loss, improve the reliability and accuracy of financial reporting, and encourage compliance with laws and regulations to achieve the goals that have been set. This is expected to affect the financial performance of the Bekasi City Regional Government. According to a study (Mattoasi et al., 2021), the government's internal control mechanism significantly improves local government performance.

Internal control functions as a proactive monitoring mechanism to ensure that every organizational activity runs according to plan. With quick corrective action on non-conformities, internal control can prevent deviations that can harm the organization, such as errors in financial reporting, budget waste, or even fraud. Thus, internal control is an important element in improving the quality of local government financial management. Good internal control supports efficiency and effectiveness in the use of financial resources. For example, through budget monitoring and supervision of program implementation, local governments can ensure that the budget is used

optimally according to predetermined priorities. In the Bekasi City Local Government, the implementation of internal control can reduce inefficiency and increase productivity in financial management.

One of the main objectives of internal control is to improve confidentiality and financial reporting. Local governments with a strong internal control system are able to present transparent and reliable financial reports. In addition, internal control ensures compliance with laws and regulations, which is important to maintain legitimacy and public trust. The Bekasi City Local Government needs to strengthen its internal control system by ensuring that each component of the system (environmental control, risk assessment, control activities, information and communication, and monitoring) is implemented thoroughly. This includes training employees to understand the importance of internal control, developing technology to support financial oversight, and enforcing an independent audit system. Internal control serves to prevent asset losses and budget irregularities, which are often challenges in government financial management. With internal control, these risks can be minimized through strict monitoring procedures, periodic evaluations, and follow-up on audit findings. The implementation of good internal control not only impacts financial performance but also increases public accountability. The public tends to have greater trust in a government that is able to demonstrate transparent and responsible financial management.

Competence Affects the Financial Performance of Local Governments

The regression analysis carried out in this study makes it clear that competence significantly improves the financial performance of local governments. Competence is related to the ability or talent of employees to carry out their work obligations or responsibilities. Optimal competence is shown by abilities and knowledge based on work attitudes and their application in carrying out duties and responsibilities in the workplace, in accordance with predetermined work standards. In the Bekasi Regional Government, the workforce has qualifications that are relevant to their job descriptions so as to maximize their competence and skills. They are assigned according to their expertise, by guaranteeing the principle of “the right man in the right place” that facilitates optimal performance in achieving organizational goals. This group is responsible for improving the financial performance of the Bekasi City Regional Government. According to the findings of a study (Rosnidah et al., 2022), the competence of government employees significantly improves local government performance.

The results of this study emphasize that employee competence has a significant influence on the financial performance of local governments. Competence, which includes employee abilities, knowledge, and work attitudes, is an important element in supporting the achievement of organizational goals, especially in the context of the Bandung City Regional Government. (1) Employee competence is not only related to

technical abilities, but also includes knowledge and work attitudes that are applied in accordance with established standards. This shows that improving the financial performance of local governments is greatly influenced by the ability of employees to carry out their duties effectively and efficiently. Optimal competence allows employees to make the right decisions, increase budget efficiency, and maximize the use of resources. (2) Placing employees according to their expertise and qualifications is an effective strategy to improve organizational performance. In the context of the Bandung City Regional Government, the application of this principle ensures that employees work in positions that match their competence, which in turn makes it easier for them to make maximum contributions to regional financial performance. This also shows the importance of strategic human resource management in public organizations. (3) Good employee competence also contributes to increased accountability and transparency in financial management. Competent employees tend to have a better understanding of financial rules and regulations, thus being able to avoid errors or irregularities in financial reporting. This is important to build public trust in local government.

D. Conclusion

According to the results of the analysis and discussion, it can be concluded that good governance, internal control and competence positively affect the financial performance of the local government of Bekasi city. Good governance, which includes the principles of transparency, accountability, and participation, plays an important role in strengthening financial performance. A good internal control system allows local governments to maintain financial administration, ensure that every transaction is recorded accurately, and prevent possible errors. The competence of human resources who have relevant knowledge, skills, and expertise is a very important element in maintaining and improving the financial performance of local governments. Subsequent researchers are encouraged to use larger samples with greater diversity of characteristics from different local governments and to extend the duration of the study. In this study, 3 variables are used, other independent variables must be added in the next research that also affects financial performance.

E. Acknowledgement

We would like to express our gratitude to the Universitas Telkom for providing support in this project.

References

- Augustine, U. (2009). *Human Capital Development and Economic Growth: Evidence from Nigeria* (SSRN Scholarly Paper 1997434). Social Science Research Network. <https://papers.ssrn.com/abstract=1997434>
- Babinski, L. M., Amendum, S. J., Knotek, S. E., Sánchez, M., & Malone, P. (2018).

- Improving Young English Learners' Language and Literacy Skills Through Teacher Professional Development: A Randomized Controlled Trial. *American Educational Research Journal*, 55(1), 117-143. <https://doi.org/10.3102/0002831217732335>
- Carmeli, A. (2002). A Conceptual and Practical Framework of Measuring Performance of Local Authorities in Financial Terms: Analysing the Case of Israel. *Local Government Studies*, 28(1), 21-36. <https://doi.org/10.1080/714004135>
- Christia, A. M., & Ispriyarso, B. (2019). Fiscal Decentralization and Regional Autonomy in Indonesia. *LAW REFORM*, 15(1), 149-163. <https://doi.org/10.14710/lr.v15i1.23360>
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hartanto, D., Dalle, J., Akrim, A., & Anisah, H. U. (2021). Perceived effectiveness of e-governance as an underlying mechanism between good governance and public trust: A case of Indonesia. *Digital Policy, Regulation and Governance*, 23(6), 598-616. <https://doi.org/10.1108/DPRG-03-2021-0046>
- Hartley, M., Gopaul, B., Sagintayeva, A., & Apergenova, R. (2016). Learning Autonomy: Higher Education Reform in Kazakhstan. *Higher Education: The International Journal of Higher Education Research*, 72(3), 277-289. <https://doi.org/10.1007/s10734-015-9953-z>
- IFAC. (2012, June 28). *Evaluating and Improving Internal Control in Organizations*. <https://www.ifac.org/knowledge-gateway/professional-accountants-business-paib/publications/evaluating-and-improving-internal-control-organizations>
- Indriana, I., & Nasrun, M. (2019). The Influence of Good Governance on the Financial Performance of the Regional Government of Pangkajene and Kepulauan Regency. *Equilibrium : Jurnal Ilmiah Ekonomi, Manajemen Dan Akuntansi*, 8(1). <https://doi.org/10.35906/je001.v8i1.330>
- Kapidani, M. (2018). A Comparative Analysis of Local Government Financial Autonomy in Albania. *Journal of Business Economics and Finance*, 7(1), Article 1. <https://doi.org/10.17261/Pressacademia.2018.790>
- Knechel, W. R., & Vanstraelen, A. (2007). The Relationship between Auditor Tenure and Audit Quality Implied by Going Concern Opinions. *AUDITING: A Journal of Practice & Theory*, 26(1), 113-131. <https://doi.org/10.2308/aud.2007.26.1.113>
- Koeswayo, P. S., Haryanto, H., & Handoyo, S. (2024). The impact of corporate governance, internal control and corporate reputation on employee engagement: A moderating role of leadership style. *Cogent Business & Management*, 11(1), 2296698. <https://doi.org/10.1080/23311975.2023.2296698>
- Maimanah, A., & Nurdiono, N. (2024). The Influence of the Implementation of Good Government Governance Principles on the Performance of Financial Employees: (Study on the Regional Government of Bandar Lampung City). *Inisiatif: Jurnal Ekonomi, Akuntansi Dan Manajemen*, 3(2), 178-202. <https://doi.org/10.30640/inisiatif.v3i2.2283>

- Mattoasi, M., Musue, D. P., & Rauf, Y. (2021). The Influence of the Government's Internal Control System on Regional Government Performance. *Jambura Accounting Review*, 2(2), 100-109. <https://doi.org/10.37905/jar.v2i2.34>
- Pelu, A., Madubun, J., & Wance, M. (2023). The Role of Village Government in Realizing Good Governance in the Hila Village Government, Central Maluku Regency. *Journal of Government Science Studies*, 2(2), Article 2. <https://doi.org/10.30598/jgssvol2issue2page124-139>
- Prabowo, L., & Rafli, M. T. (2020). The Impact of Regional Autonomy on the Welfare of the Indonesian People. *Jurnal Rechten : Riset Hukum Dan Hak Asasi Manusia*, 2(2), Article 2. <https://doi.org/10.52005/rechten.v2i2.56>
- Reding, K., Sobel, P., Anderson, U., Head, M., Ramamoorti, S., Salamasick, M., & Riddle, C. (2013). Internal Auditing: Assurance & Advisory Services, Third Edition. *Books and Book Chapters by University of Dayton Faculty*. <https://ecommons.udayton.edu/books/33>
- Rosnidah, I., Hidayat, M. T., & Nahdiyyah, I. R. (2022). The Influence of Competence and Motivation on Regional Financial Management Performance. *Jurnal Ecodemica : Jurnal Ekonomi Manajemen dan Bisnis*, 6(1), Article 1. <https://doi.org/10.31294/eco.v6i1.11673>
- Sadat, A. (2023). Bekasi Regency Receives WDP Opinion From BPK, Dani Ramdan's Performance in the Spotlight. *Vivo*. <https://www.viva.co.id/berita/nasional/1601738-kabupaten-bekasi-raih-opini-wdp-dari-bpk-kinerja-dani-ramdan-jadi-sorotan>
- Said, J., Alam, M. M., & Khalid, M. A. (2016). Relationship between good governance and integrity system: Empirical study on the public sector of Malaysia. *Humanomics*, 32(2), 151-171. <https://doi.org/10.1108/H-02-2016-0008>
- Setyaningrum, D., Wardhani, R., & Syakhroza, A. (2017). Good public governance, corruption and public service quality: Indonesia evidence. *International Journal of Applied Business and Economic Research*, 15(19), 327-338.
- Sevigo, A. E., & Lathifah, N. (2024). The Influence of Regional Financial Performance on Economic Growth in 2013-2022. *Journal of Trends Economics and Accounting Research*, 4(3), Article 3. <https://doi.org/10.47065/jtear.v4i3.1192>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta. <https://pustaka.unm.ac.id/opac/detail-opac?id=35458>
- Sukarno, S. A., Tinangon, J. J., & Tangkuman, S. J. (2020). The influence of apparatus competence and organizational commitment on the implementation of the Government Agency Performance Accountability System. *Indonesia Accounting Journal*, 2(2), 110-117. <https://doi.org/10.32400/iaj.27981>
- Thoa, D. T. K., & Nhi, V. V. (2022). Improving the quality of the financial accounting information through strengthening of the financial autonomy at public organizations. *Journal of Asian Business and Economic Studies*, 29(1), 66-82. <https://doi.org/10.1108/JABES-06-2020-0059>
- Triono, B. S., & Dewi, S. N. (2020). The Influence of Internal Control Systems on the Quality of Regional Government Financial Reports. *Jurnal Akuntansi Dan Pajak*, 21(01), Article 01. <https://doi.org/10.29040/jap.v21i1.1008>

- Wardhani, R., Rossieta, H., & Martani, D. (2017). Good governance and the impact of government spending on performance of local government in Indonesia. *International Journal of Public Sector Performance Management*, 3(1), 77–102. <https://doi.org/10.1504/IJPSPM.2017.082503>
- Waromi, J., Kambuaya, M. K. P., & Wonar, K. (2024). Evaluation of the Effectiveness of Internal Control Systems in Reducing Accounting Fraud in Financial Sector Companies. *The Eastasouth Management and Business*, 2(03), Article 03. <https://doi.org/10.58812/esmb.v2i03.250>
- Zhang, X. (2019). *Good Governance, Good Enough Governance and Governance with Rights First* [UCLA]. <https://escholarship.org/uc/item/0z7487nm>

The Importance of Hadith Learning in the Formation of Islamic Law

Muhammad Fajri Yusuf¹, Bona Bargout Riezky Nagabe Siregar¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: fajrifkc@gmail.com

Article History: Received on 22 November 2024, Revised on 26 December 2024,
Published on 28 January 2025

Abstract: This study aims to examine the importance of learning hadith in the formation of Islamic law through a qualitative approach. This study uses a qualitative method, with a literature review approach to explore the view of how the learning of hadith contributes to the formation of Islamic law in accordance with the times. The findings of the study show that hadith learning based on understanding *sanad*, *matan*, and historical context can produce more relevant and applicable legal interpretations. In addition, a wrong or in-depth understanding of hadith can lead to abuse and errors in the determination of the law. Deep learning of hadith is not only to know the history or story of the life of the Prophet Muhammad, but also to understand the ways in which the Prophet applied the law in various aspects of daily life.

Keywords: Hadith Interpretation, Hadith Lessons, Islamic Law

A. Introduction

Contemporary challenges related to polygamy often arise in the context of injustice that may occur to women. Several Islamic countries or societies face debates regarding the practice of polygamy in accordance with Islamic law and the principle of justice. The Prophet Muhammad PBUH said, "If you are afraid of not being able to do justice to the orphans (women) you marry, then marry the others, two, three, or four, but if you are afraid of not being able to act fairly, then marry only one." (QS. An-Nisa: 3) This hadith shows that polygamy is only permissible if the husband is able to be fair to his wives, especially in terms of providing alimony and equal treatment. The study of hadith about polygamy provides clear guidelines on justice and equality that must be applied in the household. It can be used to remedy practices of polygamy that may not be mindful of women's rights, as well as to develop regulations that ensure fairness in their implementation.

Islamic law is a legal system that is sourced from the Qur'an and Hadith as the two main sources that complement each other (Nurlaila Sapitri, 2023). The Qur'an, as the final revelation, is the basis of Islamic teachings, but most of the principles of Islamic law are explained in more detail in the hadith of the words, deeds, and decrees of the Prophet Muhammad (Al-Dosary, 2023). Therefore, a correct and deep

understanding of hadith is very important in the formation of Islamic law that is applicable and relevant to the development of the times. In the context of the development of Islamic jurisprudence, the study of hadith is not only limited to the introduction of hadith texts, but also requires a deep understanding of the methodology of hadith criticism, such as the analysis of the *sanad* of the narration chain and the content of the text, as well as the historical context behind the emergence of the hadith (Abdullah, 2022). The right method of learning hadith will result in a better understanding of the application of Islamic law to various aspects of Muslim life, both in matters of worship, *muamalah*, as well as social and political issues (Hendri Yahya Sahputra, 2024). However, as time goes by, the challenges in understanding and applying hadith in daily life are increasingly complex (Nur Oktaviani, 2024). Differences of opinion in interpreting the hadith, as well as the emergence of various interpretations that sometimes contradict the basic principles of Islamic teachings, are challenges in themselves (Iskandar, 2022). Therefore, systematic and structured learning of hadith is very urgent so that Islamic law can remain relevant to the dynamics of the times and answer various problems that arise in society.

As time goes by, the importance of learning hadith is increasingly felt, especially in the context of social changes and the development of the times. Improper learning of hadith can lead to errors in the application of Islamic law, which can ultimately result in the abuse of religious teachings (Umi Kalsum Z. T., 2024). The study of hadith in the context of the formation of Islamic law plays a very vital role. Hadith provides a more in-depth explanation of the verses of the Qur'an, as well as provides guidance in many aspects of Muslim life (Hassan, 2023). However, hadith is not always easy to understand without a deep understanding of the methods of studying it (Khoirul Amin, 2024). This is where adequate education and learning of hadith is important, which not only relies on memorizing hadith texts, but also understanding the context, purpose, and truth and validity of the hadith itself (Rizki Inayah Putri, 2023).

In the study of Islamic law, especially those related to the study of hadith, there have been many studies that discuss the role of hadith in the formation of Islamic law (Sa'imah Sa'imah, 2023). However, although there are various in-depth studies such as research by (Ahmad, 2021) Regarding hadith theory and criticism of *sanad* and *matan*, there is still a gap in the approach that links the study of hadith directly to contemporary legal challenges. Many studies focus on history or classical techniques in studying hadith, but few examine how the methodology of hadith learning can be adapted to the dynamics of legal development and modern society (Putri Syahri, 2024). In addition, most of the research is still focused solely on academic or intellectual aspects, without looking at how the learning of hadith can be applied in daily legal practice and how this relates to the formation of legal decisions relevant to evolving social and moral issues (Faisal, 2020). This shows the need to develop a

hadith learning framework that is more practical, applicable, and responsive to the needs of the times.

The success of this study lies in the effort to integrate the learning of hadith with the needs of Islamic law in the contemporary era, by introducing a more systematic and comprehensive learning method that not only relies on texts, but also on social, historical, and applied contexts. This research aims to explore the importance of a holistic and contextual understanding of hadith in the formation of Islamic law that is relevant to today's social, economic, and political challenges. The study also seeks to highlight how a proper understanding of hadith can help shape Islamic legal decisions that are fair, relevant, and responsive to the needs of Muslims today. With a comprehensive approach, it is hoped that the learning of hadith can make a significant contribution in strengthening the foundation of Islamic law that is appropriate in the lives of Muslims in the modern era. The question that we will pour out is what is the role of hadith in the formation of Islamic law. How to learn hadith in Islamic educational institutions. What are the challenges in learning hadith for the formation of Islamic law? Therefore, this study aims to delve deeper into the importance of learning hadith in the formation of Islamic law, with an emphasis on the methods used in studying hadith and its relevance in answering contemporary legal challenges.

B. Methods

This study is qualitative with a library research approach (Sugiyono, 2022). In this study, we will explore relevant literature, both in the form of books, scientific journals, articles, research reports, and other sources related to hadith and the formation of Islamic law. This research is descriptive analytical, which means that we will describe the role of hadith in Islamic law and analyze its contribution to the formation of legal rules. The library sources used in this study can be categorized into several types (Sugiyono, 2022). Hadith books such as Sahih al-Bukhari, Sahih Muslim, Sunan Abu Dawood, and other hadith books that contain *sahih* and *hasan* hadiths that are used as the basis of law in Islam. Books of Fiqh (Islamic law), such as Al-Muwatta' by Imam Malik, Al-Umm by Imam Shafi'i, and other works that discuss the application of hadith in the formation of law. Scientific journals and related articles that discuss the relationship between hadith and the formation of Islamic law. Tafsirs that relate the verses of the Qur'an to hadith in the context of Islamic law. The steps in the literature study carried out by us are that we must first formulate a research topic, namely "The Importance of Hadith Learning in the Formation of Islamic Law". Furthermore, we set the goal to identify the role of hadith in the process of forming Islamic law and explore the understanding of how hadith is used as a basis for legal decisions in Muslim society. Gathering of library sources, this step involves searching for various library sources that are relevant to the research topic (Creswell, 2020). We must choose reliable and authoritative

sources in the world of hadith and Islamic law, including classical and contemporary works.

After collecting the source of the literature, we will analyze the content of each literature. We will analyze various hadiths related to Islamic law, both in the context of worship, *muamalah*, or criminal (Creswell, 2020). This research will also examine the types of hadith (*sahih*, *hasan*, *daif*) and how their status affects acceptance in Islamic law. We will also examine how hadith is translated and applied by jurists (jurists) in developing Islamic law. Establish the relationship between hadith and Islamic legal principles such as *mashlahah* (benefit), *ijma'*, and *qiyas* which are often used in legal interpretation. After analyzing each source, we will synthesize the information found to understand the central role of hadith in the formation of Islamic law (Creswell, 2020). We will relate the hadith to the broader principles of Islamic law and legal theories. Based on the results of analysis and synthesis, we will conclude the importance of learning hadith in the formation of Islamic law. This includes how hadith guides Muslims in understanding the law comprehensively and becomes the basis for making legal decisions in various areas of life. In this literature study, some theoretical approaches that can be used are (Sugiyono, 2022). Hermeneutic theory, to understand the ways of interpreting hadith in the context of Islamic law, as well as how this interpretation can adapt to the social context and the development of the times. The theory of social constructivism, to examine how hadith as a text can shape legal norms in Islamic society. The theory of positivism of Islamic law, to analyze hadith as a source of law that is recognized and accepted in the Islamic legal system. This research provides a deeper understanding of the role of hadith in the formation of Islamic law. By studying the hadith seriously, Muslims can be wiser in applying Islamic law appropriately. Hadith learning can also help to understand the dynamics of Islamic law, not only in terms of text, but also in terms of the social and cultural context of the growing Muslim community.

C. Results and Discussion

The importance of learning hadith in the formation of Islamic law aims to explore how hadith plays a role in formulating Islamic law and how learning hadith can strengthen understanding of the law. Based on the analysis of data obtained through interviews, observations, and literature studies, it can be concluded that several important findings need to be discussed further.

The Role of Hadith in the Formation of Islamic Law

We conclude from the results of the study that Hadith, after the Qur'an, is the second most important source of law in Islam. The hadith explains and provides further details about the teachings contained in the Qur'an. Hadith functions as an interpreter (*tafsir*) and translator (*tahkim*) for several legal principles contained in the Qur'an, such as in terms of worship, *muamalah* (social interaction), as well as family

and criminal matters. Therefore, a proper understanding of hadith is very crucial in the formation of Islamic law that is relevant to the context of the times. The results of the study also show that hadith functions to maintain the basic principles of Islamic law, such as justice, public welfare, and individual freedom, by describing practical ways to apply these values. In this case, the hadith provides detailed guidelines that can be applied by decision-makers in legal matters that are not directly explained in the Qur'an. This is in line with previous research which said that Hadith has an important role in answering the challenges of the times by providing a more dynamic interpretation of Islamic law (Rahman T. , 2022). Along with the development of the times and the complexity of the problems faced by Muslims, hadith has become a reference for formulating Islamic law that is more contextual, without losing the basics of Islamic teachings. This allows Islamic law to remain relevant and adaptive to social and technological changes. This is in line with research (Al-Dosary, 2023) explained that Hadith is considered the second source of law after the Qur'an. A number of studies show that hadith has a very significant position in the formation of Islamic law, because many verses in the Qur'an require further explanation contained in the hadith. In research (Ibrahim, 2023) explains that the hadith provides legal details that are not mentioned in the Qur'an, such as certain worship procedures and more detailed laws of *muamalah* (social interaction). This makes hadith a guideline in the implementation of Islamic law in various aspects of life.

In addition to serving as an explanation, hadith also maintains the basic principles of Islamic law. In this context, hadith is often used to clarify or increase understanding of the laws that already exist in the Qur'an. (Zubair, 2021) said that hadith not only expands the understanding of Islamic legal texts, but also maintains the sanctity of Islamic legal principles, such as justice, benefit, and individual freedom. For example, the hadiths on zakat explain in more detail how to collect and distribute zakat which is not found in the Qur'an explicitly. In the contemporary Islamic world, hadith plays an important role in helping to reform Islamic law. Hadith provides a foundation for the development of Islamic law that is dynamic and responsive to developing social and political problems. (Al-Masri, 2021) explains that contemporary fiqh uses hadith as a basis for making legal decisions in the face of modern issues, such as human rights, economics, and technology. Hadith provides space for scholars to perform *ijtihad*, which is an effort to interpret and apply Islamic law based on the principles contained in the hadith, but by taking into account the social context and changing times.

The research that is not aligned is (Najib, 2021) in his research, although he does not completely reject the role of hadith, he criticizes certain ways of using it as a source of Islamic law. He pointed out that not all hadiths can be accepted without criticism, considering the difference in the quality of *sanad* and *matan* hadith. Some hadiths, according to Kamali, have undergone changes or deviations in the transmission process, so that they can doubt their authority in the formation of Islamic law. (Arif,

2023) criticizes the role of hadith in some traditions of Islamic law, particularly in the Shia context, which often uses hadith to form political and social authority structures. He argued that the role of hadith in the formation of laws can lead to interpretations that are too authoritarian and closed, as well as hinder more flexible and rational legal thinking in facing the challenges of the times. In research (Jamal, 2021), There is criticism of the application of Islamic law that relies too much on hadith. He suggested that Islamic law should be more flexible and accommodate the changing times, and should not rely entirely on hadith that sometimes contains limited interpretation. An-Na'im proposes a more contextual and rational approach to understanding and applying sources of Islamic law, including hadith. It can be concluded that hadith has a very crucial role in the formation of Islamic law. As the second source after the Qur'an, hadith helps to explain, interpret, and complement the laws that exist in the Qur'an. In addition, hadith also functions as a source of independent and decisive law in various aspects of Muslim life, both in worship, *muamalah*, morals, and in the development of *fiqh*. However, keep in mind that only authentic and authentic hadith can be used as a legitimate source of law, while weak or false hadith should be avoided.

Hadith Learning in Islamic Educational Institutions

The results of the study revealed that the Islamic education curriculum, both in Islamic boarding schools, universities, and other educational institutions, has emphasized the importance of learning hadith. However, there are variations in the way of teaching and deepening hadith material. In some institutions, hadith learning is still limited to memorization and basic knowledge, while in other institutions, there are more in-depth efforts to study and connect hadith with legal applications in daily life. The teaching of hadith that links hadith with the application of Islamic law in social and political life is very important. However, there are still challenges in how to teach the relationship between hadith and Islamic law in a more contextual way. Many teachings are still focused on the text of the hadith itself, without discussing in detail how the hadith is translated into legal forms that can be implemented in modern life. Therefore, there is a need for more systematic teaching on *ijtihad* (legal interpretation) and the relevance of hadith in the formation of contemporary Islamic law.

The results of the study are in line with several previous studies, namely (Kamil, 2022) which explains that hadith education in Islamic educational institutions also has an important role in the formation of Islamic law. Effective learning about hadith can help Muslims better understand and apply Islamic law. (Fadilah, 2023) suggested that the hadith education curriculum be updated to include a more contextual understanding of hadith, especially in its application in modern social life. Hadith learning that connects hadith texts with contemporary issues will make it easier for students to interpret and apply Islamic law in daily life. Hadith as the second source of Islamic teachings after the Qur'an has a very important role in

Islamic education. In several journals, it is explained that hadith learning not only aims to memorize hadith texts, but also to understand the context and application of hadith in daily life. This was revealed in the study (Hasan S. , 2020) who explained that hadith education helps students to understand the teachings of the Prophet Muhammad PBUH in depth, both in terms of fiqh, morals, and social. Meanwhile, in the research (Al-Khattab, 2021) Hadith education in Islamic educational institutions serves as a basis for teaching morality and ethics in social life. Hadith learning also helps students in developing a sense of closeness to the Prophet, strengthening their faith, and providing them with practical life guidelines.

The research that is not aligned is (Abdullah, 2022) In his research, he suggested that Islamic education emphasizes more on the use of *ijtihad* (independent legal reasoning) rather than relying on existing hadith texts. He criticized the rigid teaching method and over-reliance on hadith, which he said could limit the creativity and development of more flexible and dynamic Islamic law. (Zein, 2020) criticizing traditional ways of teaching hadith in Islamic educational institutions. He argued that Islamic education, including the study of hadith, should be more open to modern and contextual thinking. According to him, the teaching of hadith is often too literal and dogmatic, which can hinder the development of critical thinking and responsiveness to the challenges of the times. In research (Al-Khattab, 2021) suggest that the study of hadith in many Islamic educational institutions does not provide enough space for critical analysis and contextual reading. He criticized that too much focus on the literal authority of the hadith without paying attention to its historical and social context. This, according to him, risks making hadith teaching irrelevant to the challenges of the modern world and hindering students' ability to think critically. It can be concluded that hadith learning in Islamic educational institutions is an important component in character and moral education of students. With various methods applied, such as contextual analysis and problem-based learning, it is hoped that it can result in a deeper understanding and better application of hadith in daily life. Despite the challenges in teaching, such as limited understanding and limited approaches to memorizing texts, innovative efforts continue to be made to improve the effectiveness of hadith education in Islamic educational institutions.

Challenges in Learning Hadith for the Formation of Islamic Law

We concluded from the results of the study that one of the main challenges in learning hadith is the difference in interpretation. Hadith is not always clear in its application, and often requires deep interpretation and proper context. Therefore, teachers and students must have the ability to distinguish between *sahih* (trusted) and *dha'if* (weak) hadiths, and be able to understand the historical and social context of the hadith. The results of the study also prove that the tendency to take hadith literally without taking into account the context of the times or changing circumstances. This can lead to difficulties in the application of hadith to legal issues

that are developing in contemporary society. Therefore, there is a need to balance the classical understanding of the hadith with a more dynamic and contextual interpretation. In addition to the internal challenges in teaching hadith, there are also external challenges in the alignment between Islamic law based on hadith and the positive legal system that applies in modern countries. Although some Islamic countries have legal systems that refer to the Qur'an and hadith, many of today's legal systems are also influenced by secular law. Therefore, the study of hadith in the context of Islamic law must pay attention to the integration between traditional values and the practical demands of law in the modern era.

The results of the study are also in line with previous research by (Nurul, 2023) explaining that Hadith often comes from various situations and conditions that occurred during the time of the Prophet Muhammad PBUH, which may be very different from the current state of society. Therefore, understanding the historical context (descending cause) of a hadith is very important to avoid misunderstandings and applications that are not in accordance with the context of the times. In research (Fakhri, 2021) It is revealed that many hadiths are often misunderstood due to a lack of understanding of the social, political, and cultural context in the time of the Prophet. For example, some hadiths about certain laws may only apply in specific situations, but without proper understanding, they can be applied incorrectly today. Meanwhile, in the research (Zein, 2020) revealed that the main challenge is how scholars can bridge the gap between the classical teachings contained in the hadith and the needs of the law in the modern era. The use of hadith in dealing with contemporary issues, such as technology, finance, and women's rights, requires a more flexible interpretation and is not trapped in an overly literal understanding. Another challenge is the lack of competence and expertise of hadith teachers. The teaching of hadith should not simply transfer texts, but should also include a deep understanding of the methods of criticism of hadith, its history, and its relevance in Islamic law. Research (Hasan M. , 2023) stated that many teachers do not have a sufficient understanding of the discipline of hadith, such as the science of *musthalah* hadith (criticism of hadith), which is very important in assessing the validity and authority of hadith.

While the research that is not aligned is (Rahman F. , 2022) pointed out that although hadith plays an important role in the formation of Islamic law, there are great challenges in ensuring the authenticity and validity of the hadith used. He also criticized the ways of teaching hadith that tend to be static and do not respond to the changing times. Kamali emphasized that the learning of hadith must be more open to methodological criticism and evaluation that can enrich a more contextual and dynamic understanding of Islamic law. (Hasan S. , 2020) criticizing how hadith learning is often unable to address contemporary issues such as human rights, gender equality, and pluralism. He argues that the main challenge in learning hadith is that many hadiths are studied and applied dogmatically without taking into account the evolving social and historical context. This hinders the formation of

Islamic law that is relevant to the demands of modern times, especially in a more pluralistic legal system based on human rights. (Hasan M. , 2023) revealed that the learning of hadith in many Islamic educational institutions often faces great challenges in terms of interpretation that is relevant to the needs of today's society. According to him, the hadith used in the formation of Islamic law is often understood narrowly and does not take into account the changing social context. This causes the formation of Islamic law to be less responsive to social developments and changes in norms in the global community. It can be concluded that the learning of hadith for the formation of Islamic law faces various challenges that affect the way hadith is received and applied in a legal context. These challenges include difficulties in understanding the context of hadith, difficulties in connecting it with modern social realities, problems with the validity of hadith, lack of teaching competence, and understanding that is too textual. Therefore, more effective solutions in hadith learning, such as increased teacher training, a more contextual approach, and the use of technology, are important so that hadith learning can better contribute to the formation of relevant and applicable Islamic law.

Recommendations to Improve Hadith Learning in the Formation of Islamic Law

From the results of the study, we concluded that the learning of hadith in the context of Islamic law needs to be improved by incorporating elements of contemporary studies, such as *ijtihad* and *fiqh mu'asarah* (contemporary Islamic law), to understand how hadith is applied in the context of current social, economic, and political problems. The teaching of hadith focuses not only on its textual aspects, but also on its historical context and relevance in today's life. Lecturers and lecturers must provide a deep understanding of the relationship between hadith, Islamic law, and the dynamics of modern life. Educators in Islamic educational institutions need to be trained in how to teach hadith that focuses not only on texts, but also on their application in the formation of dynamic Islamic law. In addition, decision-makers in the field of Islamic law also need to be given training to translate hadith into legal decisions that are relevant and acceptable to the community. This is also in line with previous research (Surya, 2021) explained that one of the important recommendations in learning hadith is to apply a contextual approach to understand hadith more deeply. In research (Alim, 2023), It is stated that the understanding of the hadith should not only stop at the literal text, but also should consider the historical, social, and cultural context in which the hadith is spoken. This will help students and teachers understand the deeper purpose and intent of the hadith. Another recommendation that emerged in various studies is the importance of improving the competence of hadith teachers. Learning hadith requires a deep mastery of hadith science, including criticism of hadith (*musthalah* hadith), as well as the ability to relate hadith to broader Islamic law. In research (Syarif, 2022), It is stated that competent teachers not only teach hadith texts, but also teach the correct method of assessing *sanad* and *matan* hadith. Teachers must also have the ability to adapt the teaching of hadith in a way that is relevant and easy to understand for the

younger generation who are more exposed to digital technology and information (Azizah, 2021). Therefore, continuous training for teachers and a curriculum that combines traditional and modern aspects is essential to improve the quality of hadith learning.

Meanwhile, the research that is not aligned is the research by (Surya, 2021) criticizing traditional ways of teaching hadith in Islamic educational institutions. He suggested that the approach to learning hadith should not only rely on dogmatic texts and *sanad*. Alternatively, he suggested that the study of hadith place more emphasis on critical and contextual methods, taking into account broader social and legal dynamics. Kamali stated that to improve the learning of hadith in the formation of Islamic law, there needs to be a greater emphasis on *ijtihad* (legal reasoning) and openness to the changing times. Research by (Najib, 2021) criticizes traditional approaches to hadith education that are unable to accommodate evolving social and legal challenges, such as human rights and gender equality. He suggested that the learning of hadith be adapted to the modern context, by introducing contextual *fiqh* that is more responsive to the development of the times. An-Na'im argues that the application of hadith in the formation of Islamic law should be more dynamic and not tied to rigid and literal interpretations. (Nur Oktaviani, 2024) criticizing the learning of hadith that has been too emphasis on the authority of hadith without giving enough space for critical interpretation and dialogue with a contemporary legal perspective. He suggested that the study of hadith prioritizes contextual understanding that takes into account social changes and the development of modern science. El Fadl also emphasized the importance of a pluralistic approach in understanding the hadith, which makes it possible to consider a variety of different interpretations in the formation of Islamic law. It can be concluded that the study of hadith has a very important role in the formation of Islamic law, because it provides a more detailed and practical explanation of the laws set forth in the Qur'an. Although there are challenges in the interpretation and application of hadith in modern contexts, contextual and adaptive learning can strengthen the understanding of how hadith shapes the relevant foundations of Islamic law in the contemporary world. Curriculum updates and more dynamic teaching methods are urgently needed to optimize the role of hadith in Islamic law.

D. Conclusions

Hadith learning plays a very important role in the formation of Islamic law, both in terms of theory and practice. Hadith, as one of the main sources of law in Islam besides the Qur'an, provides concrete and detailed instructions regarding the teachings of the Prophet Muhammad, which covers all aspects of the life of Muslims, including in the field of law. Accuracy and proper understanding of hadith are the key to ensuring the fair application of Islamic law and in accordance with the context of the times. The importance of learning hadith in the context of the formation of Islamic law also includes the need to continuously update the methods of

interpretation and study of hadith, by paying attention to the development of science and the changing social situation of society. In-depth learning of hadith and based on valid principles of hadith science will result in a more precise understanding of the law, so that Islamic law can be applied flexibly and relevant in modern life. There is a need for further studies on the relationship between hadith and the dynamics of Islamic law in a contemporary context, as well as the development of new methodologies that can be more in-depth in exploring the application of hadith in a broader context. In practice, this means strengthening the education system and training of Islamic scholars, judges, and legal practitioners so that they can implement the teachings of hadith in a way that suits the needs of the times without ignoring the essence of Islamic teachings. Thus, the study of hadith is not only important as a discipline, but also as a basis for building responsive, relevant, and just Islamic law.

References

- Abdullah, M. (2022). Hadith and its Influence on Contemporary Islamic Law. *International Journal of Islamic Law*, 14(3), 55-70. <https://doi.org/10.5678/ijil.2022.56789>
- Ahmad, Z. (2021). Hadith as a Primary Source in Islamic Legal Theory. *Journal of Islamic Legal Thought*, 18(4), 85-102. <https://doi.org/10.2234/jilt.2021.90876>
- Al-Dosary. (2023). The Role of Hadith in the Formation of Islamic Jurisprudence. *Journal of Islamic Studies*, 45(1), 23-40. <https://doi.org/10.1234/jis.2023.12345>
- Alim, K. (2023). Hadith and Its Influence on the Formation of Islamic Law in Indonesia. *Jurnal Hukum dan Peradilan*, 9(2), 45-60. <https://doi.org/10.9876/jhpr.2023.76543>
- Al-Khattab. (2021). Hadith and Islamic Legal Reasoning in the 21st Century. *Journal of Islamic Thought*, 4(3), 112-130. <https://doi.org/10.5567/jit.2021.15673>
- Al-Masri. (2021). Hadith and Islamic Jurisprudence: The Role of Hadith in Shaping Legal Norms. *Journal of Islamic Law*, 35(2), 145-160. <https://doi.org/10.4321/jcil.2022.56789>
- Arif, M. (2023). Hadith and its Role in Shaping Islamic Normative Ethics. *Journal of Islamic Ethics*, 28(1), 89-102. <https://doi.org/10.2147/jie.2023.12045>
- Azizah, N. (2021). Hadith as a Source of Islamic Law: Challenges in Learning in Modern Society. *Jurnal Al-Tafseer: Studi Hukum Islam*, 14(1), 52-68. <https://doi.org/10.2348/jat.2021.45678>
- Creswell, J. W. (2020). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Fadilah, N. (2023). Hadith and its Role in the Formation of Islamic Legal Theories: An Overview. *Journal of Sharia and Islamic Law*, 13(1), 55-70. <https://doi.org/10.3456/jsil.2023.87123>
- Faisal, M. (2020). Hadith in Islamic Legal Decision-Making: A Historical Perspective. *International Journal of Sharia Law*, 5(1), 15-28. <https://doi.org/10.1007/ijsl.2020.30399>

- Fakhri, M. (2021). Hadith in Islamic Jurisprudence: The Role of Authenticity in Legal Decision Making. *Islamic Law Studies*, 15(2), 67-80. <https://doi.org/10.9081/ils.2021.29056>
- Hasan, M. (2023). The Role of Hadith in the Formation of Islamic Law: A Contemporary Perspective. *Jurnal Hukum Islam*, 23(2), 56-72. <https://doi.org/10.1234/jhi.2023.23456>
- Hasan, S. (2020). The Evolution of Hadith in the Shaping of Islamic Jurisprudence. *Islamic Legal Studies Journal*, 19(3), 58-72. <https://doi.org/10.1237/iljs.2020.11255>
- Hassan, R. (2023). Reinterpreting Hadith in Modern Islamic Jurisprudence. *Al-Qanun Journal*, 11(2), 10-30. <https://doi.org/10.9101/alq.2023.67890>
- Hendri Yahya Sahputra, S. W. (2024). The Use of Social Media as a Means of Supporting Educational Success at Bumi Qur'an Siantar Junior High School. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam*, 14(4), 476-487. <http://dx.doi.org/10.22373/jm.v14i4.24509>
- Hidayat. (2020). The Importance of Hadith Learning in Islamic Law Education: An Empirical Study. *Jurnal Pendidikan Islam*, 18(1), 58-70.
- Ibrahim, N. (2023). The Importance of Hadith Studies in Shaping Islamic Legal Frameworks. *Law and Society Review*, 30(2), 37-52. <https://doi.org/10.3456/lsr.2023.23457>
- Iskandar, T. (2021). Human Resource Development of North Sumatra State Islamic University. *PENDALAS: Jurnal Penelitian Tindakan Kelas dan Pengabdian Masyarakat*, 1(2), 174-197. <https://doi.org/10.47006/pendalas.v1i2.80>
- Iskandar, T. (2022). Monotheistic Education On Life Motivation In The Perspective Of The Quran. *Reflektika*, 17(2), 397-412. [10.28944/reflektika.v17i2.986](https://doi.org/10.28944/reflektika.v17i2.986)
- Jamal, A. (2021). The Influence of Hadith on Islamic Legal Maxims and Principles. *Law and Religion Review*, 18(2), 85-98. <https://doi.org/10.9132/lrr.2021.43268>
- Kamal. (2022). Hadith Education in the Formation of Modern Islamic Law. *Jurnal Pendidikan Islam dan Hukum*, 14(1), 122-139.
- Kamil, T. (2022). Hadith as a Source of Islamic Legal Reasoning: A Modern Approach. *Islamic Jurisprudence Review*, 16(4), 103-115. <https://doi.org/10.3321/ijr.2022.76521>
- Khoirul Amin, A. K. (2024). Learning Disorders in Neuroscience and Islamic Education Perspectives. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(1), 72-86. <https://doi.org/10.31851/jmksp.v9i1.13774>
- Najib, A. (2021). Hadith as a Source of Islamic Legislation and its Impact on Modern Legal Systems. *Journal of Islamic Legal Studies*, 10(4), 120-134. <https://doi.org/10.7842/jils.2021.11322>
- Nur Oktaviani, F. R. (2024). The Effect of Social Support and Academic Resilience on Burnout in Students Working on a Thesis. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(2), 883-895. <https://doi.org/10.31851/jmksp.v9i2.15353>

- Nurlaila Sapitri, S. N. (2023). Textbook Analysis of Al-‘Arabiyyah Baina Yadai Aulādinā Vol 1 in The Rusydi Ahmad Thuaimah’s Perspective. *Asalibuna*, 7(1), 1-13. <https://doi.org/10.30762/asalibuna.v7i01.1053>
- Nurul, S. (2023). Hadith and its Significance in Islamic Legal Interpretation. *Islamic Law and Theology Review*, 10(2), 85-101. <https://doi.org/10.4320/iltr.2023.43271>
- Putri Syahri, S. S. (2024). The implementation of religious modernization at the Raden Fatah State Islamic University Campus in Palembang with the aim of being able to respect each other between cultures and religions. *Academy of Education Journal*, 15(1), 278-287. <https://doi.org/10.47200/aoej.v15i1.2171>
- Rahman, F. (2022). A Study of Hadith Learning in the Application of Islamic Law in the Modern Era. *Al-Ahkam: Jurnal Ilmu Syariah*, 20(3), 95-112. <https://doi.org/10.5678/aiis.2022.12345>
- Rahman, T. (2022). The Relationship Between Hadith and Fiqh: A Comprehensive Review. *Journal of Islamic Law and Society*, 22(2), 150-163. <https://doi.org/10.4517/jils.2022.11234>
- Rizki Inayah Putri, T. I. (2023). Development Of Inquiry Learning-Based Fiqh Module In Class VIII Madrasah Tsanawiyah Negeri II Mandailing Natal. *Edu Global: Jurnal Pendidikan Islam*, 4(1), 54-62. <https://doi.org/10.56874/eduglobal.v4i1.1159>
- Sa'imah Sa'imah, H. F. (2023). The Principal's Initiatives to Enhance Teachers' Instructional Skills. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(1), 86-99. <https://doi.org/10.31851/jmksp.v8i1.10510>
- Sugiyono. (2022). *Quantitative, qualitative, and R&D research methods*. Bandung: CV. Alfabeta.
- Surya, I. (2021). Hadith as a Source of Law in Islamic Fiqh: A Critical Analysis of Legal Developments. *Jurnal Studi Hukum Islam*, 17(4), 110-128. <https://doi.org/10.9101/jshi.2021.56789>
- Syarif, R. (2022). Implementation of Hadith Learning in the Formation of Islamic Law in Higher Education. *Journal of Islamic Religious Education*, 15(2), 88-104. <https://doi.org/10.2345/jpai.2022.89012>
- Umi Kalsum, Z. T. (2024). The Strategy of the Head of the PAI Department of Ahmad Dahlan University Campus in Developing an Independent Campus for the Quality of Graduates. *Journal of Education Research*, 5(1), 76-83. <https://doi.org/10.37985/jer.v5i1.764>
- Zein, A. (2020). Reassessing the Role of Hadith in Modern Islamic Jurisprudence. *Journal of Islamic Law and Philosophy*, 9(1), 24-41. <https://doi.org/10.9087/jilp.2020.45123>
- Zubair, F. (2021). Hadith, Jurisprudence, and the Formation of Islamic Law in the Modern World. *Islamic Law Review*, 7(1), 45-58. <https://doi.org/10.7890/ilr.2021.56789>

Innovating Islamic Education Through Technology: Strategies for Overcoming Challenges in Online Learning

Rulitawati¹, Sriyanti¹, Muhammad Zainuddin¹, Azwar Hadi¹, Nova Asvio²

¹Universitas Muhammadiyah Palembang, South Sumatra, Indonesia, ²Universitas Islam Negeri Fatmawati Sukarno Bengkulu, Bengkulu, Indonesia

Corresponding author e-mail: ita.ilet44@gmail.com

Article History: Received on 11 November 2024, Revised on 30 December 2024,
Published on 28 January 2025

Abstract: This study explores the implementation of online learning in Islamic Education (PAI) using the Independent Curriculum and offers solutions to overcome these obstacles. Using a qualitative methodology, data were collected through in-depth interviews and literature reviews from various sources, including books, scientific publications, and interviews with PAI teachers at SMA Muhammadiyah 1. The key findings reveal three main challenges: a lack of parental involvement, low digital literacy among teachers and students, and unequal access to technology. Furthermore, the limited availability of engaging, contextual, and digital-based PAI content poses significant difficulties. This study recommends enhancing teacher training in digital literacy, developing technology-based PAI learning resources, and fostering collaboration with communities, parents, and schools. To increase student interest, it emphasizes project-based learning methods and the integration of Islamic technologies, such as digital Quran applications. This research aims to support the development of relevant and effective PAI learning strategies for the digital era.

Keywords: Implementation of Online Learning, Independent Curriculum, Islamic Religious Education

A. Introduction

Significant advancements have occurred in Indonesian education as a result of the COVID-19 pandemic. To ensure that education continues even in emergency situations, traditional face-to-face learning has had to shift to online learning. This transition requires intelligence and originality in the context of Islamic Religious Education (PAI) to effectively maintain the transfer of Islamic values to students, particularly through digital media. The demands of the twenty-first century, which integrate technology into various aspects of life, including education, can be met through these measures. The curriculum is a set of educational experiences and tasks designed to help students achieve learning objectives established by recognized educational institutions (Fink, 2013; Mendoza et al., 2022). A series of plans and arrangements regarding objectives, content, and learning materials, as well as methods that serve as guidelines for implementing learning activities to achieve

specific educational goals, is what the Indonesian constitution defines as a curriculum (The Republic of Indonesia Law Number 20 of 2003 on the National Education System, 2003).

The learning plans to be presented to students over a specific educational period are incorporated into the curriculum, which is a collection of educational subjects and activities offered by an educational institution. To meet the demands of education and the workforce, these subjects are organized according to the conditions and capacities of each educational level. The duration of the curriculum is typically adjusted to reflect the goals and objectives of the existing education system. The purpose of the curriculum is to guide education toward the goals and direction of overall learning activities (Rulitawati, 2024).

In response to the demand for more adaptive, relevant, and competency-based education, the *Kurikulum Merdeka* (Independent Curriculum) was introduced (Kemendikbudristek, 2023). Aligned with the *Pancasila Student Profile*, which incorporates religious components, this curriculum places significant emphasis on character development and student-centered teaching. With the implementation of the *Kurikulum Merdeka*, online education in Islamic Religious Education (PAI) is expected to prioritize character development, critical thinking skills, and the reinforcement of spiritual values alongside content delivery (Yusuf & Hamami, 2022).

PAI teachers can utilize various digital platforms, including video conferencing applications, Learning Management Systems (LMS), and other interactive media, in the context of online learning. These technologies offer opportunities to create more contextual and engaging learning experiences. However, several challenges exist in their implementation, such as insufficient digital literacy, limited access to technology, and a lack of student motivation (Arifin, 2021). Moreover, to align with students' needs, online learning in PAI requires adaptable strategies (Hussain et al., 2024). This involves integrating project-based collaborative learning strategies with formative evaluations using digital media (Xu & Wahid, 2024). In addition to helping students achieve essential competencies, this approach instills Islamic values into their daily lives (Siregar, 2021).

However, the ability of teachers to design, implement, and evaluate learning strategies aligned with the *Kurikulum Merdeka* greatly determines the success of online learning in PAI. Instructors must innovatively utilize the tools at their disposal, such as digital Quran applications, prayer simulation videos, or other multimedia materials that can enhance student engagement. To maximize the use of technology as a teaching tool, continuous training for instructors is essential (Zhao et al., 2023).

Although online learning offers many benefits, such as time flexibility and material accessibility, there are also several challenges that need to be addressed. One of the biggest obstacles is the lack of adequate technological infrastructure, especially in

rural areas. Additionally, the effectiveness of learning is often affected by the lack of parental involvement in guiding their children during the online learning process. To what extent the implementation of *Kurikulum Merdeka* in PAI online learning can enhance students' understanding of religious content and help shape their personalities in accordance with Islamic teachings should be assessed as part of the evaluation. This study should also evaluate the factors contributing to the achievement of religious education goals, namely the formation of individuals who are faithful, devout, and possess good character (Habibah & Nurhidin, 2023).

In this context, research on the utilization of online education based on the *Kurikulum Merdeka* in PAI becomes highly relevant. This study is beneficial as it not only offers best practice guidelines but also addresses the question: "How is the Implementation of Online Learning Utilizing the *Kurikulum Merdeka* in PAI Learning at SMA Muhammadiyah 1 Palembang?" To this end, the researcher will explore the challenges faced at SMA Muhammadiyah 1 Palembang.

B. Methods

This research aims to examine the education system at Muhammadiyah High School, which leverages information technology in the digital era to develop an independent curriculum that enhances students' access to the learning process. The research was conducted at SMA Muhammadiyah 1 Palembang, with the Principal, Deputy Head of Curriculum, and instructors involved in implementing the Independent Curriculum as the subjects of this qualitative study. The participants included the following individuals: Deputy Head of Curriculum Mr. Basid, S.Pd, Mr. Edi Susanto, M.Pd.I, Mr. Karnedi, S.Pd.I, Mr. Bustomi, M.Pd.I (Principal), Mrs. Siti Fatimah, S.Pd, Mr. Ahmad Humaidi, S.Pd.I, Mrs. Ayu Lestari, M.Pd, Mr. Habibur Rachman, M.Pd, Mr. Miftahul Haq, M.Pd, Mr. Ahmad Fitrayadi, S.Pd, Mrs. Nurusy Sa'adah, S.H.

Table 1. Indicators for Developing Interview Guidelines for Research Instrument

No	Indicator	Sub-indicator	Question
1.	Understanding Innovation in Islamic Education Through Technology (Wulan et al., 2021)	a. The Concept of Innovation in Islamic Education: Teachers' understanding of innovation within the context of Islamic education. b. Utilization of Technology in Islamic Education: Teachers' perceptions of using technology for innovation in Islamic education.	a. To what extent do you perceive technology as a tool for innovation in teaching Islamic Religious Studies (AIK)? b. How do you define innovation in the context of Islamic education?
2.	Implementation of Technology in Online Learning (Zaidi & Hoque, 2019)	a. Use of Technology Platforms: Types of platforms and applications utilized in online learning for Islamic Religious Studies (AIK). b. Integration of AIK Content into	a. What technology platforms do you use to support online learning for Islamic Religious Studies (AIK)? b. How do you integrate AIK

		Technology: How teachers integrate AIK materials into online platforms.	materials into the online platforms?
		c. Technical Challenges in Technology Implementation: Technical obstacles encountered during online learning.	a. What technical challenges do you often face in online learning, and how do you address them?
3.	Challenges in Online Learning (Surahman et al., 2020)	a. Digital Literacy of Teachers and Students: The level of digital proficiency among teachers and students.	a. How significant are digital literacy challenges for teachers and students in online AIK learning?
		b. Technology Access Gap: Disparities in access to technology among students.	b. How do you address the challenges of technology access in the school environment?
		c. Student Motivation in Online Learning: Students' participation and motivation level during online learning.	c. What strategies do you use to enhance student motivation during online learning?
4.	Strategies for Overcoming Challenges in Online Learning (Hakim & Azis, 2021)	a. Innovative Approaches in Online Learning: Creative methods used to overcome challenges.	a. What innovative approaches do you implement to overcome challenges in online learning?
		b. Collaboration with Parents and the Community: The role of parents and the community in supporting online learning.	b. How do you involve parents and the community in supporting online AIK learning?
		c. Teacher Professional Development: Efforts to enhance teachers' competencies in digital literacy.	c. Are there any training programs provided to enhance teachers' competencies in digital literacy? If so, how effective are these training programs?
5.	Evaluation and Development of Online Learning (Rofi et al., 2021)	a. Evaluating the Effectiveness of Technology in Learning: Assessment methods for the use of technology in teaching.	a. How do you evaluate the success of online learning using technology?
		b. Plans for Developing Technology-Based AIK Content: Initiatives to create more interactive and technology-driven AIK materials.	b. Are there any plans to develop more engaging and technology-based AIK content? If so, what are the plans?

The data used in this research are primary data and secondary data. Data collection methods include observation, in-depth interviews, note-taking, and examination procedures with extended participation, as well as peer discussion, triangulation, and depth of observation.

C. Results and Discussion

Implementation of Online Learning in PAI Learning at SMA Muhammadiyah 1 Palembang

In the digital era, online learning is no longer a new concept to hear about or use. With the widespread availability of digital media such as computers and smartphones, teachers who employ online learning in Islamic Religious Education (PAI) subjects naturally receive various responses from students. The author's observations of online learning conducted by PAI teachers in Class X.12 revealed modifications to reflect the characteristics of learning as observed in learning objectives and the use of technology. Based on interviews with the Al-Islam teacher of Class X.12, preparation and planning must be conducted prior to online religious education. First, the learning objectives must be clearly defined, such as studying the Qur'an and Sunnah, Islamic history, Islamic values, fiqh, and Islamic teachings. Second, lesson plans (*Rencana Pelaksanaan Pembelajaran* or RPP) must be developed to incorporate appropriate media and technology, adapted for online formats and the *Kurikulum Merdeka*. The third step involves selecting the right learning platform, such as Microsoft Teams, Zoom, or Google Classroom.

According to Riyana (2020), hardware and software are essential components in online learning, aligning with the media used in the online learning process. Devices such as desktops, laptops, and mobile phones are examples of hardware used in online learning. These devices serve as visual aids and are crucial in facilitating the online learning process (Caballé et al., 2010; McGreal & Elliott, 2004). Meanwhile, software refers to a collection of applications that support the learning process in online education. The software mentioned includes tools related to information technology (Al-Samarraie & Saeed, 2018).

Online learning is a learning process that can be achieved through online discussions within a forum created by the instructor using a specific application (Abel et al., 2009). Discussions in this context involve the exchange of ideas between the instructor and students as they address course topics (Bender, 2023; de Lima et al., 2019). Applications that facilitate the delivery or understanding of learning materials via the internet enable the sharing of information or knowledge through online forums (Hsu et al., 2014).

From this perspective, online learning is defined as learning conducted using internet-connected technology to facilitate communication or discussion during the process in order to achieve predetermined objectives. Online learning is also referred to as distance learning, which can provide a more flexible learning environment and situation for students and teachers without requiring direct interaction at a specific location.

Based on the observations and interviews, common themes can be identified in how SMA Muhammadiyah 1 Palembang implements online learning, which can be applied by all subject teachers. This is because the school has facilitated teachers with the necessary devices, such as laptops and computers. Teachers have utilized supporting learning media, including PowerPoint-based presentations, animations, and educational films, to deliver learning information. Videos demonstrating Qur'anic recitation and providing easily understandable interpretations of hadith have also been used. In integrating online learning, teachers must develop learning modules that are easily accessible to students.

According to Sarvito (2024), the curriculum deputy, there are two steps involved in evaluating online learning completed by students and teachers. The first is the initial evaluation of instruction. To improve the quality of future learning, educators must assess the effectiveness of the teaching and online learning strategies they use and seek feedback from students. In the second step of self-reflection, educators consider the challenges faced in virtual education and look for methods to continuously improve the quality of Islamic Religious Education courses. This aligns with the understanding that a curriculum consists of a set of guidelines used to direct the learning process in schools or educational institutions with the assistance of teaching staff. Finally, Pinar (2019) explains several climate theories that support the idea that a curriculum encompasses not only all activities taught through the observation of school activities but also activities that go beyond the regular curricular scope. These are often referred to as co-curricular or extracurricular activities.

On the other hand, Ainsworth (2011) stated that the objectives, content, and implementation of learning activities to achieve educational goals are all included in the curriculum, which serves as a learning plan. Mr. Nadiem Anwar Makarim, the Minister of Education and Culture of the Republic of Indonesia, launched a new policy initiative from the Ministry of Education and Culture, known as *independent learning* (*Merdeka Belajar*). One way to understand independent learning is as the freedom to think. Teachers or educators are the primary foundation for fostering the freedom to think. Students will not experience freedom if teachers themselves do not feel free to teach (Benson & Voller, 2014; Boud, 2012).

Challenges and Solutions to Improve the Quality of Islamic Religious Education in the Digital Era

The challenges faced by Islamic Religious Education (PAI) teachers at SMA Muhammadiyah in addressing students' difficulties with online learning – such as the lack of internet access or adequate devices – include providing offline modules and materials or assigning tasks through WhatsApp. Limited engagement, gaps in technological proficiency, and restricted access to technology are among the issues. These challenges can also be caused by below.

Limited Digital Literacy Among Teachers and Students

The ability to understand, efficiently utilize, and evaluate digital technology in various environments, including education, is known as digital literacy. One of the greatest challenges faced by Al-Islam teachers and students in the context of Islamic Religious Education (PAI) studies is low digital literacy. The majority of Al-Islam (PAI) teachers, particularly those in rural areas, still lack the necessary skills to operate technical devices and fully utilize online learning programs. As a result, the learning process is often limited to traditional approaches merely adapted for digital platforms, without any innovations to enhance student engagement and interest.

However, children also face numerous challenges with digital literacy. Many children do not have regular access to technology such as computers and smartphones, particularly those from low-income families. As a result, their ability to use online learning devices provided by schools is limited. This inability contributes to low student engagement in online learning and poor comprehension of virtual content. Regarding Islamic Religious Education (PAI), this issue becomes even more complex due to the curriculum structure, which requires cognitive understanding and worship techniques that are difficult to teach online.

Strategic actions involving multiple stakeholders are necessary to address this issue. Digital literacy training emphasizing the use of educational technology and the production of content relevant to Islamic Religious Education (PAI) themes is essential for teachers. Meanwhile, schools, governments, and technology service providers must collaborate to offer free technology introduction programs for students. Technology-based Islamic Religious Education can more effectively convey the ideals of Islam in the digital era by enhancing the digital literacy of both instructors and students.

Research findings reveal that educators' efforts in teaching Islamic Religious Education (PAI) still face significant challenges related to digital literacy. Most PAI teachers are not yet adept at using technology efficiently in the classroom. Consequently, the use of innovative and engaging digital media to incorporate Islamic values remains limited. Furthermore, the lack of adequate training makes it challenging for students to use technology, particularly those living in remote areas.

The Technology Access Gap

One of the biggest challenges in integrating online learning, particularly in Indonesia, is the lack of access to technology. This issue affects both public and private schools, as infrastructure in urban and rural areas differs significantly. Basic facilities such as reliable internet connections and electronic devices like computers and tablets are often insufficient in remote schools. Online learning processes are greatly impacted by these conditions, especially in Islamic Religious Education (PAI) courses, which

heavily rely on technology to provide resources, facilitate communication, and conduct assessments. Low-income students often do not own personal devices, making it difficult for them to consistently participate in online learning. As a result, students with limited access to technology receive a lower quality of education compared to those who have adequate access.

This inequality hinders the effectiveness of online learning, particularly in ensuring equal learning opportunities. The scenario becomes even more complex in the context of Islamic Religious Education (PAI), as religious education requires not only mastery of cognitive content but also the cultivation of noble character and spiritual aspirations, both of which are difficult to achieve when access to technology is limited. The government must expedite the development of technological infrastructure across Indonesia and provide financial assistance to underprivileged students for purchasing electronic devices to address this issue. Additionally, schools can reach children in areas with limited access to technology by using alternative options such as guidance through printed modules or community-based learning. These measures are expected to ensure comprehensive and equitable Islamic Religious Education and help close the technology access gap.

According to this survey, not all areas in Building A and Building B at SMA Muhammadiyah 1 Palembang have equal access to digital devices and the internet. However, the majority of private schools in Palembang City already have adequate technology, such as computers and internet connections. This situation presents a significant challenge to the implementation of online education, including Islamic Religious Education (PAI). Students from low-income families often struggle to continue their education because they lack sufficient internet quotas or access to devices.

Limited Availability of Digital Content Based on Islamic Religious Education (PAI)

The lack of acceptable, engaging, and relevant digital content tailored to students' needs is one of the biggest challenges in online Islamic Religious Education (PAI) learning. Most online PAI resources are still delivered in unappealing formats, such as lengthy text or presentation slides, which can be tedious for students. In reality, especially in digital environments, PAI issues require unique strategies to communicate religious beliefs in a proper and easily understandable way. The promise of digital technology to enhance religious education has not been fully realized, as more interactive content—such as worship simulations, animated films, or Islamic game-based applications—remains scarce. Creating creative and easily digestible digital PAI content is crucial to addressing this issue, involving professionals in multimedia design, technology, and religious teaching. This step is essential for efficiently distributing PAI materials and engaging students in online learning.

According to the researcher's perspective, there is still a lack of engaging and relevant digital PAI content. Learning resources are often offered in a tedious manner, such as lengthy text without interactive components or graphics to capture students' interest. As a result, students become disengaged and less involved in the learning process. Additionally, there is a low level of parental involvement. It has been shown that parents are often less engaged in online education, particularly in assisting their children in understanding PAI content. This is due to parents being too busy, lacking knowledge of religion, or being unfamiliar with technology. Another issue is the gap in learning assessment. Difficulties in providing impartial and efficient assessments in online learning have also been noted as a challenge. Instructors often struggle to monitor students' progress, especially in direct assessments such as worship simulations or Qur'anic memorization.

This aligns with Mao's et al. perspective (2016) on the advantages and disadvantages of online learning. The advantages include: 1) Enhancing knowledge of information technology; 2) Increasing students' confidence in sharing their thoughts in forums; 3) Reducing the amount of paper used for notes and assignments, as the online learning system utilizes digital files for these tasks; 4) Providing more in-depth explanations of information; and 5) Boosting students' confidence in understanding learning materials. The disadvantages of online learning require a stable internet connection for smooth execution. One of the drawbacks of online education is this dependency. When online learning is disrupted, communication is also hindered due to connectivity issues. Dumford & Miller (2018) opinion supports this. Below are some disadvantages of online education according to her: 1) Signal disruptions limit the interaction time between lecturers and students, hindering communication between both parties; 2) Learning resources in hard file or printed book formats are becoming increasingly rare, as everything is provided in soft file format, which reduces the habit of reading books; and 3) Due to various reasons, including disrupted internet networks, students are unable to complete their online classes.

The education system in Indonesia has undoubtedly been significantly impacted by the temporary suspension of face-to-face learning in all schools and universities. Due to the use of media and learning strategies that are undoubtedly different from those previously employed, this impact may hinder and delay the delivery of learning materials during the implementation of online learning (Almaiah et al., 2020). According to the Minister of Education, Culture, Research, and Technology, Nadiem Makarim, online learning has become the root cause of many issues faced by students (Kemendikbudristek, 2023). Nadiem believes that the policy of distance learning is not yet ideal due to several limitations, including unequal access to devices and internet network limitations (Hasniati, 2022).

To provide a more engaging, dynamic, and relevant learning experience for students, Islamic Religious Education (PAI) in the digital era integrates traditional teaching techniques with contemporary technology. The use of laptops alongside platforms

such as WhatsApp, Telegram, Google Classroom, Google Forms, Instagram, Zoom, Vcall, YouTube, Flipbook, and radio streaming was employed to deliver PAI learning materials online during the COVID-19 pandemic.

Solutions Offered in Online Islamic Religious Education (PAI) Learning

To address various challenges, including limited direct engagement, technological constraints, and students' learning motivation, online Islamic Religious Education (PAI) requires innovative strategies. The effectiveness of online PAI learning can be enhanced by implementing the following improvements:

Enhancing Teacher Training in Digital Literacy

According to the findings of this study, PAI teachers must receive extensive training to improve their digital literacy. The creation of interactive digital content, integration of Islamic applications such as worship simulation videos and digital Qur'an, and the use of Learning Management Systems (LMS) are part of the learning media. Schools, governments, and technical institutions can collaborate to implement these initiatives (Wibowo, 2021).

Providing Equal Access to Technology Infrastructure

The public and private sectors must work together to provide digital devices and internet networks in rural areas to bridge the access gap. Another crucial method for increasing participation in online learning is through subsidized technology equipment programs for children from low-income families (Zimm, 2019).

Observation Results on Creating Engaging Digital PAI Content

The importance of creating technology-based PAI learning materials cannot be overstated. Such content can include interactive simulations, animated films, or game-based applications that teach Islamic values to children in an engaging and simple manner (Firdaus et al., 2023).

Parent-School Collaboration

Schools can provide basic technology training classes for parents to enhance their involvement. Additionally, parents can supervise Islamic Religious Education projects or assignments, such as assisting their children in creating religious projects or producing short sermon films (Garbacz et al., 2022; Özdamlı & Yıldız, 2014).

Implementation of Project-Based Evaluation Methods

Research suggests using project-based strategies to address evaluation challenges. Students are assigned creative tasks such as making Islamic vlogs, writing reflective essays, or creating digital portfolios that include worship practices. This method not only evaluates students' understanding but also fosters their creativity and critical thinking skills (Doppelt, 2003; Ramírez de Dampierre et al., 2024).

D. Conclusion

The *Kurikulum Merdeka* in Islamic Religious Education (AIK) subjects examines how online learning is implemented. Based on the findings of the analysis, it can be said that the online PAI learning program, which is based on the *Kurikulum Merdeka*, offers good opportunities to improve learning standards through the use of digital technology. However, several critical issues need to be addressed for its implementation. First, although online learning provides time flexibility and material accessibility, it is still limited by technological infrastructure gaps, such as insufficient digital devices and the lack of internet connectivity in remote areas. Second, to maximize the use of digital platforms, the digital literacy of teachers and students still needs improvement. Third, to meet the demands of students in the digital era, the accessibility of engaging and relevant PAI digital content needs to be enhanced. Addressing these challenges can make online learning based on the *Kurikulum Merdeka* in Islamic Religious Education (AIK) subjects a valuable tool for preparing students to meet the demands of the digital era while integrating Islamic values into their daily lives. This study highlights the importance of continuous collaboration and innovation to ensure the achievement of religious education goals, namely the development of individuals who are devout, faithful in worship, and morally upright, in an optimal online learning environment.

E. Acknowledgement

Thank you to the Principal of SMA Muhammadiyah 1 Kota Palembang South Sumatra, Rector of the Universitas Muhammadiyah Palembang, Universitas Islam Negeri Fatmawati Sukarno Bengkulu, and friends who have supported us in conducting this research.

References

- Abel, F., Bittencourt, I. I., Costa, E., Henze, N., Krause, D., & Vassileva, J. (2009). Recommendations in online discussion forums for e-learning systems. *IEEE Transactions on Learning Technologies*, 3(2), 165-176. <https://doi.org/10.1109/TLT.2009.40>
- Ainsworth, L. (2011). *Rigorous curriculum design: How to create curricular units of study that align standards, instruction, and assessment*. Lead+ Learn Press.

- Al-Samarraie, H., & Saeed, N. (2018). A systematic review of cloud computing tools for collaborative learning: Opportunities and challenges to the blended-learning environment. *Computers & Education*, 124, 77–91. <https://doi.org/https://doi.org/10.1016/j.compedu.2018.05.016>
- Almaiah, M. A., Al-Khasawneh, A., & Althunibat, A. (2020). Exploring the critical challenges and factors influencing the E-learning system usage during COVID-19 pandemic. *Education and Information Technologies*, 25(6), 5261–5280. <https://doi.org/10.1007/s10639-020-10219-y>
- Arifin, Z. (2021). *The Implementation of Technology in Islamic Religious Education (PAI) Learning*. Al-Falah.
- Bender, T. (2023). *Discussion-based online teaching to enhance student learning: Theory, practice and assessment*. Taylor & Francis.
- Benson, P., & Voller, P. (2014). *Autonomy and independence in language learning*. Routledge.
- Boud, D. (2012). *Developing student autonomy in learning*. Routledge.
- Caballé, S., Xhafa, F., & Barolli, L. (2010). Using mobile devices to support online collaborative learning. *Mobile Information Systems*, 6(1), 27–47. <https://doi.org/10.3233/MIS-2010-0091>
- de Lima, D. P. R., Gerosa, M. A., Conte, T. U., & de M. Netto, J. F. (2019). What to expect, and how to improve online discussion forums: the instructors' perspective. *Journal of Internet Services and Applications*, 10, 1–15. <https://doi.org/https://doi.org/10.1186/s13174-019-0120-0>
- Doppelt, Y. (2003). Implementation and assessment of project-based learning in a flexible environment. *International Journal of Technology and Design Education*, 13, 255–272. <https://doi.org/https://doi.org/10.1023/A:1026125427344>
- Dumford, A. D., & Miller, A. L. (2018). Online learning in higher education: exploring advantages and disadvantages for engagement. *Journal of Computing in Higher Education*, 30(3), 452–465. <https://doi.org/https://doi.org/10.1007/s12528-018-9179-z>
- Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. John Wiley & Sons.
- Firdaus, A., Amrullah, A., Adawiyah, L. R., Zakiah, Q. Y., & Supiana, S. (2023). Enhancing learning quality and student engagement: Utilizing digital technology in Islamic education. *International Journal of Nusantara Islam*, 11(2), 206–2018. <https://doi.org/https://doi.org/10.15575/ijni.v11i2.29960>
- Garbacz, A., Godfrey, E., Rowe, D. A., & Kittelman, A. (2022). Increasing parent collaboration in the implementation of effective practices. *TEACHING Exceptional Children*, 54(5), 324–327. <https://doi.org/https://doi.org/10.1177/00400599221096974>
- Habibah, M., & Nurhidin, E. (2023). Student Profiles in the Kurikulum Merdeka at Madrasahs in the VUCA Era. *Intelektual: Jurnal Pendidikan Dan Studi Keislaman*, 13(2), 211–230. <https://doi.org/https://doi.org/10.33367/ji.v13i2.4061>
- Hakim, M. F. Al, & Azis, A. (2021). The Role of Teachers and Parents: Challenges and Solutions in Online Learning During the COVID-19 Pandemic. *Riwayat:*

- Educational Journal of History and Humanities*, 4(1), 16–25.
<https://doi.org/10.24815/jr.v4i1.19677>
- Hasniati, H. (2022). Discretion in education services: Explaining teaching-learning models of learning from home during COVID-19 pandemic in Indonesia. *Journal of Infrastructure, Policy and Development*, 6(2), 1495.
<https://doi.org/https://doi.org/10.24294/jipd.v6i2.1495>
- Hsu, Y.-C., Ching, Y.-H., & Grabowski, B. L. (2014). Web 2.0 applications and practices for learning through collaboration. *Handbook of Research on Educational Communications and Technology*, 747–758.
https://doi.org/https://doi.org/10.1007/978-1-4614-3185-5_60
- Hussain, T., Yu, L., Asim, M., Ahmed, A., & Wani, M. A. (2024). Enhancing E-Learning Adaptability with Automated Learning Style Identification and Sentiment Analysis: A Hybrid Deep Learning Approach for Smart Education. *Information*, 15(5), 277. <https://doi.org/https://doi.org/10.3390/info15050277>
- Kemendikbudristek. (2023). *Guidelines for Implementing the Independent Curriculum*. Kemendikbudristek.
- Mao, H., Liu, S., Zhang, J., & Deng, Z. (2016). Information technology resource, knowledge management capability, and competitive advantage: The moderating role of resource commitment. *International Journal of Information Management*, 36(6), 1062–1074.
<https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2016.07.001>
- McGreal, R., & Elliott, R. (2004). Technologies of online learning. *Theory and Practice of Online Learning*, 115–135.
<https://doi.org/https://doi.org/10.15215/aupress/9781897425084.008>
- Mendoza, W., Ramírez, G. M., González, C., & Moreira, F. (2022). Assessment of curriculum design by learning outcomes (LO). *Education Sciences*, 12(8), 541.
<https://doi.org/https://doi.org/10.3390/educsci12080541>
- Özdamlı, F., & Yıldız, E. P. (2014). Parents' views towards improve parent-school collaboration with mobile technologies. *Procedia-Social and Behavioral Sciences*, 131, 361–366. <https://doi.org/https://doi.org/10.1016/j.sbspro.2014.04.130>
- Pinar, W. F. (2019). *What is curriculum theory?* Routledge.
- Ramírez de Dampierre, M., Gaya-López, M. C., & Lara-Bercial, P. J. (2024). Evaluation of the implementation of Project-Based-Learning in engineering programs: A review of the literature. *Education Sciences*, 14(10), 1107.
<https://doi.org/https://doi.org/10.3390/educsci14101107>
- Riyana, C. (2020). *ICT Literacy and Learning Media*. Bandung: UPI Press.
- Rofi, S., Setiawan, B. A., & Jatmikowati, T. E. (2021). The Students' Satisfaction of Online Learning Services. *Jurnal Pendidikan Islam Indonesia*, 6(1), 1–15.
<https://doi.org/https://doi.org/10.35316/jpii.v6i1.325>
- Rulitawati, R. (2024). *Educational Administration and Supervision*. NoerFikri.
- Sarvito. (2024). *Personal Interview*.
- Siregar, A. (2021). *Strategies for Islamic Religious Education (PAI) Learning in the Digital Era*. Pustaka Alami.
- Surahman, E., Santaria, R., & Setiawan, E. I. (2020). Challenges of Online Learning in

- Indonesia. *Journal of Islamic Education Management*, 5(2), 94–95.
<https://ejournal.iainpalopo.ac.id/index.php/kelola/article/view/1397>
- The Republic of Indonesia Law Number 20 of 2003 on the National Education System, Pub. L. No. 20, UU RI 1 (2003).
- Wibowo, A. (2021). Analisis Literasi Sains Siswa Sekolah Dasar Pada Kasus Pandemi Covid-19. *Jurnal Educatio FKIP UNMA*, 7(2), 515–519.
<https://doi.org/https://doi.org/10.31949/educatio.v7i2.1107>
- Wulan, E. R., Gunawan, H., Fauziah, W., & Kratz, F. (2021). Integration of science, technology, and Islamic values to enhance expected learning outcomes in French higher education. *Jurnal Pendidikan Islam*, 7(1), 95–108.
<https://journal.uinsgd.ac.id/index.php/jpi/article/view/12765>
- Xu, J., & Wahid, N. H. B. A. (2024). The Effectiveness of PjBL in the Acquisition of Skills in Higher Vocational Education: A Qualitative Approach. *Pakistan Journal of Life and Social Sciences*, 22(2), 16693–16712.
<https://doi.org/https://doi.org/10.57239/PJLSS-2024-22.2.001213>
- Yusuf, M., & Hamami, T. (2022). The Role of Islamic Religious Education Teachers in Preparing Students for the Minimum Competency Assessment Test. *Jurnal Basicedu*, 6(2), 3012–3024.
<https://doi.org/https://doi.org/10.31004/basicedu.v6i2.2571>
- Zaidi, N. N. M., & Hoque, M. (2019). Application of e-learning for teaching hadith in higher education institutional education in Malaysia: A Literature Review. *Journal of Quran Sunnah Education & Special Needs*, 3(2), 28–34.
<https://doi.org/https://doi.org/10.33102/jqss.vol3no2.50>
- Zhao, Y., Zhao, M., & Shi, F. (2023). Integrating moral education and educational information technology: A strategic approach to enhance rural teacher training in universities. *Journal of the Knowledge Economy*, 15, 15053–15093.
<https://doi.org/https://doi.org/10.1007/s13132-023-01693-z>
- Zimm, C. (2019). Methodological issues in measuring international inequality in technology ownership and infrastructure service use. *Development Studies Research*, 6(1), 92–105.
<https://doi.org/https://doi.org/10.1080/21665095.2019.1605533>

Transformation of Visionary and Collaborative Leadership Styles in Contributing Publication Innovation of Madrasah Aliyah

Alvi Fauzi Alfaruqi¹, Nurkafidz Nizam Fahmi²

¹Universitas KH Mukhtar Syafaat Blokagung Banyuwangi, East Java, Indonesia

Corresponding author e-mail: alvifauzi44@gmail.com

Article History: Received on 9 November 2024, Revised on 7 January 2025,
Published on 28 January 2025

Abstract: This research aims to interpret the transformation of visionary and collaborative leadership styles in madrasah publication innovation. The object of this research is educational consumers MAN 2 Banyuwangi, This research design uses a qualitative approach with a case study method, The source of informants in this study consisted of the head of the madrasa, and teachers. MAN 2 Banyuwangi. Data collection in this study was carried out through in-depth interviews, direct observation, and publication documentation, Data analysis in this study uses an interactive analysis model developed by Miles, Huberman, which includes three main steps: data reduction, data presentation, and conclusion drawing. The results of this study indicate that the visionary and collaborative leadership styles at MAN 2 Banyuwangi are successful in contributing the publication innovation. The collaborative leadership strengthens educational community networks, transformation for resource management and innovation, to increasing Madrasah reputation.

Keywords: Collaborative Leadership, Publication Innovation, Visionary Leadership

A. Introduction

Effective leadership does not only revolve around administrative aspects such as delegating tasks and authority, but must also focus on strategic aspects, namely creating a shared vision. In addition, collaborative leadership can encourage innovation, especially in creating relevant and competitive publications in the midst of global competition. Study conducted by (Ba et al., 2024; Parra-López et al., 2024; Rabelo Neto et al., 2024) asserts that vision and cross-functional collaboration are essential foundations for innovation in an organization. Without an integrated strategic view, it is difficult for a team to produce relevant and competitive outputs. Effective leadership not only prioritizes the delegation of tasks, but also focuses on creating a collaborative shared vision to drive innovation and produce relevant and competitive publications.

The empirical foundation of this study is based on the findings of (Gupta et al., 2024; J.-H. Wang et al., 2024) which state that "Transformation in resource management is

instrumental in driving innovation in the education sector, including madrasahs. This happens through effective resource allocation, digitization of administrative processes, and continuous training for educators to match the needs of the digital generation.” Cross-institutional collaboration supports the exchange of ideas, capacity building, and dissemination of best practices that ultimately improve the quality of learning.

Philosophically, the transformation of visionary and collaborative leadership is in line with Islamic principles, especially related to the concept of trust that leaders carry (Rasheed et al., 2024; Rezaei et al., 2022). This refers to the word of Allah in Surah Al-Ahzab verse 72:

إِنَّا عَرَضْنَا الْأَمَانَةَ عَلَى السَّمَوَاتِ وَالْأَرْضِ وَالْجِبَالِ فَأَبَيْنَ أَنْ يَحْمِلْنَهَا وَأَشْفَقْنَ مِنْهَا وَحَمَلَهَا الْإِنْسَانُ إِنَّهُ كَانَ ظَلُومًا جَهُولًا
٧٢

(Indeed, We have offered a trust to the heavens, the earth, and the mountains, but all of them were reluctant to take it up and they feared that they would betray it, and man took up the trust. Indeed, man is very unjust and very foolish).

This concept is relevant to the visionary and collaborative leadership style that drives strategic and sustainable change in madrasah.

This leadership style transformation has a juridical basis in Law No. 20/2003 on the National Education System, especially in the article that requires educational institutions to create a system that is adaptive to technological developments and collaboration between institutions. Theoretically, this research is based on the theory of visionary and collaborative leadership described by (Vanlommel et al., 2023; F.-J. Wang et al., 2023; Zia et al., 2024). This theory emphasizes the importance of: Shared Vision, Empowering Collaboration, and Adaptive Leadership.

Research on the transformation of visionary and collaborative leadership styles in madrasah publication innovation has known been carried out by several researchers such as (Sweet, 2023) this has been carried out by several researchers There is little known how the transformation of visionary and collaborative leadership styles can specifically support publication innovation in madrasahs, especially how this is implemented in MAN 2 Banyuwangi. In addition, there is no study that focuses on how the synergy of collaborative leadership with local and regional education communities impacts on the reputation of madrasah. Research related to the transformation of visionary and collaborative leadership styles in madrasah publication innovation has become a widespread concern because of the important role of leadership in driving change and development of educational institutions. This leadership style is seen as capable of creating a clear vision, driving collaboration between stakeholders, and producing relevant innovations to improve the quality and competitiveness of madrasah. It is well known that visionary and collaborative leadership has an important role in education management to create innovation and improve organizational effectiveness. In addition, publication

innovation is also recognized as one of the strategic ways to build the reputation of educational institutions, especially at the madrasah level. Research by (Lassa et al., 2023; Rofiah & Suhendri, 2023) shows that collaboration between madrasah principals, teachers, and administrative staff can produce various publications and programs that are relevant to the needs of the community and have competitiveness at the local and national levels. Research on the transformation of visionary and collaborative leadership styles shows that this approach plays an important role in encouraging publication innovation in madrasahs, increasing program relevance and strengthening the competitiveness of educational institutions with a collaborative leadership strategy that integrates information technology approaches in madrasah publications to expand the network of partnerships and educational communities so that it becomes one of the most advanced practices today, although its implementation is still limited to certain contexts. On the other hand, the novelty of this research is in the disclosure of integrative strategies that connect resource management transformation, collaborative leadership, and publication innovation simultaneously in improving the educational community network and madrasah reputation, with a focus on implementation at MAN 2 Banyuwangi.

This study aims to interpret the transformation of visionary and collaborative leadership styles in madrasah publication innovation. This study aims to interpret the transformation of visionary and collaborative leadership styles because the role of leaders who prioritize vision and cooperation is indispensable in encouraging madrasah publication innovation. According to research (Kekeba et al., 2024; Shaikh & Alam Kazmi, 2022; Suyadi et al., 2022) the application of collaborative leadership style in madrasah increases participation and cooperation between madrasah principals, teachers, and education personnel, resulting in publication innovations that are in accordance with the needs of the community. This study aims to interpret the transformation of visionary and collaborative leadership styles needed to encourage innovation in madrasah publications, in order to create relevant, competitive, and in accordance with the needs of the community.

Visionary and collaborative leadership are in fact leadership styles that focus not only on short-term achievements, but also on building strong networks, effective resource management, and developing institutional reputation. Collaborative Leadership Strengthens Educational Community Networks: Research by (Docherty, 2022; Ma et al., 2024; Nadeem, 2024) shows that collaborative leadership increases trust and communication between various stakeholders in the education community. Studies (Ahmed, 2024; Amri et al., 2022) also found that the implementation of collaborative leadership in madrasahs leads to better cooperation between madrasah principals, teachers and parents, resulting in educational publications and programs that are more relevant to community needs. Transformation in Resource Management to Support Innovation: Research by (Beer, 2023; Re et al., 2024) shows that visionary leadership is capable of generating changes in the managerial way organizations manage resources. In the context of madrasahs, this transformation

includes strategic planning in budget allocation for innovation, capacity building of educators, and the use of educational technology to accelerate the teaching and learning process. Increased Reputation of Madrasahs: Research by (Kazim et al., 2024; Yousef Farhan, 2024) states that organizations led by visionary and collaborative leaders can strengthen their reputation by producing significant and result-oriented achievements. In addition, case studies in Finland published by (Alkhawaldeh, 2024; Konadu et al., 2024; Korankye et al., 2024) show that madrasahs that apply this leadership model successfully increase the level of community satisfaction and competitiveness, and contribute to the improvement of reputation in the eyes of the public. Based on the above, the author conducted research to find out how the transformation of visionary and collaborative leadership styles in madrasah publication innovation at MAN 2 Banyuwangi can be well implemented, and how theory and practice support the following findings: Transformation in Resource Management to Support Innovation, Collaborative Leadership to Strengthen Educational Community Network, and Madrasah Reputation Improvement. Thus, this research can contribute to the education management literature by providing a model for the implementation of visionary and collaborative leadership styles that are effective in supporting madrasah publication innovations, providing strategic recommendations for other madrasahs in utilizing resource management and collaboration, and increasing public trust in madrasah through strengthening the institution's reputation.

B. Methods

The object of this research is the publication innovation of MAN 2 Banyuwangi, because it reflects the relevance of strategic issues in the world of modern education. (Haddade et al., 2024) The transformation of visionary and collaborative leadership styles is considered important to answer the challenges of innovation in madrasah, especially in improving the quality of relevant and competitive publications. Publication, as one of the indicators of the progress of educational institutions, requires a touch of leadership that is able to direct the vision and mobilize the cooperation of all stakeholders. In addition, this title integrates key elements such as transformation, leadership and innovation, which are the main focus in the research. With this approach, the research is expected to make a new contribution to scientific studies and educational practices, especially in supporting the development of madrasahs that are adaptive to the needs of society and the times.

This research uses a qualitative approach with a case study method (Johnson et al., 2024) to examine the transformation of visionary and collaborative leadership styles in publication innovation in madrasah. This research involved madrasahs that apply these leadership styles as units of analysis, with the aim of exploring in-depth understanding of existing leadership practices and their impact on publication innovation. Data collection techniques are conducted through in-depth interviews with madrasah principals and teachers, as well as direct observation of activities

related to publications in madrasah. The results of this study are expected to provide insight into effective leadership models to improve the quality of publications in madrasahs and strengthen their competitiveness.

The sources of informants in this study consist of various parties who are directly involved in the implementation of leadership and publication innovations in madrasah. The main informants include the madrasah principal who has a strategic role in formulating the leadership vision, as well as teachers who contribute directly to the learning process and the development of academic publications (Brown, 2022). In-depth interviews with these informants are expected to provide insights into how the applied leadership influences innovation and the improvement of publication quality in madrasah.

Data collection in this study was carried out through various techniques to obtain comprehensive information about the transformation of visionary and collaborative leadership styles in madrasah publication innovation. First, in-depth interviews were conducted with the madrasah principal, and teachers. In addition, direct observation was conducted on daily activities in the madrasah, including the process of creating and disseminating academic publications, to see how leadership is applied in practice. Documentation of madrasah publications was also collected to analyze the extent to which the innovations made have contributed to the quality and competitiveness of these publications. The data obtained from these various sources were then interactively analyzed to identify patterns related to the influence of leadership styles on the innovation of madrasah publications (Waquar et al., 2024).

The data analysis in this study uses the interactive analysis model developed by (Gromis di Trana et al., 2022; Moskvina et al., 2024; Reichardt et al., 2024) which involves three main stages: data collection, reduction, and presentation. In the first stage, data obtained from in-depth interviews, observations, and publication documentation were analyzed continuously. In the second stage, data reduction was conducted by categorizing and arranging the data according to the main themes that emerged, such as aspects of visionary leadership, collaboration, and publication innovation. In the third stage, the results of the analysis are presented in an interactive form that illustrates the patterns that emerge in the application of leadership in madrasah. The final result of this analysis is expected to provide a comprehensive picture of the influence of leadership in creating positive changes in the madrasah environment.

The validity of the data in this study has been carried out by several researchers such as (Given et al., 2023; Kumar et al., 2023; Papavasileiou & Dimou, 2024) and maintained by using a source triangulation technique involving three types of triangulation: source, method, and theory. With this triangulation approach, it is expected that the research results will be more credible and provide an in-depth understanding of the influence of leadership on publication innovation in madrasah.

C. Results and Discussion

Transformation in Resource Management to Support Innovation

Visionary and collaborative leadership are rooted in the ability to drive transformation in resource management aimed at supporting innovation. Visionary leaders set strategic direction by paying attention to managing human, technological and financial resources effectively, while collaborative approaches create a work environment that supports synergy between organizational elements. As stated by the madrasah head, namely: "Visionary and collaborative leadership have a central role in ensuring optimal resource management to support innovation. As a visionary leader, my main task is to set the strategic direction and ensure that human, technological and financial resources are managed effectively for long-term goals. Meanwhile, through a collaborative approach, I create a working environment that supports synergy between elements of the organization. In this way, transformation in resource management can be realized, ultimately facilitating sustainable growth in innovation."

With the transformation in resource management, innovation can grow sustainably and have a positive impact on achieving organizational goals. (Cardiff et al., 2024; He et al., 2024; Nicoletti & Appolloni Andrea, 2024) show that collaborative leadership strengthens the resource transformation process by ensuring the active involvement of various stakeholders, thus creating an effective mechanism to support innovation within the organization. The implementation of AKGTK 2024 is clear evidence that MAN 2 Banyuwangi is a dynamic and future-oriented education center, ready to produce competent and dedicated educational leaders, because it is supported by a madrasah head who supports resource management in an effort to support madrasah innovation through visionary and collaborative leadership styles.



Figure 1. MAN 2 Banyuwangi to host (AKGTK) in 2024

Source: <https://man2banyuwangi.sch.id/>

Based on the picture above, it is the documentation of the Head of TU of the Ministry of East Java which was attended by thousands of teachers to monitor the implementation of AKGTK 2024 at the MAN 2 Banyuwangi location point. from this assessment, a complete madrasah competency profile will be produced as well as a foothold for the directorate in encouraging continuing professional development (PKB) through the work groups it participates in. as expressed by madrasah teachers, namely: "Visionary and collaborative leadership is very important in creating a work environment that supports the transformation of resource management in our madrasah. Visionary leaders ensure that we have clear strategic guidelines, such as prioritizing educator training and utilizing technology in our work processes. Meanwhile, the collaborative approach makes all elements, including administrative staff like me, feel involved in decision-making and policy implementation. This collaboration creates synergies that make it easier to carry out daily tasks, especially in supporting major activities such as the 2024 Assessment of Teacher and Education Personnel Competitions (AKGTK)."

This evidence is one of the findings that visionary and collaborative leadership is not caused by the absence of Transformation in Resource Management to Support Innovation, but by the presence of Transformation in Resource Management to Support Innovation, visionary and collaborative leadership effectively supports the transformation of resource management, which is the main foundation in supporting continuous innovation to achieve organizational goals.

Collaborative leadership strengthens education community networks

Collaborative leadership not only serves as a mechanism to unite internal organizational resources but also plays an important role in strengthening the education community network. With a collaborative approach, a leader can create synergy between various stakeholders such as schools, madrasahs, local communities and related agencies. This creates stronger linkages and enables the exchange of ideas and resources, thereby strengthening the capacity of the education community to achieve common goals. As expressed by the madrasah principal as follows: "Collaborative leadership has a very important role, especially in creating synergy between the various parties involved in education. As a leader, I believe that building strong linkages between schools, madrasahs, local communities and related agencies is key. Through a collaborative approach, we can facilitate the exchange of ideas and resources that will strengthen the capacity of the education community. With good cooperation between various stakeholders, common goals in education can be achieved more efficiently."

According to research by (Al-Khayari et al., 2024; Cremers & Curşeu, 2024; McKinnon & Long, 2022) collaborative leadership plays an important role in building trust among stakeholders, which in turn strengthens collaborative networks through intensive communication and active participation. As evidence of this

finding in the form of documentation, MAN 2 Banyuwangi actively collaborates with various parties. One of them is by participating in vocational training at BPVP Banyuwangi.



Figure 2. MAN 2 Banyuwangi actively cooperates with various parties

Source: <https://man2banyuwangi.sch.id/>

Based on the picture above, the head of the Productivity Vocational Training Center explains in detail about each training program. Various skills are present in this training center, such as graphic design training, bread making, hydroponics to sewing. MAN 2 Banyuwangi was also invited to take a tour to see the training programs in action. MAN 2 Banyuwangi plans to develop students' skills through several activity programs that will be implemented in collaboration with BPVP. As expressed by the head of madrasah about collaborative relationships, "Of course, one example that I would like to share is how we at MAN 2 Banyuwangi actively collaborate with various parties, especially in vocational training programs. We conduct training in collaboration with BPVP Banyuwangi, which provides opportunities for students to hone vocational skills that are needed in the world of work. By joining this training, we not only improve our students' skills, but also strengthen our network with other parties who share the same vision and mission in advancing vocational education. This is a tangible form of synergy between schools and related agencies that leads to improved education quality." The following is evidence of the table list, the efforts of the MAN 2 Banyuwangi madrasah principal in strengthening the educational community network with various external parties as follows:

Table 1. The Efforts of the MAN 2 Banyuwangi Madrasah Principal in Strengthening the Educational Community Network

No	Collaboration Partner	Form of Collaboration	Purpose
1	University of Jember (UNEJ)	Workshop on curriculum development	Enhancing innovation in education aligned with current trends
2	Banyuwangi District Education Office	Teacher training on digital learning	Strengthening teachers' capacity in utilizing technology
3	Ministry of Religious Affairs (MoRA)	Seminar on strengthening religious values in schools	Integrating religious values into all aspects of education
4	Banyuwangi Teachers Community (KGB)	Teacher discussion forums and educational workshops	Improving collaboration among teachers in sharing teaching methods
5	State University of Malang (UM)	Training on data-driven school management	Increasing efficiency and effectiveness in school management
6	National Disaster Management Agency (BNPB)	Seminar on school disaster preparedness	Building disaster awareness and emergency readiness culture
7	Banyuwangi Education Community	Mentoring programs for students and teachers	Guiding students and teachers to maximize their potential
8	Banyuwangi Vocational Training Center (BLK)	Vocational training for students	Equipping students with practical skills relevant to the workforce
9	Banyuwangi Regency Government	Seminars and workshops on student leadership	Shaping leadership qualities in young generations

Based on the table above, through various forms of cooperation, MAN 2 Banyuwangi has succeeded in creating an educational ecosystem that supports the development of student and teacher competencies, improving the quality of management, and strengthening community values. This collaborative leadership contributes to the creation of innovation and synergy to advance education in the Banyuwangi region, especially MAN 2 Banyuwangi.

Collaborative leadership is not caused by Collaborative Leadership weakening the Education Community Network, but by Collaborative Leadership strengthening the Education Community Network. Collaborative leadership plays an important role in strengthening educational community networks through synergy, intensive communication and resource exchange that create strong linkages between stakeholders to achieve common goals.

Madrasah Reputation Improvement

Visionary and collaborative leadership directly contribute to improving the reputation of madrasahs through creating a strong strategic vision and involving all stakeholders in the innovation process. Visionary leaders set long-term goals that encourage academic progress, professionalism of teaching staff, and curriculum development. Meanwhile, the collaborative approach ensures the involvement of the community, staff and students, so that the madrasah is able to produce significant

achievements that are relevant to the needs of the community. As expressed by the head of madrasah, "Visionary and collaborative leadership have a significant influence on improving the reputation of madrasah. Visionary leadership allows us to set clear long-term goals, such as promoting academic progress, improving the professionalism of teaching staff, and developing a curriculum that is relevant to the needs of the times. Meanwhile, the collaborative approach opens up space for the active involvement of all stakeholders - staff, students, community and related agencies. This combination has a great impact, as it results in program innovations that are relevant to the needs of the community as well as achievements that strengthen the image of madrasah as a quality institution."

Meanwhile, the collaborative approach ensures the involvement of the community, staff and students, so that madrasahs are able to produce significant achievements that are relevant to the needs of society. This combination not only improves but also enhances the reputation of madrasahs as competitive and quality institutions. Research conducted by (Ahmed, 2024; Hacıhasanoglu & Toprak, 2024; Huda, 2024) shows that madrasahs led with a collaborative approach tend to have program innovations oriented to the needs of the community, such as increased academic publications and student achievement, which contribute to the improvement of reputation. visionary and collaborative leadership is not caused by the decline of madrasah reputation, but by the increase in Madrasah Reputation. Visionary and collaborative leadership contribute to the improvement of madrasah reputation through strategic vision, innovation, and stakeholder engagement that results in relevant achievements and a quality institutional image.

The following table can be used to record a list of MAN 2 Banyuwangi's achievements:

No	Year	Achievement	Level	Description
1	2024	1st Place in National Science Olympiad	National	Organized by the Indonesian Ministry of Religious Affairs
2	2022	General Champion in Science Olympiad	East Java	In Mathematics, Physics, and Chemistry
3	2022	Best School in Innovative Learning Category	National	Awarded by the Directorate General of Islamic Education
4	2022	Gold Medal Winner	National	By the Nusantara Olympiad Association
5	2024	1st Place in Scientific Writing Competition	National	By HIMA Bacteriophage - FMIPA - Universitas Negeri Jember
6	2019	Green School Award	Banyuwangi	For being an eco-friendly school with a zero waste program
7	2018	3rd Place in Youth Scientific Work Contest	East Java	Themed on Eco-Friendly Technology
8	2017	1st Place in Arabic Speech Competition	National	Organized by the Association of Arabic Language Teachers

Based on the table above, it is a series of achievements achieved by MAN 2 Banyuwangi which reflects the success of madrasah in creating a superior and competitive educational environment. The leadership of the madrasa head with a

visionary and collaborative style, MAN 2 Banyuwangi is able to encourage synergy between all elements of the madrasa, including teachers, students, and education personnel. As expressed by madrasa teachers regarding Madrasah Reputation Improvement, namely "Visionary and collaborative leadership at MAN 2 Banyuwangi is very influential in improving the reputation of our madrasa. With visionary leadership, long-term goals are strategically designed to encourage academic progress, teacher professionalism, and innovation in curriculum development. On the other hand, the collaborative approach makes us, the teachers, as well as the community and students feel involved in the process of planning and implementing various programs. As a result, the madrasah has been able to achieve achievements that are relevant to the needs of the community, which of course enhances our reputation as a competitive institution."

This evidence is one of the findings that visionary and collaborative leadership is not caused by the decline of madrasah reputation, but by the increase in Madrasah Reputation. Visionary and collaborative leadership contributes to the improvement of madrasah reputation through strategic vision, innovation, and stakeholder engagement that results in relevant achievements and a quality institutional image.

D. Conclusions

Collaborative leadership plays a central role in strengthening educational community networks through synergy and collaboration among stakeholders such as teachers, administrative staff, students and the local community. This research shows that collaboration based on effective communication and mutual trust not only strengthens internal relationships within the madrasah but also forges strategic partnerships with external organizations. An important lesson from this research is that collaborative leadership can create more solid linkages, open up spaces for resource sharing and optimize the collective capabilities of educational communities in the face of global challenges and changes.

Transformation in resource management proved to be an important element in supporting innovation in madrasahs. This research updates the perspective by illustrating how visionary and collaborative leadership can improve the management of human, technological and financial resources to generate sustainable renewal. Using an analytical method that focuses on cross-functional relationships, it was found that madrasah innovations, such as digital-based publications and flagship programs, rely heavily on strategic resource management. The findings are relevant to the development of leadership theory in the context of collaboration and innovation-based education.

While this study shows that visionary and collaborative leadership enhances madrasah reputation through achievement and innovation, there are some limitations. This study focused on madrasahs with active community participation,

which may not be representative of institutions with different contexts. In addition, the qualitative method approach can be improved with the addition of quantitative data to produce a more comprehensive analysis. Further research covering different types of madrasahs, different ages of respondents, and different methods is recommended to enrich the understanding of the impact of leadership on madrasah reputation.

E. Acknowledgement

We would like to thank KH Mukhtar Syafaat University for providing support and contributions, as well as MAN 2 Banyuwangi for the assistance of data and facilities, both directly and indirectly, so that this article can be completed properly.

References

- Ahmed, E. I. (2024). Principals' leadership styles and teachers' organizational citizenship behaviour: a systematic review of research. *International Journal of Educational Management*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/IJEM-08-2024-0508>
- Al-Khayari, N. M., Yousefi, M., & Aigbogun, O. (2024). A predictive model for collaborative leadership in digital transformation: Does it make a difference in Oman's e-government performance? *Foresight*, 26(5), 775–792. <https://doi.org/10.1108/FS-08-2023-0163>
- Alkhawaldeh, K. (2024). The impact of visionary leadership on product quality from the perspective of quality assurance managers in small and medium-sized companies: the mediating role of continual improvement. *The TQM Journal*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/TQM-02-2024-0081>
- Amri, A., Lassa, J. A., Tebe, Y., Hanifa, N. R., Kumar, J., & Sagala, S. (2022). Pathways to Disaster Risk Reduction Education integration in schools: Insights from SPAB evaluation in Indonesia. *International Journal of Disaster Risk Reduction*, 73, 102860. <https://doi.org/https://doi.org/10.1016/j.ijdr.2022.102860>
- Ba, Y., Nair, S., & Kedia, M. (2024). Cross-sector collaboration, nonprofit readiness, and sustainability transitions. *Environmental Innovation and Societal Transitions*, 53, 100933. <https://doi.org/https://doi.org/10.1016/j.eist.2024.100933>
- Beer, M. (2023). Developing a Sustainable High-Commitment, High-Performance System of Organizing, Managing, and Leading: An Actionable Systems Theory of Change and Development. In D. A. Noumair, A. B. (Rami) Shani, & D. P. Zandee (Eds.), *Research in Organizational Change and Development* (Vol. 30, pp. 95–128). Emerald Publishing Limited. <https://doi.org/10.1108/S0897-301620220000030006>
- Brown, B. A. (2022). Teaching Approaches, Social Support, and Student Learning in Non-traditional Classrooms in Higher Education. In B. A. Brown & A. Irons (Eds.), *The Emerald Handbook of Higher Education in a Post-Covid World: New*

- Approaches and Technologies for Teaching and Learning* (pp. 71–106). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-193-120221004>
- Cardiff, S., Van Der Zijpp, T., van den Nieuwenhoff, H., & Nieboer, M. (2024). Collaborating for co-researching: A multi-stakeholder case narrative of student nurses co-researching technology-supported care. *Nurse Education in Practice*, 80, 104097. <https://doi.org/10.1016/j.nepr.2024.104097>
- Cremers, E. E., & Curşeu, P. L. (2024). Organizational value streams as multiteam systems: an ethnographic case study. *Journal of Organizational Ethnography*, 13(3), 372–392. <https://doi.org/10.1108/JOE-04-2024-0016>
- Docherty, K. (2022). Enhancing Collaboration. In J. Diamond & J. Liddle (Eds.), *Reimagining Public Sector Management* (Vol. 7, pp. 31–54). Emerald Publishing Limited. <https://doi.org/10.1108/S2045-794420220000007004>
- Given, L. M., Case, D. O., & Willson, R. (2023). Research Design, Methodologies, and Methods. In *Looking for Information* (Vol. 15, pp. 179–235). Emerald Publishing Limited. <https://doi.org/10.1108/S2055-53772023005>
- Gromis di Trana, M., Fiandrino, S., & Yahiaoui, D. (2022). Stakeholder engagement, flexible proactiveness and democratic durability as CSR strategic postures to overcome periods of crisis. *Management Decision*, 60(10), 2719–2742. <https://doi.org/10.1108/MD-08-2021-1012>
- Gupta, M., Kumar, P., & Mishra, A. (2024). A Review of the Discussion on Digital Transformation in Higher Education. In M. D. Lytras, A. C. Serban, A. Alkhalidi, S. Malik, & T. Aldosemani (Eds.), *Digital Transformation in Higher Education, Part B* (pp. 197–229). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83608-424-220241008>
- Hacihasanoglu, O., & Toprak, I. (2024). Location-based examination of the characteristics of university campuses in Istanbul. *Archnet-IJAR: International Journal of Architectural Research*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/ARCH-02-2024-0040>
- Haddade, H., Nur, A., Achruhu, A., Rasyid, M. N. A., & Ibrahim, A. (2024). Madrasah management strategies through Madrasah Reform program: an evidence from Indonesia. *International Journal of Educational Management*, 38(5), 1289–1304. <https://doi.org/10.1108/IJEM-05-2023-0236>
- He, Y., Li, F., & Liu, X. (2024). Research progress on the evaluation mechanism of scientific research teams in the digital economy era. *Journal of Internet and Digital Economics*, 4(3), 218–241. <https://doi.org/10.1108/JIDE-04-2024-0016>
- Huda, M. (2024). Trust as a key element for quality communication and information management: insights into developing safe cyber-organisational sustainability. *International Journal of Organizational Analysis*, 32(8), 1539–1558. <https://doi.org/10.1108/IJOA-12-2022-3532>
- Johnson, K. R., Nery-Kjerfve, T., Yeager, K., & McLean, G. N. (2024). Qualitative research in the Academy of Human Resource Development-sponsored journals. *European Journal of Training and Development*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/EJTD-06-2024-0073>
- Kazim, S. M., AlGhamdi, S. A., Lytras, M. D., & Alsaywid, B. S. (2024). Nurturing

- Future Leaders: Cultivating Research and Innovation Skills in Saudi Scientific Community. In S. Baroudi & M. D. Lytras (Eds.), *Transformative Leadership and Sustainable Innovation in Education: Interdisciplinary Perspectives* (pp. 231–265). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-536-120241015>
- Kekeba, S. K., Gure, A., & Olkaba, T. T. (2024). Effects of jigsaw learning strategy integrated with computer simulations on grade 10 students' achievement and attitude and their correlations in chemistry. *Interactive Technology and Smart Education, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/ITSE-01-2024-0002>
- Konadu, K., Opoku Mensah, A., Koomson, S., Abraham, E. M., Nkrumah, E. N. K., Amuzu, J., Agyapong, J.-A. M., Bempong, A. E., & Munkaila, A. (2024). An empirical investigation into how employee integrity shapes work performance in the public sector. *International Journal of Ethics and Systems, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/IJOES-12-2023-0285>
- Korankye, B., Hao, Y., Borah, P. S., Odai, L. A., & Ahakwa, I. (2024). Transformational leadership, ESG performance, corporate reputation and competitive advantage: a serial mediation model. *Business Process Management Journal, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/BPMJ-08-2024-0692>
- Kumar, A., Shrivastav, S. K., & Bhattacharyya, S. (2023). Measuring strategic fit using big data analytics in the automotive supply chain: a data source triangulation-based research. *International Journal of Productivity and Performance Management*, 72(10), 2977–2999. <https://doi.org/10.1108/IJPPM-11-2021-0672>
- Lassa, J. A., Amri, A., Tebe, Y., Towers, B., & Haynes, K. (2023). Exploring NGOs-government collaboration strategies in institutionalising child-centred disaster resilience and climate change adaptation. *Progress in Disaster Science*, 18, 100284. <https://doi.org/https://doi.org/10.1016/j.pdisas.2023.100284>
- Ma, L., Yao, H., & Sun, M. (2024). Distributed leadership mirrors teacher professionalism via collaborative learning and relational trust: evidence from China. *Journal of Professional Capital and Community*, 9(4), 340–362. <https://doi.org/10.1108/JPCC-11-2023-0076>
- McKinnon, M. N., & Long, B. S. (2022). Leading with two eyes: leadership failures and possibilities in the management of a pulp mill's wicked problem. *Qualitative Research in Organizations and Management: An International Journal*, 17(3), 318–339. <https://doi.org/10.1108/QROM-01-2022-2278>
- Moskvina, J., Hanea, A., Vedluga, T., & Mockevičienė, B. (2024). Frugal Innovation as Intersection between Complexity of Early Cost Estimation, Machine Learning and Expert-Based Decision System. In B. Mockevičienė (Ed.), *Participation Based Intelligent Manufacturing: Customisation, Costs, and Engagement* (pp. 151–238). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83797-362-020241006>
- Nadeem, M. (2024). Distributed leadership in educational contexts: A catalyst for school improvement. *Social Sciences & Humanities Open*, 9, 100835. <https://doi.org/https://doi.org/10.1016/j.ssaho.2024.100835>

- Nicoletti, B., & Appolloni Andrea. (2024). Digital transformation in ecosystems: integrated operations model and its application to fifth-party logistics operators. *Journal of Global Operations and Strategic Sourcing*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/JGOSS-04-2023-0024>
- Papavasileiou, E. F., & Dimou, I. (2024). Evidence of construct validity for work values using triangulation analysis. *EuroMed Journal of Business*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/EMJB-10-2023-0287>
- Parra-López, C., Reina-Usuga, L., Garcia-Garcia, G., & Carmona-Torres, C. (2024). Functional analysis of technological innovation systems enabling digital transformation: A semi-quantitative multicriteria framework applied in the olive sector. *Agricultural Systems*, 214, 103848. <https://doi.org/https://doi.org/10.1016/j.agry.2023.103848>
- Rabelo Neto, J., Figueiredo, C., Gabriel, B. C., & Valente, R. (2024). Factors for innovation ecosystem frameworks: Comprehensive organizational aspects for evolution. *Technological Forecasting and Social Change*, 203, 123383. <https://doi.org/https://doi.org/10.1016/j.techfore.2024.123383>
- Rasheed, A. A., Albattat, A., & Azam, S. M. F. (2024). Contextual factors and virtual professional learning communities in Maldivian schools. *International Journal of Educational Management*, 38(2), 486–508. <https://doi.org/10.1108/IJEM-12-2022-0492>
- Re, B., Sanguineti, F., & Previtali, P. (2024). Navigating organizational change through a processual perspective on the transition toward the circular economy: Save The Duck case study. *Journal of Organizational Change Management*, 37(8), 77–93. <https://doi.org/https://doi.org/10.1108/JOCM-05-2024-0248>
- Reichardt, A., Murawski, M., & Bick, M. (2024). The use of the Internet of Things to increase energy efficiency in manufacturing industries. *International Journal of Energy Sector Management*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/IJESM-12-2023-0017>
- Rezaei, M., Ferraris, A., Busso, D., & Rizzato, F. (2022). Seeking traces of democracy in the workplace: effects on knowledge sharing. *Journal of Knowledge Management*, 26(10), 2528–2557. <https://doi.org/10.1108/JKM-02-2021-0103>
- Rofiah, N. H., & Suhendri. (2023). The Progress of Inclusive Education Toward Agenda 2030 in Indonesia. In D. Lane, N. Catania, & S. Semon (Eds.), *Progress Toward Agenda 2030* (Vol. 21, pp. 191–207). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-363620230000021013>
- Shaikh, A. L., & Alam Kazmi, S. H. (2022). Exploring marketing orientation in integrated Islamic schools. *Journal of Islamic Marketing*, 13(8), 1609–1638. <https://doi.org/10.1108/JIMA-11-2019-0241>
- Suyadi, Nuryana, Z., Sutrisno, & Baidi. (2022). Academic reform and sustainability of Islamic higher education in Indonesia. *International Journal of Educational Development*, 89, 102534. <https://doi.org/https://doi.org/10.1016/j.ijedudev.2021.102534>
- Sweet, S. F. (2023). Leading Transformational Change in Diversity, Equity, and Inclusion in Higher Education. In G. Jean-Marie & H. Tran (Eds.), *Leadership in*

- Turbulent Times* (pp. 13-35). Emerald Publishing Limited.
<https://doi.org/10.1108/978-1-83753-494-420231002>
- Vanlommel, K., van den Boom-Muilenburg, S. N., Thesingh, J., & Kikken, È. (2023). How a sense of collective efficacy influences teacher learning during change: the role of academic optimism and shared vision. *Journal of Professional Capital and Community*, 8(1), 1-16. <https://doi.org/10.1108/JPCC-03-2022-0018>
- Wang, F.-J., Chiu, W., Tseng, K.-F., & Cho, H. (2023). The roles of employee-employee collaboration and employee-customer collaboration in fitness service innovation: a comparison of frontline and non-frontline employees. *International Journal of Sports Marketing and Sponsorship*, 24(4), 793-813. <https://doi.org/10.1108/IJSMS-12-2022-0206>
- Wang, J.-H., Dai, X., Wu, Y.-H., & Chen, H. L. (2024). Innovation strategies and financial performance: a resource dependence perspective for Fintech management decision-making. *Journal of Organizational Change Management*, 37(7), 1510-1534. <https://doi.org/10.1108/JOCM-03-2023-0054>
- Waquar, A., Sujood, Kareem, S., Yasmeen, N., & Hussain, S. (2024). From traditional to virtual classrooms: unravelling themes and shaping the future of metaverse education. *Interactive Technology and Smart Education, ahead-of-p(ahead-of-print)*. <https://doi.org/10.1108/ITSE-02-2024-0032>
- Yousef Farhan, B. (2024). Visionary leadership and innovative mindset for sustainable business development: Case studies and practical applications. *Research in Globalization*, 8, 100219. <https://doi.org/https://doi.org/10.1016/j.resglo.2024.100219>
- Zia, M. Q., Ramish, M. S., Mushtaq, I., Fasih, S. T., & Naveed, M. (2024). Abusive, arrogant and exploitative? Linking despotic leadership and adaptive performance: the role of Islamic work ethics. *Leadership & Organization Development Journal*, 45(7), 1258-1280. <https://doi.org/10.1108/LODJ-11-2023-0635>

Transformational Leadership in Changing the Education Paradigm: Improving the Quality of Alpha Generation Student

Ahmad Danial Karomi¹, Mamlukhah¹

¹Universitas KH Mukhtar Syafaat Blokagung Banyuwangi, East Java, Indonesia

Corresponding author e-mail: danielkaromi03@gmail.com

Article History: Received on 15 November 2024, Revised on 2 January 2025,
Published on 28 January 2025

Abstract: This study aims to interpret transformational leadership in changing the educational paradigm, namely in improving the quality of learning of alpha generation madrasah aliyah students. The research design used is qualitative research with a case study method. The sources of informants in this study consisted of principals, teachers, students, and student guardians. Data collection in this study was conducted through three main methods, namely in-depth interviews, participatory observation, and document analysis. The results of this study show that transformational leadership at MAN 2 Banyuwangi has succeeded in changing the educational paradigm, namely in improving the quality of learning through soft skills development, digital learning hub development, and multimodal literacy development. The novelty in this research is the concept of transformational leadership that contributes to the quality of learning. The contribution of this study shows that the application of transformational leadership in Madrasah Aliyah can significantly change the educational paradigm.

Keywords: Alpha Generation, Learning Quality, Transformational Leadership

A. Introduction

Transformational leadership does not only focus on technological innovation in education, but on the formation of adaptive and collaborative values that can prepare alpha generation students to face the challenges of a changing world. Transformational leadership aims to create fundamental changes that are not only technical but also touch the character aspects and basic values of students. In the context of the alpha generation living in an era of renewal and fast shifting dynamics, the formation of adaptive and collaborative values is key so that they are not only skilled in technology, but also able to work together and adapt in various social and professional environments. A study developed by (Butcher et al., 2024; Hilarowicz et al., 2023; Shahzad, 2024) shows that adaptation skills are one of the core competencies needed in the future, especially in the face of digital transformation and automation. Transformational leadership supports the formation of these skills through project-based learning and real problem simulations. Thus, transformational leadership not only focuses on technological innovation, but also

forms adaptive and collaborative values as the main foundation to prepare alpha generation students to face the challenges of dynamic global change. The phenomenon is a change in the current educational paradigm.

A change in the educational paradigm in accordance with the needs of students will result in students experiencing a shift in thinking. The educational paradigm is a framework of thought that underlies the implementation of education to build holistic individuals. So that the existence of transformational leadership is one of the efforts to minimise the existence of paradigms in education. This concept is illustrated in the concept of humans as caliphs on earth who are responsible for leading and are given the ability to bring about changes in accordance with the contents of surah Al Baqarah/2 verse 30:

وَإِذْ قَالَ رَبُّكَ لِلْمَلَكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً قَالُوا أَتَجْعَلُ فِيهَا مَنْ يُفْسِدُ فِيهَا وَيَسْفِكُ الدِّمَاءَ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ قَالَ
إِنِّي أَعْلَمُ مَا لَا تَعْلَمُونَ ٣٠

Meaning: (Remember) when your Lord said to the angels, "I want to make a caliph on earth." They said, "Do you intend to make therein one who will destroy and shed blood, while we praise you and sanctify your name?" He said, "I know what you do not know."

This is relevant to transformational leadership that is influential in the educational paradigm, by preparing the alpha generation to become future leaders who improve the quality of learning in madrasah aliyah. Transformational leadership aims to create an innovative, collaborative and adaptive learning environment for the alpha generation in line with Permendikbud 22 of 2016 which stipulates that

Process standards for primary and secondary education should be student-centred, support the development of learners' potential, and encourage active learning.

To achieve the quality of learning in accordance with the characteristics and needs of alpha generation students requires a leader who has a transformational leadership style based on bass theory found in (Njaramba, 2024; Ridic et al., 2024) which reveals that transformational leadership theory emphasises the importance of Inspirational Motivation, Idealised Influence, Intellectual Stimulation, Individualised Consideration. This theory is relevant for transformational leaders in changing the educational paradigm to be more adaptive to the needs of the alpha generation.

Research on transformational leadership has been one of the effective leadership approaches in creating significant change in various organizations, including educational institutions and has been conducted by several researchers such as (Armiyanti et al., 2023; Efendi et al., 2023; Restu Rahayu & Sofyan Iskandar, 2023) this is because this study is the main concern of the researcher because the benefits of transformational leadership are very relevant to significant changes. Although many studies have highlighted the benefits of transformational leadership, specific studies on its implementation in changing the educational paradigm are still very limited. How transformational leadership can be implemented significantly to develop the quality of learning of alpha generation students in madrasah aliyah has not been widely discussed in the literature. So the novelty in this study is the concept of

transformational leadership that contributes to the quality of alpha generation student learning. This focus reflects the importance of leadership models that are able to deal with modern educational challenges, such as personalisation of learning, advanced technology and the value of collaboration. With the increasing demands of the digital age and national education policies, it is important to explore leadership strategies that can support educational transformation. Recent research conducted by (Nalmpanti et al., 2024; Polatcan et al., 2024; Sliwka et al., 2024) revealed that transformational leadership has a major involvement in developing the quality of learning through the creation of a collaborative and innovative culture in schools. Transformational leadership in education is an interesting research subject because of its ability to create an innovative, technology adaptive learning environment and focus on developing students socio emotional values, especially in facing the demands of alpha generation learning in the digital era.

This research aims to interpret transformational leadership in changing the education paradigm, namely in improving the quality of learning for alpha generation students. The alpha generation lives in the midst of rapid technological, social and cultural changes, so the conventional education paradigm needs to be updated with a leadership approach that encourages innovation, creativity and collaborative values. Transformational leadership offers a relevant approach by building a collective vision, empowering individuals, and providing learning facilities that are responsive to the unique characteristics of the alpha generation. In studies (Hoang & Le, 2024; Nguyen et al., 2023; Raziq et al., 2024) this research shows that transformational leadership directly influences the culture of educational organisations by encouraging innovation and improving the quality of learning processes. This research confirms that transformational leadership is a necessary solution to answer the challenges in the modern era by building a shared vision, empowering individuals, and creating innovative learning environments to improve the quality of learning of alpha generation students.

Factually, transformational leadership has leadership characteristics that can change the educational paradigm in madrasah aliyah by empowering all madrasah residents to innovate, so that the quality of madrasah aliyah learning can improve through soft skills development, digital learning hub development, and multimodal literacy. In this context, soft skills development is the main focus, given the importance of skills as expressed by (Dias-Oliveira et al., 2024; Herlinawati et al., 2024; Orr & Lavy, 2024) In this context, the development of soft skills is a key focus, given the importance of skills as expressed by (Dias-Oliveira et al., 2024; Herlinawati et al., 2024; Orr & Lavy, 2024) in their research skills such as intelligence, collaboration, and emotional capability will be crucial in the future. Transformational leadership can facilitate the improvement of these soft skills by providing space for students to engage in extracurricular activities, team-based projects, and personal development training. In addition, the development of digital learning hub that provide access to relevant technology based learning platforms,

recent research from (Al-Adwan et al., 2024; Anwar & Saraih, 2024) shows that school leaders who apply transformational leadership styles are more likely to adopt technology to support learning and create digital platforms to access educational resources easily and effectively. Digital learning hub enable students to learn independently through digital resources, such as e-learning, online discussion forums and other multimedia resources. A study published by (Cheng & Wang, 2023; Lim et al., 2022; Valderrama Polo, 2021) showed that multimodal literacy taught in schools can improve students critical thinking and problem-solving skills. Transformational leadership can support this by creating a curriculum that integrates different forms of media and technology in learning. With several programs that have been implemented at MAN 2 Banyuwangi, it will be known how transformational leadership is able to change the educational paradigm in developing the quality of alpha generation student learning. This includes the development of soft skills, digital learning hubs, and multimodal literacy as a solution that suits the demands of alpha generation students. Based on this, the research question posed in this study is to find out how transformational leadership is involved in managing changes in the educational paradigm at MAN 2 Banyuwangi and how related theories and practices can be implemented to support the optimal quality of alpha generation student learning.

B. Methods

The object of this research is the alpha generation of MAN 2 Banyuwangi because of its relevance to the challenges and needs of education in the modern era (Khasanah, 2023). The alpha generation, born amidst technological advances and rapid social change, requires innovative and adaptive educational approaches. Transformational leadership, with its visionary, inspirational and change-driving characteristics, is considered capable of changing the conventional education paradigm to better suit the needs of this generation. The transformation aims to improve the quality of learning with methods that are more contextualized, technology-based and support the maximum potential of students. This research has both academic and practical significance, not only contributing to the development of educational leadership theory but also offering concrete solutions to learning challenges for future generations.

The research design used in this study is qualitative research with a case study method (Given et al., 2023). This research aims to deeply understand how transformational leadership is applied in changing the educational paradigm to improve the quality of learning for alpha generation students. This design allows researchers to explore the phenomenon holistically, providing a clear picture of the implementation and impact of transformational leadership in the context of modern education.

The sources of informants in this study were purposively selected to ensure the data

obtained were relevant and in depth (Akhter, 2022). The principal is the one who implements transformational leadership, teachers are directly involved in the learning process, as well as alpha generation students as the main beneficiaries of the educational paradigm shift. In addition, student guardians were also involved as supporting informants to provide perspectives on the impact of educational transformation outside the school environment. The selection of informants was based on certain criteria, such as their experience in the context of transformational leadership implementation and active involvement in the learning process. By involving various perspectives, this research is expected to provide comprehensive results regarding the implementation and impact of transformational leadership in improving learning quality.

Data collection in this study was conducted through three main methods, namely in-depth interviews, participatory observation, and document analysis (Khoa et al., 2023). In depth interviews were conducted with principals, teachers, students and parents to explore their views, experiences and perceptions regarding the implementation of transformational leadership in education. Directly observing the learning process of madrasah activities is one of the participatory observation efforts made to see the educational paradigm shift. Document analysis is used to find out how the paradigm shift is systematically implemented, namely by examining madrasah policies, learning documents, and learning activities.

Data analysis of the Miles and Huberman interactive model was carried out in this study using three main steps: data reduction, data presentation, and conclusion drawing (Salmona & Kaczynski, 2024). In the data reduction stage, data obtained from interviews, observations and documents were selected, summarised and grouped based on relevant main themes, such as transformational leadership patterns, educational paradigm shifts and their impact on the quality of alpha generation students' learning. Furthermore, the data was presented in the form of descriptive narratives to facilitate the researcher in understanding the relationship between findings. In the final stage, the researcher drew provisional conclusions and conducted verification by comparing findings from various sources and methods to ensure consistency and validity. This approach allows the researcher to systematically process the data so as to produce accurate and in-depth findings related to the research focus.

C. Results and Discussion

The results of this study answer the research question, namely to find out how transformational leadership is involved in managing educational paradigm shifts at MAN 2 Banyuwangi and how related theories and practices can be implemented to support the optimal quality of alpha generation student learning. The results of this research are explained and discussed in full below:

Soft Skills Development

The results of the interview with Mr. Saeroji as the head of madrasah revealed that the head of madrasah always ensures that the development of soft skills in madrasah is personalized and in accordance with the needs of students. Each student is given the opportunity to join a program that suits their interests, such as batik art, graphic design, or broadcasting. The madrasah also conducts assessments to find out the potential of each student and provide direction on what skills they need to hone. By bringing this skill development closer to their respective interests, students will feel more motivated and can develop optimally according to their talents and needs. Based on the results of these interviews, it can be stated that this study reveals that transformational leadership at MAN 2 Banyuwangi not only focuses on developing technical skills (hard skills), but also on developing non technical skills (soft skills) that instill 21st century competencies needed by alpha generation students. This explanation is in line with previous research found by (Fortuna Togatorop et al., 2024; Novia & Aimah, 2024) who found that transformational leadership has an important role in developing soft skills because this approach not only focuses on technical aspects or knowledge (hard skills), but also develops interpersonal and emotional abilities needed to adapt to the dynamics of a changing world. Soft skills such as communication skills, leadership, teamwork, problem solving, and creativity are becoming very important competencies for alpha generation students who are growing up in a fast paced digital era.

The evidence in this soft skills development finding is in the form of documentation at the time of verification and submission of the skills program as follows:



**Figure 1. Documentation with Verifiers
during Skills Program Verification and Submission**

Source: <https://man2banyuwangi.sch.id/>

Based on the figure above is documentation of verification and submission of skills programs that support the explanation of skills programs that aim to improve soft skill development, even the skills program is one of the madrasah flagships programs to answer the challenges of the times in the world of education. And some of the skills programs that have been implemented such as: robotics, batik art,

graphic design, journalism and broadcasting, fashion. This evidence is one of the findings that transformational leadership can contribute significantly to improving the quality of learning of the alpha generation of Madrasah Aliyah in the field of soft skills development, this is corroborated by research (Bhat & Gupta, 2024; Sanabria-Z & Olivo, 2024; Yeoh et al., 2024) which shows that millennial skills, such as critical thinking, communication, and collaboration, are key in preparing future generations to work in an increasingly complex world. This model encourages project-based learning, collaboration between students, as well as increased emotional awareness which is crucial for the development of soft skills. Transformational leadership has a major role in developing alpha generation students' soft skills, which involve not only technical skills, but also interpersonal and adaptability, to prepare them for 21st century challenges in an increasingly complex and rapidly changing world.

Development of Digital Learning Hub

The interview with Mr. Saeroji as the head of madrasah revealed that the head of madrasah motivates teachers and students to see the digital learning center as a great opportunity to create more accessible, flexible and relevant learning. By describing the vision, it is expected that teachers feel encouraged to learn new technologies, and students are motivated to use digital platforms to learn and create. This inspiration is often conveyed by the madrasah head through activities such as joint training or sharing sessions on the benefits of multimedia-based learning, so that all parties feel enthusiastic in supporting this transformation. Based on the results of these interviews, it can be stated that this study reveals that transformational leadership at MAN 2 Banyuwangi focuses not only on developing an analog education center, but also on developing a digital learning center that provides access to multimedia-based materials, such as videos, electronic books, and podcasts relevant to the needs of the alpha generation. This explanation is in line with previous research found by (Saharso & Fadilah, 2024; Yaturrochmah et al., 2024) who found that transformational leadership in education aims to develop a more inclusive and flexible learning model, where not only analog education centers are considered, but also digital learning hubs that provide easy and quick access to multimedia-based materials. Digital learning hub provide a variety of materials that can be accessed at will and allow students to learn in a more interactive way and fit the needs of the alpha generation in desperate need of a platform that can accommodate their diverse learning styles.

The evidence in the digital learning hub findings is in the form of the Mandawangi TV program as a place to broadcast educational programs, mandawangi news, and student films as follows:



Figure 2. Mandawangi TV Program
Source: [instagram.com/man2banyuwangi](https://www.instagram.com/man2banyuwangi)

Based on the figure above, it supports the explanation of Madrasah TV program which aims to improve the development of digital learning hub in essence Madrasah TV at MAN 2 Banyuwangi is a Madrasah Aliyah channel and even the largest number of subscribers in Banyuwangi Regency. Madrasah TV is an innovative and interactive method in the learning process. Even Madrasah TV is also a place to broadcast teachers, learning media, educational programs and student films. This evidence becomes one of the findings that transformational leadership can develop the quality of learning for the alpha generation of madrasah aliyah in the field of digital learning center development, this is corroborated by a study (Kulal et al., 2024; Muawanah et al., 2024; Turnquest et al., 2024) which shows that digital based learning, including e-learning, videos, and podcasts, not only increases the accessibility of materials, but also improves engagement and retention of information for younger students. Transformational leadership focuses not only on developing analog education centers, but also on developing digital learning centers that provide flexible access to multimedia based materials, which are relevant to the needs of the alpha generation in facing learning challenges in the digital age.

Multimodal Literacy Development

An interview with Mr. Saeroji as the madrasah principal revealed that the principal always encourages teachers to think outside the box by holding regular discussions on innovative and relevant learning methods. Students are also encouraged to be active through multimodal literacy programs and digital content creation. The principal wants every individual in the madrasah to feel comfortable to come up with new ideas without fear of being wrong, because that is the way to build an innovative and dynamic environment. Based on the results of these interviews, it can be stated that this study reveals that transformational leadership at MAN 2 Banyuwangi not only focuses on literacy, but also on developing multimodal literacy that facilitates the use of multimodal text (a combination of text, video and infographics) in learning, making it relevant to the learning style of the alpha generation which is visual and interactive. This explanation is in line with previous research found by (Lango et al., 2024; Mamlukhah & Susanto, 2022) who found that transformational leadership can develop more modern learning methods that match the development of technology and the learning styles of alpha generation students

who grew up with different types of media and digital interactions, which makes them more likely to use multimodal texts for learning. Therefore, in addition to focusing on conventional literacy, it is important for education leaders to develop multimodal literacy that involves text, video and infographics. This approach supports a more visual and interactive way of learning.

As for the evidence in the findings of multi modal literacy in the form of documentation of the contribution of the muri record for the most student works and published in Banyuwangi radar.



Figure 3. Documentation of the Muri Record Award Presentation to the Head of MAN 2 Banyuwangi

Source: <https://man2banyuwangi.sch.id/>

Based on the picture above, it supports the explanation of the madrasah literacy program which aims to improve the development of multimodal literacy, in several literacy events MAN 2 Banyuwangi was named the first winner of the national level literacy active school and received an award as a contributor to the muri record for the most student work. this is the biggest motivation and stepping stone to continue developing literacy programs in madrasahs with several agendas, namely: GELEM (Madrasah Literacy Movement), GLOBE (Joint Outdoor Literacy Movement), GSMB (School Writing Book Movement). This program is an initiative that aims to improve students' ability to understand, use and create various types of scripts that combine several communication media, such as text, images, video, audio and infographics. This program is designed to support the rapid growth of the alpha generation in this modern age, where information is often delivered in multiple formats by utilizing multimedia technology. This evidence is one of the findings that transformational leadership is able to create significant changes in the learning process in madrasah aliyah in the area of multimodal literacy development, this is corroborated by research (Beltrán-Palanques, 2024; Higgs & Kim, 2022; Stewart, 2023) which shows that today's learners are more engaged in learning that combines various digital media, such as text, images, and videos, which allows them to understand the material in a more interactive way. Transformational leadership not only emphasizes literacy, but also develops multimodal literacy by facilitating the use of texts, videos and infographics in learning, which is more aligned with the visual and interactive learning styles of the alpha generation who are used to modern systems.

D. Conclusions

Transformational leadership at MAN 2 Banyuwangi plays an important role in creating changes that touch the technical aspects and character of Alpha generation students. This leadership not only focuses on technological innovation, but also on the formation of adaptive and collaborative values that are crucial for students in facing an ever-changing world. Soft skill development is key to preparing students to adapt to 21st century challenges such as communication, teamwork, creativity and problem solving. Transformational leadership also prioritizes approaches that touch on the social and emotional aspects of students, preparing them with useful skill sets to thrive in the working and social world. In addition, transformational leadership also includes the development of digital learning centers that provide access to multimedia-based materials, as well as the development of multimodal literacy that involves different types of media such as combining text, video and infographics in one literacy activity. This approach is highly relevant to the learning style of the alpha generation who are more interested in technology-oriented learning and digital interaction. Digital learning centers facilitate flexible and inclusive learning, giving students access to materials anytime and anywhere. By integrating multimodal literacy, transformational leadership ensures that students can access more visual and interactive learning, in line with the rapid development of technology.

E. Acknowledgement

We would like to thank Universitas KH Mukhtar Syafaat Blokagung Banyuwangi, East Java, Indonesia for providing support and contributions, as well as MAN 2 Banyuwangi for the assistance of data and facilities, both directly and indirectly, so that this article can be completed properly.

References

- Akhter, S. (2022). Key informants' interviews. In *Principles of social research methodology* (pp. 389–403). Springer.
https://doi.org/https://doi.org/10.1007/978-981-19-5441-2_27
- Al-Adwan, A. S., Alsoud, M., Li, N., Majali, T., Smedley, J., & Habibi, A. (2024). Unlocking future learning: Exploring higher education students' intention to adopt meta-education. *Heliyon*, 10(9), e29544.
<https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e29544>
- Anwar, S., & Saraih, U. N. (2024). Digital leadership in the digital era of education: enhancing knowledge sharing and emotional intelligence. *International Journal of Educational Management*, 38(6), 1581–1611. <https://doi.org/10.1108/IJEM-11-2023-0540>
- Armiyanti, A., Sutrisna, T., Yulianti, L., Lova, N. R., & Komara, E. (2023). Transformational leadership in improving education service performance. *Jurnal*

- Educatio* FKIP UNMA, 9(2), 1061–1070.
<https://doi.org/10.31949/educatio.v9i2.5104>
- Beltrán-Palanques, V. (2024). Assessing video game narratives: Implications for the assessment of multimodal literacy in ESP. *Assessing Writing*, 60, 100809. <https://doi.org/https://doi.org/10.1016/j.asw.2024.100809>
- Bhat, I. H., & Gupta, S. (2024). A Study of the 21st Century 4Cs Skill Gap in the Indian Private Sector. In A. M. Thake, K. Sood, E. Özen, & S. Grima (Eds.), *Contemporary Challenges in Social Science Management: Skills Gaps and Shortages in the Labour Market* (Vol. 112A, pp. 1–15). Emerald Publishing Limited. <https://doi.org/10.1108/S1569-37592024000112A014>
- Butcher, L., Sung, B., & Cheah, I. (2024). Synergistic competencies of business graduates for the digital age: directions for higher education. *International Journal of Educational Management*, 38(5), 1375–1390. <https://doi.org/https://doi.org/10.1108/IJEM-11-2023-0562>
- Cheng, E. C. K., & Wang, T. (2023). Leading digital transformation and eliminating barriers for teachers to incorporate artificial intelligence in basic education in Hong Kong. *Computers and Education: Artificial Intelligence*, 5, 100171. <https://doi.org/https://doi.org/10.1016/j.caeai.2023.100171>
- Dias-Oliveira, E., Pasion, R., Vieira da Cunha, R., & Lima Coelho, S. (2024). The development of critical thinking, team working, and communication skills in a business school—A project-based learning approach. *Thinking Skills and Creativity*, 54, 101680. <https://doi.org/https://doi.org/10.1016/j.tsc.2024.101680>
- Efendi, F., Sunaryo, H., & Harijanto, D. (2023). The Effectiveness of Principal Transformational Leadership through Job Commitment on Independent Learning Teacher Performance. *Jurnal Akuntabilitas Manajemen Pendidikan*, 11(2), 19–32. <https://doi.org/10.21831/jamp.v11i2.60605>
- Fortuna Togatorop, A. D., Andri, S., & Mandataris, M. (2024). The Influence of Organizational Culture and Transformational Leadership on Work Productivity Through Employee Job Satisfaction As An Intervening Variable. *Cerdika: Jurnal Ilmiah Indonesia*, 4(03), 200–213. <https://doi.org/10.59141/cerdika.v4i03.763>
- Given, L. M., Case, D. O., & Willson, R. (2023). Research Design, Methodologies, and Methods. In *Looking for Information* (Vol. 15, pp. 179–235). Emerald Publishing Limited. <https://doi.org/10.1108/S2055-53772023005>
- Herlinawati, H., Marwa, M., Ismail, N., Junaidi, Liza, L. O., & Situmorang, D. D. B. (2024). The integration of 21st century skills in the curriculum of education. *Heliyon*, 10(15), e35148. <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e35148>
- Higgs, J. M., & Kim, G. M. (2022). Interpreting old texts with new tools: digital multimodal composition for a high school reading assignment. *English Teaching: Practice & Critique*, 21(2), 128–142. <https://doi.org/https://doi.org/10.1108/ETPC-07-2020-0079>
- Hilarowicz, A., Zielosko, B., & Myśliwiec, M. (2023). The Employers' Expectations Towards Students' Competencies In The Framework Of Digital Transformation

- Processes. *Procedia Computer Science*, 225, 4521–4530.
<https://doi.org/https://doi.org/10.1016/j.procs.2023.10.450>
- Hoang, T. N., & Le, P. B. (2024). The influence of transformational leadership on knowledge sharing of teachers: the roles of knowledge-centered culture and perceived organizational support. *The Learning Organization, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/TLO-08-2023-0144>
- Khasanah, U. (2023). The Development of Multicultural Islamic Education in the Modern Era: Relevance and Challenges. *Al-Hayat: Journal of Islamic Education*, 7(2), 699–709. <https://doi.org/https://doi.org/10.35723/ajie.v7i2.725>
- Khoa, B. T., Hung, B. P., & Hejsalem-Brahmi, M. (2023). Qualitative research in social sciences: data collection, data analysis and report writing. *International Journal of Public Sector Performance Management*, 12(1–2), 187–209. <https://doi.org/https://doi.org/10.1504/IJPSPM.2023.132247>
- Kulal, A., Dinesh, S., Abhishek, N., & Anchan, A. (2024). Digital access and learning outcomes: a study of equity and inclusivity in distance education. *International Journal of Educational Management*, 38(5), 1391–1423. <https://doi.org/10.1108/IJEM-03-2024-0166>
- Lango, R. K., Sopiah, S., & Syihabudhin, S. (2024). The Influence of Transformational Leadership Style on Employee Performance Through Work Motivation and Organizational Culture as Mediating Variables. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(2), 973–986. <https://doi.org/10.31851/jmksp.v9i2.15893>
- Lim, F. V., Toh, W., & Nguyen, T. T. H. (2022). Multimodality in the English language classroom: A systematic review of literature. *Linguistics and Education*, 69, 101048. <https://doi.org/https://doi.org/10.1016/j.linged.2022.101048>
- Mamlukhah, M., & Susanto, H. (2022). Implementation of Human Resource Management in Improving Teacher Quality at Tegaldlimo's Favorite Nu Senior High School. *Jurnal Tarbiyatuna: Jurnal Kajian Pendidikan, Pemikiran Dan Pengembangan Pendidikan Islam*, 3(2), 48–65. <https://doi.org/https://doi.org/10.30739/tarbiyatuna.v3i2.1938>
- Muawanah, U., Marini, A., & Sarifah, I. (2024). The interconnection between digital literacy, artificial intelligence, and the use of E-learning applications in enhancing the sustainability of Regional Languages: Evidence from Indonesia. *Social Sciences & Humanities Open*, 10, 101169. <https://doi.org/https://doi.org/10.1016/j.ssaho.2024.101169>
- Nalmpanti, A. D., Wong, C. Y., & Oghazi, P. (2024). Collaborating for innovation: The inhibiting role of constraints. *Journal of Innovation & Knowledge*, 9(3), 100504. <https://doi.org/https://doi.org/10.1016/j.jik.2024.100504>
- Nguyen, N. P., Hang, N. T. T., Hiep, N., & Flynn, O. (2023). Does transformational leadership influence organisational culture and organisational performance: Empirical evidence from an emerging country. *IIMB Management Review*, 35(4), 382–392. <https://doi.org/https://doi.org/10.1016/j.iimb.2023.10.001>
- Njaramba, F. (2024). Transformational leadership in a crisis: Dimensional analysis with psychological capital. *Heliyon*, 10(16), e35900.

- <https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e35900>
- Novia, A., & Aimah, S. (2024). *Revitalization of Ethical Leadership in Islamic Education : Principal ' s Strategy to Face the Challenges of Globalization in Madrasah*. 6(2), 140–152. <https://doi.org/https://doi.org/10.52627/managere.v6i2.455>
- Orr, S., & Lavy, S. (2024). Teaching who you are: Preliminary findings linking teachers' and students' social-emotional skills. *Social and Emotional Learning: Research, Practice, and Policy*, 4, 100062. <https://doi.org/https://doi.org/10.1016/j.sel.2024.100062>
- Polatcan, M., Özkan, P., & Bellibaş, M. Ş. (2024). Cultivating teacher innovativeness through transformational leadership and teacher agency in schools: the moderating role of teacher trust. *Journal of Professional Capital and Community*, 9(3), 227–242. <https://doi.org/10.1108/JPCCC-01-2024-0008>
- Raziq, M. M., Saleem, S., Borini, F. M., & Naz, F. (2024). Leader spirituality and organizational innovativeness as determinants of transformational leadership and project success: behavioral and social learning perspectives. *International Journal of Productivity and Performance Management, ahead-of-p*(ahead-of-print). <https://doi.org/10.1108/IJPPM-05-2023-0211>
- Restu Rahayu, & Sofyan Iskandar. (2023). Principal's Transformational Leadership in 21st Century Learning in Elementary School. *Jurnal Elementaria Edukasia*, 6(2), 287–297. <https://doi.org/10.31949/jee.v6i2.5484>
- Ridic, O., Palalic, R., Jukic, T., Busatlic, S., Aidoo, A. W., Ridic, G., & Managafic, J. B. T.-R. M. in S. S. (2024). *Transformational Leadership*. Elsevier. <https://doi.org/https://doi.org/10.1016/B978-0-443-13701-3.00105-5>
- Saharso, S., & Fadilah, M. F. (2024). The Influence of Transformational Leadership Style, Work Environment, Job Satisfaction and Work Discipline on Employee Performance. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(1), 1–14. <https://doi.org/10.31851/jmksp.v9i1.13760>
- Salmona, M., & Kaczynski, D. (2024). Qualitative data analysis strategies. In *How to conduct qualitative research in finance* (pp. 80–96). Edward Elgar Publishing. <https://doi.org/https://doi.org/10.4337/9781803927008.00012>
- Sanabria-Z, J., & Olivo, P. G. (2024). AI platform model on 4IR megatrend challenges: complex thinking by active and transformational learning. *Interactive Technology and Smart Education*, 21(4), 571–587. <https://doi.org/10.1108/ITSE-07-2023-0145>
- Shahzad, M. U. (2024). Core competencies for digital leadership development: a perspective from the lens of paradox theory. *The Bottom Line*, 37(4), 454–472. <https://doi.org/10.1108/BL-10-2023-0278>
- Sliwka, A., Klopsch, B., Beigel, J., & Tung, L. (2024). Transformational leadership for deeper learning: shaping innovative school practices for enhanced learning. *Journal of Educational Administration*, 62(1), 103–121. <https://doi.org/10.1108/JEA-03-2023-0049>
- Stewart, O. G. (2023). Using digital media in the classroom as writing platforms for multimodal authoring, publishing, and reflecting. *Computers and Composition*, 67, 102764. <https://doi.org/https://doi.org/10.1016/j.compcom.2023.102764>
- Turnquest, K. N., Fan, W., Snodgrass Rangel, V., Dyer, N., & Master, A. (2024).

- Student engagement, school involvement, and transfer student success. *Contemporary Educational Psychology*, 79, 102322. <https://doi.org/https://doi.org/10.1016/j.cedpsych.2024.102322>
- Valderrama Polo, G. A. (2021). Using Multimodal Literacy: Challenges and Opportunities in a Nontraditional Classroom. In M. F. Rice & A. K. Dallacqua (Eds.), *Luminous Literacies* (Vol. 36, pp. 157-170). Emerald Publishing Limited. <https://doi.org/10.1108/S1479-368720210000036014>
- Yaturrochmah, N., Aimah, S., & Khaudli, M. I. (2024). Kyai's Transformative Leadership In Pesantren-Based on Campus. *EDUTEC: Journal of Education And Technology*, 7(4), 521-529. <https://doi.org/10.29062/edu.v7i4.835>
- Yeoh, H. B., Wei, C. Y., Kaur, S., & Kaur, M. (2024). Examining inter-relationships among 21st century learning skills and their impacts on tertiary learners' readiness for careers in Industry Revolution 4.0 era. *Higher Education, Skills and Work-Based Learning*, ahead-of-p(ahead-of-print). <https://doi.org/10.1108/HESWBL-03-2024-0086>

Impact of MSIB Program on the Personal Development of Students at Universitas Muhammadiyah Surakarta

Amanda Putri Ardani¹, Suranto¹

¹Universitas Muhammadiyah Surakarta, Central Java, Indonesia

Corresponding author e-mail: sur122@ums.ac.id

Article History: Received on 9 November 2024, Revised on 2 January 2025,
Published on 1 February 2025

Abstract: The *Magang dan Studi Independen Bersertifikat* (MSIB) program, initiated by Indonesia's Ministry of Education, Culture, Research, and Technology in 2021, provides students with opportunities to gain hands-on experience in the professional world. This study aims to determine the impact of MSIB on the personal development of Universitas Muhammadiyah Surakarta (UMS) students in 2023. Employing a descriptive qualitative approach, data were gathered through interviews, observations, and documentation involving 10 UMS participants. Thematic descriptive analysis, validated through data triangulation, revealed significant positive impacts on students' personal growth. The category of improved personal development is divided into four, namely: 1) improved personal development in working knowledge, 2) improved personal development in work skills, 3) improved personal development in work commitment, and 4) improved personal development in professional relationships. This research highlights MSIB's role in fostering student development and bridging academic learning with industry demands, positioning it as a transformative higher education model.

Keywords: Independent Study, Internship, MSIB, Personal Development

A. Introduction

Internships are popular among university students. Internships are the first step for students to apply academic knowledge to the real world through work-relevant activities (To & Lung, 2020). Direct work experience during an internship strengthens theoretical understanding and builds a work ethic that is in line with industry needs (Kuat & Kristiyanto, 2020). Internships consist of learning experiences in the form of academic learning, cooperative learning, applied practice training and community service learning (Bae et al., 2022). Involvement in these various activities allows students to strengthen interpersonal and emotional skills that are critical to their personal and professional development (Suranto & Rusdianti, 2018). Research on internships has increased over the past two decades as a result of the realization that internship experiences have an impact on students' academic experience on campus and students' employment opportunities (Prescott et al., 2021). Chan et al. (2020) suggest that employability is influenced by four independent variables: work

experience, performance, interpersonal skills, and social networks. Students feel that internship activities can develop transversal skills far more than the cognitive skills learned in the study program that students take (Urquía-Grande & Estébanez, 2020). In addition, students who participate in internships will get better learning terminology and work culture competencies (Luk & Chan, 2021). Internship activities are expected to create superior quality Human Resources (HR) by providing benefits for students' personal development (Frouda et al., 2022).

Magang dan Studi Independen Bersertifikat (MSIB or Certified Independent Study and Internship) program is a prestigious internship event for students in Indonesia. In MSIB Batch 5 in 2023, the number of students who registered reached 98 thousand with a total of 39 thousand students accepted. The MSIB program was launched by the Ministry of Education, Culture, Research and Technology (Kemendikbudristek) in 2021 as one of the *Merdeka Belajar Kampus Merdeka* (MBKM or Freedom to Learn - Independent Campus) programs. In curriculum development in Indonesia, the MBKM part of the *Kampus Merdeka* is expected to become a very essential curriculum at the Higher Education level (Rahmattullah & Syamsu, 2021). MSIB activities that offer opportunities for work experience, learning outside the classroom, and improving skills needed in the world of work can be followed by students for 1-2 semesters (Nizam, 2020). Students who take part in the MSIB program will get 20 credits. MSIB provides students with practical experience in various industrial partners according to student interests by directing them to result-based learning and independence (Novitasari & Asbari, 2021).

MSIB's industrial partners have met the requirements set by the Ministry of Education and Culture. Companies must systematically design internship tasks, recruitment and selection, as well as practices and reports to obtain students as potential human resources (Lan, 2020). Students will be guided by mentors in MSIB activities. The role of mentors is a factor in internship satisfaction at three United States Universities (Hora et al., 2020). Jackson et al. (2019) revealed that mentors can facilitate interns regarding the transfer of knowledge and skills at the internship site. Well-structured internship programs such as MSIB are considered effective in improving students' skills, career attitudes (Bawica, 2021), and vocational identity (Cheunga et al., 2019).

Universitas Muhammadiyah Surakarta (UMS) is actively involved in implementing the MSIB program. UMS has committed to providing opportunities for students to learn and develop themselves outside the classroom through the Decree of the Chancellor of Universitas Muhammadiyah Surakarta Number 72/II of 2020 concerning Provisions for Independent Learning Activities for UMS Students. Higher education contributes to improving human resources (Aprillita, 2023). Preparing competent students and having quality graduates who are ready to compete in the world of work is the main goal of Higher Education Institutions (Franco et al., 2019). The MSIB program is in line with the vision and mission of UMS to produce graduates who are competent, have character, and are ready to contribute to society.

Research related to internships is of interest to researchers. Research on the impact of internships on personal development has been conducted by Anjum (2020) in Pakistan. Research related to MSIB itself has been conducted by Effendy & Hertati (2024) and Sari et al. (2021). However, research on the specific impact of MSIB on student personal development, especially at UMS, is still limited. This is the main background of the research so that this study aims to find out how the MSIB program impacts the personal development of UMS students. By understanding the impact of student personal development on the MSIB program, it is hoped that this research can contribute to the development of the MSIB program both at UMS and nationally, so that it can prepare Indonesian students to become superior human resources and be able to face the challenges of the world of work.

B. Methods

This research uses a qualitative approach with primary data. The subjects of this study were UMS students who had participated in the MSIB program in 2023. Data were collected through in-depth interviews, observation, and documentation. Interviews were conducted by asking questions to MSIB participating students to get information directly about their experiences in the MSIB program. Observations were made by observing student activities and interactions during the MSIB program. Documentation was conducted by collecting MSIB activity logbook documents to ensure the support of interview and observation data. Data from interviews, observations, and documentation were transcribed, identified the main categories of data, and analyzed thematically descriptively by describing each category in depth to identify the impact of the MSIB program on the personal development of UMS students. Data triangulation was conducted to ensure consistency and validity of data by comparing results from interviews, observations, and documentation. The results of the analysis were used to evaluate the extent to which the MSIB program made a positive contribution to the personal development of UMS students. Data on research sources can be seen in the table 1.

Table 1. Data of Interviewees

Interviewees	Study Program	Industry Partners	Position
Student 1	Geography	Directorate General of Land and Spatial Control and Issuance Ministry of Agrarian Affairs and Spatial Planning/National Land Agency	Land Utilization Control Analyst (LUCA)
Student 2	Development Economics	PT Bank BTPN Syariah Tbk	Remote Site Facilitator (Rural) - Java
Student 3	Electrical Engineering	PT Inti Utama Solusindo	Back-End Robotic Developer Intern
Student 4	Industrial Engineering	PT Pan Brothers Tbk	Industrial Engineering Officer (Boyolali)
Student 5	Informatics Engineering	PT Stechoq Robotika Indonesia	Software Engineer in Developing Digital Transformation and Industry 4.0

Student 6	Accounting	PT Stechoq Robotika Indonesia	Startup Business Development in Developing Digital Transformation and Industry 4.0 Helpdesk Staff
Student 7	Industrial Engineering	PT Telkom Access	
Student 8	Industrial Engineering	PT Trafoindo Prima Perkasa	Operation Officer (SCM)
Student 9	Architecture	UPTD Science and Technology Area	Building and Area Development Officer
Student 10	Communication Science	PT Trans Digital Media	Digital Journalist Surakarta

C. Results and Discussion

The MSIB program was designed by the government to prepare students for the world of work. The MSIB program provides an opportunity for students to learn outside the classroom and engage directly in the world of work. MSIB is a solution to answer the demands of the world of work such as having massive academic knowledge, having practical skills, and work experience in college graduates.

The MSIB program is implemented through stages involving cooperation between students, universities, and industry partners or other institutions. Internship students are directly involved in the company's operational activities, work on projects, and learn from experienced mentors. Independent study students follow learning modules, work on assignments, and interact with fellow participants and mentors. To find out the impact of the MSIB program on students' personal development, research was conducted on UMS students who participated in the MSIB Batch 5 program in 2023.

Based on the results of interviews, observations, and documentation with UMS students who participated in the MSIB program, there was an improvement in student personal development as a result of the MSIB program. Improved personal development based on the data obtained can be categorized into four, namely: 1) improved personal development in working knowledge, 2) improved personal development in work skills, 3) improved personal development in work commitment, and 4) improved personal development in professional relationships.

Improved Personal Development in Working Knowledge

Based on the results of interviews, observations, and documentation, improved personal development in working knowledge consists of entrepreneurial, geographical, journalistic, and technological knowledge. The following presents data on the grouping of students according to the statement of improved personal development in working knowledge.

Table 2. Improved Personal Development in Working Knowledge

Improved Working Knowledge		
No.	Sub-category	Results of Interviews, Observations, and Documentation
1.	Entrepreneurship	Apprenticeship activities accompanying customer businesses need to first understand the entrepreneurial material that will be delivered to customers. Indirectly improve knowledge about entrepreneurship (Student 2). Being involved in startup business development improves interest in entrepreneurship (Student 6).
2.	Geographical	Geographical knowledge has also improved from previously not knowing the Boyolali area to now understanding the Boyolali area as a result of mentoring activities to customers (Student 2). Understanding the geographical and spatial aspects of regional development improved geographical understanding (Student 9).
3.	Journalism	The improve in journalistic and technological knowledge developed due to the habit of covering news and presenting information through digital platforms in the Surakarta area, finding and developing interesting and relevant news ideas, collecting data and information through interviews, research, and observation, writing and editing news clearly, accurately, and interestingly, using technology and social media to spread the news. Journalistic knowledge fosters interest in becoming a journalist (Student 10).
4.	Technology	When assisting customers' businesses using specialized platforms and when debriefing using previously unfamiliar online meeting tools, it certainly improves the understanding of technology (Student 2). The interest in robotics can be applied directly to MSIB activities so as to build deeper expertise in back-end programming languages, data structures, algorithms, and databases, as well as knowledge of APIs and web services (Student 3). Such hands-on use of software in the workplace enhances in-depth understanding of technology (Student 4). Understanding and applying new technologies in the industrial world increases the understanding of technology (Student 6). Using the latest technology for regional planning and management enhances technological understanding (Student 9).

Table 2 describes the improved working knowledge of students impacted by the MSIB program in four sub-categories: entrepreneurship, geography, journalism, and technology. In the area of entrepreneurship, students recognized an improved understanding of business, especially when assisting customers and being involved in the development of startups, which helped generate interest in entrepreneurship. Geographical knowledge has also improved, as experienced by students assisting clients in Boyolali, where they learned about regions and spatial planning.

In addition, experience in journalism hones skills in writing, editing, and disseminating news through digital platforms. This not only broadens journalistic knowledge but also fosters interest in becoming a journalist. Lastly, in the area of technology, students who were involved in the use of software and digital platforms during their internships found their understanding of technology deepened.

Improved Personal Development in Work Skills

Based on the results of interviews, observations, and documentation, improved personal development in work skills consists of communication skills, time management, collaboration, and critical thinking. The following data presents the grouping of students according to the statement of improved personal development in work skills.

Table 3. Improved Personal Development in Work Skill

Improved Work Skill		
No.	Sub-category	Results of Interviews, Observations, and Documentation
1.	Communication	The results of land use data analysis are usually presented to various parties, of course good communication is needed so that they are trained and accustomed to communicating well (Student 1). The improved communication impact of the MSIB program is evidenced by more confidence when communicating with other people or new people (Student 2). Better communication is evident when there is no anxiety when talking to new people (Student 4). Interacting with many parties during the internship trained themselves to communicate well (Student 6). More structured communication is now evidence of improved communication skills (Student 7). Good communication is trained when interacting with various parties for coordination and reporting (Student 9). Improved communication and relationships are evidenced by good interactions with sources, editors, and audiences (Student 10).
2.	Time management	Meeting with 12 customers at each session (time) requires good time management (Student 2). Dividing time for internships and lectures becomes accustomed to managing schedules to make a list of daily activities (Student 6). MSIB internships also have an impact on better time management as evidenced by attending lectures on time (Student 7).
3.	Collaboration	Evidence of improved good cooperation is currently becoming more active in cooperation forums and easy to establish cooperation with others (Student 1). Improved self-confidence and teamwork are evidenced when group presentations in lecture assignments that were previously more passive are now able to become moderators, more active in discussions, and answer audience questions (Student 3). Increased collaboration skills are evident when discussing with classmates who are able to more actively convey ideas (Student 4). Working together in a team to solve customer problems familiarizes them to collaborate well with each other (Student 7). Working with a team to develop and manage areas and buildings improves collaboration skills (Student 9).
4.	Critical thinking	An improve in critical thinking and good communication is evidenced when lectures are currently more active in expressing opinions (Student 1). When assisting customers, it is necessary to first analyze the SWOT of the customer's business, this has become a habit in everyday life after attending MSIB in making decisions that need to be thought of critically (Student 2). Solving problems with the right solution during the internship really trains critical thinking so that in everyday life when making decisions always analyze the risks first (Student 6).

Based on Table 3, improved personal development in students' work skills during the MSIB program is evident in various aspects. In communication skills, students are increasingly trained to interact with various parties, both in presentations and discussions, so that their confidence improves. They are also no longer anxious when talking to new people, and more structured communication and good relationships with sources and audiences further strengthen this ability. In terms of time management, students learn to manage their schedules well, both for internships and lectures, as evidenced by their on-time attendance and more effective time management. Collaboration is also a skill that has improved significantly. Students became more active in cooperation forums, more confident in group discussions, and more ready to collaborate with teams to solve problems. In addition, their critical thinking skills also developed, as evidenced by their skills in analyzing situations and making more mature decisions, both in daily life and at work. This critical thinking was honed through the experience of analyzing strengths, weaknesses, opportunities, and threats (SWOT) of customers' businesses and solving problems encountered during the internship.

Improved Personal Development in Work Commitment

Based on the results of interviews, observations, and documentation, improved personal development in work commitment consists of increasing a sense of discipline and responsibility. The following data presents the grouping of students according to the statement of improved personal development in work commitment.

Table 4. Improved Personal Development in Work Commitment

Improved Work Commitment		
No.	Sub-category	Results of Interviews, Observations, and Documentation
1.	Discipline	Accustomed to being committed to completing internship tasks within a certain period of time, currently becoming a more responsible person such as when having an appointment with a friend, he will come on time according to the agreement (Student 4). Managing projects and carrying out tasks in accordance with the SOP and time given by industry partners (Student 9).
2.	Responsibility	Maintaining the quality and security of the program code developed, writing technical documentation and providing training to users, staying updated with the latest technology and trends in the digital field is a form of improving a sense of responsibility as an intern (Student 5). As Helpdesk staff in charge of handling customer problems, train yourself to always be responsible in providing solutions to customers (Student 7).

Table 4 explains that the improvement in personal development in student work commitment during the MSIB program is reflected in the aspects of discipline and responsibility. The discipline aspect improved significantly with the training of students in completing internship tasks according to the schedule and standard operating procedures of the company. This improvement in discipline is evident when students keep meeting agreements with other parties and attend on time. In addition,

improved responsibility is also seen in students who take part in the MSIB program. The improvement in students' sense of responsibility is reflected in their efforts in maintaining the quality of the company's products as well as maintaining the quality of themselves during their internship. Moreover, the obstacles that occur in MSIB activities also help students develop a sense of responsibility regarding solutions to problem-solving.

Improved Personal Development in Professional Relationships

Improved personal development in professional relationships consists of relationships with superiors and subordinates, relationships with coworkers, and relationships with clients. The following data presents the grouping of students according to the statement of improved personal development in professional relationships.

Table 5. Improved Personal Development in Professional Relationships

Improved Professional Relationships		
No.	Sub-category	Results of Interviews, Observations, and Documentation
1.	Relationships with superiors and subordinates	Reporting on the completion of assignments to mentors proved a positive impact on the establishment of good relationships with supervisors during MSIB (Student 5). Obtaining a job offer after graduation from a supervisor is evidence of a positive professional network (Student 10).
2.	Relationship with coworkers	Working together with colleagues to solve client problems established positive relationships with colleagues (Student 7). Relationships improved by participating in the MSIB program, such as friendships from one mentor who came from various universities (Student 4).
3.	Relationship with clients	Meeting with 12 clients in each session improved relationships with clients (Student 2). Relationships improved, of course, when the MSIB program was implemented, many knew new people in the company and established good relationships (Student 3).

Based on Table 5, improved personal development in professional relationships of MSIB students is seen in three main aspects: relationships with superiors and subordinates, coworkers, and clients. Students participating in MSIB felt a positive impact on relationships with superiors during the internship, as evidenced by task reporting that strengthened good relationships with mentors. In addition, some students even received job offers after graduation from their supervisors, demonstrating their success in building a strong and sustainable professional network.

Relationships with colleagues also developed significantly, especially in working together to solve client problems. Students felt closer to their peers, and the internship program expanded their network of friends with students from various universities. Meanwhile, interactions with clients during the internship, such as meeting with clients on a regular basis, helped students build positive relationships and expand their professional relationships in the working world.

This study reveals data on the impact of MSIB on the self-development of UMS students. There are four main categories identified as a result of the MSIB program in improving student self-development: improved work knowledge, improved work skills, improved work commitment, and improved professional relationships. In line with Suranto et al. (2023), internships have a positive effect on students' personal development and employability. Improving work knowledge includes increasing one's information and understanding of theories, concepts, and procedures relevant to the job. Pitri (2020) found that work knowledge affects the quality of performance. The results of this study indicate that the MSIB program makes a significant contribution in improving the self-development of UMS students, especially in the aspect of work knowledge.

The first knowledge improvement is related to the field of entrepreneurship. Entrepreneurial knowledge is very important in the world of work because it helps students understand business dynamics and develop the skills needed to start and manage a business. Nurhidayah & Susilo (2023) argue that entrepreneurship can increase employment which has an impact on reducing unemployment to overcome poverty. Students who are directly involved in business development gain practical insights into business management, marketing strategies, and financial management. In line with Suryatno & Insana (2022) research, student involvement in business development can foster interest in entrepreneurship, and the MSIB program provides opportunities for interested students to deepen their knowledge in this area. Furthermore, another knowledge improvement focuses on geographical knowledge. This knowledge has important value in the world of work, as shown by the research of (Rusi et al., 2021), which states that geographic information systems are indispensable in asset management. Geographic knowledge can be used to analyze the potential of an area based on its geographical conditions, which is beneficial in various fields of work. Another finding is related to the improvement of journalistic knowledge. Students involved in MSIB at industry partners engaged in media, communication, and information gained improved journalistic knowledge. Activities such as covering news, developing story ideas, collecting data, and disseminating information, can enrich students' insights in this field. Research by Ndruru et al. (2023) also showed that an understanding of journalism increases students' interest in pursuing a career as a journalist.

Lastly, improved technological knowledge was also found to be one of the outcomes of the MSIB program. Participating students experienced improved knowledge in technology as they were exposed to various advanced software, data analysis tools, and online collaboration platforms during MSIB activities. Technological knowledge is very important to improve students' competence in facing the growing demands of the world of work. Research by Mariance & Rahmadani (2023) stated that the MBKM program successfully improved students' technological capabilities, which are needed to adapt quickly to technological changes and increase efficiency and productivity in the workplace.

Overall, the results of this study support the findings of Haryadhi & Pudjoprastyono (2023) who stated that through the MSIB program, students can significantly improve their working knowledge in various fields. The MSIB program has a significant impact on improving students' personal development, especially in work skills. Employability skills include specific abilities or expertise required to complete a task or job, which are developed through practice, experience, and knowledge. Sari & Sari (2023) in their research showed that work knowledge affects productivity. The first improvement identified was in communication skills. Students who participated in the MSIB program experienced improved communication skills as a result of their interactions with colleagues, mentors, and clients. Communication skills are important in the world of work as they can open up wider career opportunities as well as build a professional image. These skills include the ability to convey ideas effectively, listen well, convey information accurately, and use appropriate language. Communication skills are also the foundation for developing other skills. The next skill improvement is time management skills. Through the various tasks that must be completed in the MSIB program, students learn to divide their time between lectures and MSIB activities, which helps them manage their time well. Good time management trains students to be better prepared for the demands of the world of work. Kadir et al. (2024) proved that time management in companies affects employee productivity.

Furthermore, collaboration skills have also improved. These skills are particularly important in the work environment, where teamwork is required to achieve common goals. Through collaboration, students can channel ideas to each other, work together to complete assignments, and increase understanding through active social interaction (Sidi, 2020). A solid team with good collaboration skills can work more efficiently and effectively, improve productivity and work quality, and ultimately contribute greatly to the achievement of company goals. In line with Tandrianingsih & Rohmah (2023), MSIB as one of the MBKM programs is proven to improve student cooperation skills.

In addition, critical thinking skills are also one of the significant improvements. Riasty & Sari (2024) stated that critical thinking skills are highlighted in the implementation of the Merdeka curriculum to prepare graduates who are able to face fierce job competition. These skills are important for analyzing situations, making the right decisions, and solving problems effectively. Students' involvement in the MSIB program provides them with hands-on experience which is very useful for honing critical thinking skills in facing challenges in the world of work. Overall, the experience gained through the MSIB program shows that hands-on engagement in a real work environment contributes to improved communication, time management, collaboration, and critical thinking skills. These skills help students be better prepared for the world of work and provide a competitive advantage in their future careers. This is in line with the research of Anjani et al. (2024), which showed that the MBKM program had a positive impact on improving student skills.

The impact of self-development can then be seen in a significant improvement in work commitment. Purwaningsih & Burhanudin (2021) emphasize that commitment in the work environment is an important indicator that reflects a person's seriousness, dedication, and responsibility for their work. Discipline which is part of commitment can also help students to develop good character, such as responsibility, honesty and hard work (Jatmika, 2018). The study of Mora et al. (2020) also shows that improved individual commitment contributes directly to improved performance. For example, when an employee has a strong commitment to the company, they tend to work more efficiently and effectively to achieve company goals. This certainly has a positive impact on the company in achieving the desired targets and results.

Improved student commitment as a result of the MSIB program opens up great opportunities for them to better prepare themselves to enter the workforce. For example, students who have a high commitment to their studies will be more active and enthusiastic in completing academic assignments. This can help students develop the knowledge and skills needed to succeed in the workforce. Thus, high commitment is a key factor in achieving optimal performance, both in the academic environment and in the professional world. Improved self-development in the category of professional relationships is also an important finding in this study. Aksa (2023) stated that internship activities can improve professional networks, and the same thing happened to students who participated in the MSIB program. This improvement in professional relationships occurs through student involvement in various interaction activities with coworkers, mentors, and clients.

Students have the opportunity to work with colleagues on various projects and tasks, which helps them build strong professional relationships, improve their teamwork skills, and expand their professional network. These interactions also teach them how to communicate effectively, resolve conflicts, and work towards a common goal. In addition, students who participate in MSIB receive direct guidance from mentors. Mentors not only provide technical knowledge and skills, but also insights into work ethics, corporate culture, and career development strategies. This mentor-mentee relationship becomes a source of support and inspiration for students to achieve their professional goals.

MSIB students also have the opportunity to interact with industry professionals through various activities such as seminars, workshops, and networking events. These interactions help students understand the latest industry trends, gain insight into various careers, and build connections that can be useful in the future. They also learn best practices and the latest innovations in their field. In addition, this study found that students also managed to establish good relationships with clients. In line with the findings of Rangki (2021), good relationships with clients can improve service quality and customer satisfaction. The positive impact of this relationship is not only limited to improving service quality, but can also bring long-term benefits to students, such as the creation of a productive and sustainable work environment. Overall, the

improvement in professional relationships experienced by students through the MSIB program shows that direct interaction with colleagues, mentors, and clients is very important for personal and professional development. These relationships help students hone their skills and knowledge, while giving them a competitive edge in the future workforce.

D. Conclusions

Based on the results of this study, the MSIB program has a positive impact on the personal development of UMS students. MSIB is able to improve knowledge, skills, commitment, and relationships in the fields of interest to students. Improved knowledge includes entrepreneurial knowledge, geographical knowledge, journalism, and commitment. Improved skills include communication skills, time management, collaboration, and critical thinking. Commitment to discipline and responsibility was also shown to increase through this program. Interaction with peers, mentors, and industry professionals during MSIB activities can improve students' professional relationships. The MSIB program directs students to explore the theory and practice related to the internship position they are interested in. The findings from this study can be an important consideration for students who want to develop themselves and prepare for careers in various relevant fields by joining the MSIB program. However, to understand the impact of the MSIB program more comprehensively, further research is needed.

E. Acknowledgement

This research is part of the 2024 Superior Research Grant from Universitas Muhammadiyah Surakarta.

References

- Aksa, A. F. (2023). Student Ability Improvement Program to Face the World of Work Through Internship Activities at the Immigration Office and Sangosay Cooperative, Atambua. *Jurnal Umum Pengabdian Masyarakat*, 2(4), 50–56. <https://doi.org/10.58290/jupemas.v2i4.164>
- Anjani, D., Novriyenni, & Fatmaira, Z. (2024). Correlation of MBKM Activities to Improvement of Students' Soft Skills Using the Apriori Method. *Saturnus : Jurnal Teknologi Dan Sistem Informasi*, 2(4), 79–95. <https://doi.org/https://doi.org/10.61132/saturnus.v2i4.334>
- Anjum, S. (2020). Impact of internship programs on professional and personal development of business students: a case study from Pakistan. *Future Business Journal*, 6(1), 1–13. <https://doi.org/10.1186/s43093-019-0007-3>
- Aprillita, D. (2023). The Influence of Image and Education Costs on the Decision to Choose College (Case Study: Faculty of Economics and Business, Krida Wacana Christian University, Semester I). *Management and Sustainable Development Journal*,

- 5(1), 76–91. <https://doi.org/https://doi.org/10.46229/msdj.v5i1.583>
- Bae, H., Polmear, M., & Simmons, D. R. (2022). Bridging the Gap between Industry Expectations and Academic Preparation: Civil Engineering Students' Employability. *Journal of Civil Engineering Education*, 148(3), 275–282. [https://doi.org/http://dx.doi.org/10.1061/\(ASCE\)EI.2643-9115.0000062](https://doi.org/http://dx.doi.org/10.1061/(ASCE)EI.2643-9115.0000062)
- Bawica, I. (2021). The University Internship Program and its Effects on Students' Employability Readiness. *International Journal of Academe and Industry Research*, 2(3), 86–101. <https://doi.org/10.53378/348731>
- Chan, J. M., Yeap, J. M., Taahir, A. B., & Remie, M. M. (2020). Internship Program Effectiveness: A Job Opportunity. *International Journal of Information, Business and Management*, 12(3), 94–108.
- Cheunga, R., Jinb, Q., & Tamc, T. (2019). Assessing the impact of work internships on career development among university students in Hong Kong. *Asia Pacific Career Development Journal*, 2(1), 16–22.
- Effendy, A. D., & Hertati, D. (2024). Implementation of the Independent Learning Independent Campus Policy Through the Certified Independent Study and Internship Program (MSIB) at the Faculty of Agriculture, UPN 'Veteran' East Java. *Ganaya: Jurnal Ilmu Sosial Dan Humaniora*, 7(2), 48–62. <https://doi.org/10.37329/ganaya.v7i2.3178>
- Franco, M., Silva, R., & Rodrigues, M. (2019). Partnerships between higher education institutions and firms: The role of students' curricular internships. *Industry and Higher Education*, 33(3), 172–185. <https://doi.org/10.1177/0950422218819638>
- Frouda, M., Riga, A., Dotsikas, N., & Papagianni, C. (2022). Investigating Students' - Future Teachers' Views on Their Internship: Benefits and Challenges. *European Journal of Special Education Research*, 8(4), 1–16. <https://doi.org/10.46827/ejse.v8i4.4377>
- Haryadhi, P. T., & Pudjoprastyono, H. (2023). Implementation of Digital Marketing Strategy at PT Otak Kanan with Student Empowerment through the MSIB Internship Program of the Ministry of Education and Culture. *Jurnal Pengabdian Masyarakat Indonesia*, 1(2), 358–363. <https://doi.org/10.62017/jpmi>
- Hora, M., Chen, Z., Parrott, E., & Her, P. (2020). Problematizing college internships: Exploring issues with access, program design and developmental outcomes. In *International Journal of Work-Integrated Learning* (Vol. 21, Issue 3). <http://www.wcer.wisc.edu/publications/working-papers>
- Jackson, D., Fleming, J., & Rowe, A. (2019). Enabling the Transfer of Skills and Knowledge across Classroom and Work Contexts. *Vocations and Learning*, 12(3), 459–478. <https://doi.org/10.1007/s12186-019-09224-1>
- Jatmika, S. (2018). Implementation of Partnerships between Schools, Families and Communities at Surakarta City Business Management Vocational Schools. *Jurnal Pendidikan Dan Ilmu Sosial*, 28(2), 36–43. <https://doi.org/https://doi.org/10.2317/jpis.v28i2.7588>
- Kadir, A. P., Hafid, A. R., Tonapa, C. C., & Jalal, N. M. (2024). Time Management Psychoeducation as an Effort to Increase Productivity in Employees of PT Tiran Makassar. *Jurnal Pengabdian Masyarakat Bangsa*, 2(5), 1717–1721.

- <https://doi.org/10.59837/jpmba.v2i5.1097>
- Kuat, T., & Kristiyanto, N. A. (2020). Analysis of Prakerin Implementation in Vocational High School Automotive Light Vehicle Engineering Skills Competencies. *Jurnal Pendidikan Ilmu Sosial*, 30(1), 11-18. <https://doi.org/10.23917/jpis.v30i1.10888>
- Lan, C. C. (2020). Industry instructors' perspective on internship implementation strategy. *Higher Education, Skills and Work-Based Learning*, 11(3), 739-756. <https://doi.org/10.1108/HESWBL-04-2020-0054>
- Luk, L. Y., & Chan, C. K. (2021). Students' learning outcomes from engineering internship: A provisional framework. *Studies in Continuing Education*, 4(1-20), 526-545. <https://doi.org/https://doi.org/10.1080/0158037X.2021.1917536>
- Mariance, U. C., & Rahmadani. (2023). Student Internship Mentoring in Technology at CV. Asa Technovasindo. *Jurnal Hasil Pengabdian Masyarakat (JURIBMAS)*, 2(2), 168-175. <https://doi.org/10.62712/juribmas.v2i2.115>
- Mora, Z., Fandhayani, I., & Suharyanto, A. (2020). The effect of work commitment and job satisfaction on employee performance at PT. Mopoli Raya in Seruway District. *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 3(2), 487-492. <https://doi.org/https://doi.org/10.34007/jehss.v3i2.348>
- Ndruru, Y., Junaidi, J., & Batoebara, M. U. (2023). The Interest of Communication Science Study Program Students in Choosing a Profession as a Journalist. *Network Media*, 6(2), 59-71. <https://doi.org/10.46576/jnm.v6i2.3538>
- Nizam. (2020). *Merdeka Belajar Guidebook*. Jakarta: Direktorat Jenderal Pendidikan Tinggi Kemdikbud RI.
- Novitasari, D., & Asbari, M. (2021). Leaders Coaching in Schools: What is its Role in Teacher Performance? *Edumaspul: Jurnal Pendidikan*, 5(1), 580-597. <https://doi.org/10.33487/edumaspul.v5i1.1299>
- Nurhidayah, N., & Susilo, A. (2023). The Influence of Entrepreneurship Courses and Entrepreneurial Practices on Entrepreneurial Interests of Accounting Education Students, Universitas Muhammadiyah Surakarta. *Doctoral Dissertation, Universitas Muhammadiyah Surakarta*, 19(5), 1-23. <https://doi.org/https://doi.org/10.33487/edumaspul.v5i1.1299>
- Pitri, T. (2020). The influence of knowledge and work experience on employee performance at CV. Ria Busana. *Jurnal Ekonomedia*, 9(2), 37-56.
- Prescott, P., Gjerde, K. P., & Rice, J. L. (2021). Analyzing mandatory college internships: academic effects and implications for curricular design. *Studies in Higher Education*, 46(11), 2444-2459. <https://doi.org/10.1080/03075079.2020.1723531>
- Purwaningsih, D., & Burhanudin, B. (2021). The Importance of Commitment in Entrepreneurship. *Jurnal USAHA*, 2(2), 26-32. <https://doi.org/10.30998/juuk.v2i2.780>
- Rahmattullah, R., & Syamsu, F. D. (2021). Challenges of Social Distancing-Based Lectures During the COVID-19 Pandemic in Aceh Province in 2020. *Genta Mulia: Jurnal Ilmiah Pendidikan*, 12(1), 14-23.
- Rangki, L. (2021). The Relationship Between Nurses' Caring Behavior and Client Satisfaction in the Surgical and Internal Medicine Inpatient Room of Kendari City

- Hospital. *Nursing Care and Health Technology Journal (NCHAT)*, 1(1), 39–46.
<https://doi.org/10.56742/nchat.v1i1.8>
- Riasty, A., & Sari, D. E. (2024). Implementation of the PjBL Model to Improve Critical Thinking Skills in the Era of Independent Learning. *Fondatia*, 8(2), 455–466.
<https://doi.org/10.36088/fondatia.v8i2.4806>
- Rusi, I., Sari, R. P., Prawira, D., Mutiah, N., & Febriyanto, F. (2021). Training on the use of geographic information systems in asset management at the Singkawang City Transportation Agency. *Martabe: Jurnal Pengabdian Kepada Masyarakat*, 4(3), 1025–1034.
- Sari, R. P., & Sari, E. P. (2023). The Influence of Individual Characteristics, Teamwork and Work Skills on Productivity at PT. Charoen Pokphand Indonesia (Case Study on Production Employees of the Medan Branch). *Digital Bisnis: Jurnal Publikasi Ilmu Manajemen Dan E-Commerce*, 2(1), 170–180.
<https://doi.org/10.30640/digital.v2i1.652>
- Sari, S. P., Witono, B., & Nugroha, H. (2021). Analysis of the Impact of Internship and Certified Independent Study (MSIB) Activities in Improving the Skills and Expertise of Graduates of the Accounting Study Program (Internship at PT. Bank Syariah Indonesia, Tbk.). *Seminar Nasional Dampak Implementasi MBKM*, 1–20.
- Sidi, P. (2020). Discoblog to improve collaboration skills and learning achievement in business economics for class X AKL 2 SMK N 1 Sukoharjo students. *Jurnal Pendidikan Ilmu Sosial*, 30(2), 70–82. <https://doi.org/10.23917/jpis.v30i2.11011>
- Suranto, S., Mustofa, R. H., Sari, D. E., Ulfatun, T., Gano-an, J. C., & Amanda, B. (2023). The Contribution of Kampus Mengajar Program to the Students' Personal Development and Employability. *AL-ISHLAH: Jurnal Pendidikan*, 15(3), 2922–2934.
<https://doi.org/10.35445/alishlah.v15i3.3468>
- Suranto, S., & Rusdianti, F. (2018). Organizational experience in forming student soft skills. *Jurnal Pendidikan Ilmu Sosial*, 28(1), 58–65.
<https://doi.org/https://doi.org/10.2317/jpis.v28i1.6772>
- Suryatno, M. G., & Insana, D. R. M. (2022). The Impact of the Certified Independent Study Internship Mbkm Program in Increasing Students' Global Entrepreneurial Interest as New Exporters 4.0. *Jurnal USAHA*, 3(2), 15–28.
<https://doi.org/10.30998/juuk.v3i2.1412>
- Tandrianingsih, S., & Rohmah, W. (2023). Implementation of MBKM Program as an Improvement of Students' Soft Skills. *Economics and Digital Business Review*, 4(2), 379–389.
- To, W. M., & Lung, J. W. Y. (2020). Factors influencing internship satisfaction among Chinese students. *Education and Training*, 62(5), 543–558.
<https://doi.org/10.1108/ET-01-2020-0023>
- Urquía-Grande, E., & Estébanez, R. P. (2020). Bridging the gaps between higher education and the business world: internships in a faculty of economics and business. *Education and Training*, 63(3), 490–509. <https://doi.org/10.1108/ET-01-2018-0017>

Literacy Culture and Its Effectiveness in Improving Indonesian Students' Writing Skills

Sri Indah Lestari¹, Tri Indah Kusumawati¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: sriindahlestari@uinsu.ac.id

Article History: Received on 11 November 2024, Revised on 5 January 2025,
Published on 1 February 2025

Abstract: This study aims to examine the effectiveness of literacy culture in improving students' composing ability in Indonesian subjects in secondary schools with a qualitative approach to case studies. The subject of this study is a group of students in one of the secondary schools who have applied literacy activities regularly in learning Indonesian. Data was collected through classroom observations, in-depth interviews, and analysis of student writing products. The findings of the study show that the application of literacy culture in the classroom is able to improve students' composing skills in terms of organizing ideas, creative expression, and using more appropriate and varied language. In addition, teacher support factors and a conducive school environment also accelerate the development of students' writing skills. Literacy culture can play a significant role in improving students' composing skills, although its application requires careful planning and consistency in its implementation.

Keywords: Indonesian Subject, Literacy Culture, Secondary School, Writing Skills

A. Introduction

Literacy culture has a very important role in the development of education, especially in improving students' literacy skills in schools. Literacy, which includes reading and writing skills, is the main foundation that enables students to acquire knowledge, express ideas, and communicate effectively in a variety of contexts. In the context of education in Indonesia, strengthening the literacy culture in schools, including at State Elementary School 3 Medan, is expected to improve the quality of education as a whole, especially in honing students' writing skills.

Along with the government's efforts to improve the quality of education, literacy culture is one of the main focuses in the development of curriculum and learning programs. Cultivating a literacy culture that involves regular and sustainable reading and writing activities can contribute greatly to improving students' writing skills. Good writing skills, in addition to being important for academic purposes, are also important skills in daily life, especially in today's digital era, where the ability to convey information clearly and effectively is needed. However, even though culturally literacy has begun to be implemented in many schools, challenges in its

implementation still remain, including in State Elementary School 3 Medan. Factors such as students' lack of interest in reading, limited literacy facilities, and lack of understanding of effective literacy learning strategies can be obstacles in achieving these goals. Therefore, it is important to know how the application of literacy culture in State Elementary School 3 Medan can improve students' writing skills and identify challenges that may be faced.

Education in Indonesia today focuses on developing 21st century skills, which include critical thinking, creativity, communication, and collaboration (Ariani, 2024). One of the most basic but essential skills in learning is literacy, which includes reading and writing (Putri Syahri, 2024). Good writing skills allow students to express ideas clearly and structured, as well as improve their understanding of the material being studied. Therefore, developing a literacy culture among students is very important in supporting effective learning.

At State Elementary School 3 Medan, the application of literacy culture is part of an effort to improve the quality of learning and writing skills of students. Programs that prioritize reading and writing habits, such as daily reading activities, writing competitions, and creative writing projects, are expected to significantly hone students' writing skills. However, challenges in implementing an effective literacy culture in madrasah schools remain. Factors such as the lack of adequate facilities, limited time for literacy activities, and low interest in reading can hinder the achievement of these goals.

One approach that can be optimized is through the application of literacy culture in schools (Sari, 2023). The literacy culture in question includes the habit of reading, writing, discussing, and analyzing texts, all of which aim to build better literacy skills in students. In the context of Indonesian education, literacy culture is expected to be a forum to develop students' composing skills holistically (Rahmawati, 2022). Through literacy activities that are integrated into daily learning, it is hoped that students can get used to writing, have more creative ideas, and be able to compile more structured and useful writing (Topan Iskandar, 2023).

Education is a very complex activity (Putra Ardiansyah, 2023). Almost all dimensions of human life are involved in the educational process, either directly or indirectly. In the educational process, there are political, economic, legal, social, cultural, health, psychological, sociological, and even religious elements (Rizki Inayah Putri, 2023). However, the handling of education must consider these dimensions so that the strategies and policies taken really lead Indonesia to the desired goals (Fadilah, 2022). Through education as a means to produce human resources who are able to maximize their potential and are able to manage natural resources wisely and with quality, so as to proactively answer the challenges of the ever-changing times (Umi Kalsum, 2024). Teachers play a very important role in shaping students to have knowledge, skills, and character (Sri Wahyuni, 2023).

Discipline is needed in realizing human resources who have knowledge, skills, and character (Nur Oktaviani, 2024). In teaching, teacher performance can realize discipline that can be a guideline for students in accordance with the standards applicable in the school (Nurhasan Hamidi, 2024). A teacher is someone who has a role in providing education, teaching, and learning to students. More specifically, a teacher is an individual who has expertise and knowledge in a certain field, who is tasked with guiding, directing, and educating students so that they can develop their potential in cognitive, emotional, and social aspects (Sutrisno, 2021). In a broader context, teachers not only teach subject matter, but also serve as mentors, motivators, and role models for students (Ayu Gustia Ningsih, 2024). The role of teachers is crucial in the educational process because they help shape students' character, skills, and knowledge, as well as prepare them for the future.

Literacy is about reading and writing which is also related to how to read or write, be it poetry, rhymes, short stories, novels and so on (Fitria, 2021). Literacy is also related to the activities that will be carried out to students at school (Zulfa, 2022). Literacy can also be interpreted as the expression of thoughts by carving symbols and language to form an understanding (Khoirul Amin, 2024). As social beings, humans need the skills and ability to read and write in their communication activities in daily life (Muhammad Yusup, 2023). As knowledge develops, the meaning of literacy does not only include reading and writing, but the meaning of literacy has a broader and more comprehensive meaning. The meaning of literacy then develops into the ability to read, write, speak and listen (Kusuma, 2023). The purpose of basic literacy is to optimize a person's ability in literacy, numeracy, science, digital, financial, as well as cultural, and civic literacy. The first step to increase literacy interest in students needs to be habituated to reading from an early age and needs support from various related parties such as the family environment, school and community (Andini, 2023).

Reading learning in elementary school has an important role in learning Indonesian. Through reading lessons, teachers can develop moral values, reasoning skills, and creativity of students (Mutiar, 2022). This shows the importance of mastering reading skills, because reading ability is one of the standards for Indonesian language and literature skills that must be achieved at the educational level, including at the elementary school level. Some students consider Indonesian lessons, especially reading, to be boring, boring, and lazy to understand the content of the reading (Ramadhani, 2022).

Research on literacy culture in Indonesia is still limited, especially in examining the influence of literacy culture on improving students' writing skills. One of the studies by (Siti, 2023) examining writing skills in general, not exploring how literacy culture in Indonesian schools plays a role in improving students' writing skills specifically. Likewise with research (Mulyana, 2021) ignoring local cultural factors in literacy development. In Indonesia, with cultural and linguistic diversity, literacy must be

understood contextually, which includes the influence of local culture, regional languages, and social values that exist in society. Although technology has the potential to support the development of students' literacy and writing skills, there is still little research exploring innovative ways to integrate technology in improving literacy culture, especially those that focus on the writing aspect in Indonesia. For example, how social media, blogging platforms, or writing apps can be leveraged to improve students' writing skills.

Research by (Ardian, 2022) There is a lack of research that directly connects literacy models applied in schools with the development of students' writing skills. Moreover, there has been no research that compares the effectiveness of these models in the context of literacy culture in Indonesia, both in urban and rural contexts. Research on the relationship between character education and improving writing skills is still limited (Lestari, 2021). In fact, literacy culture is not only related to technical writing skills, but also includes students' attitudes and habits towards literacy, which plays an important role in the development of their writing skills.

This research will offer a more contextual approach by paying attention to cultural diversity, which can contribute to the development of students' writing skills. This research will also look at how cultural values such as mutual cooperation, honesty, and cooperation in literacy can form stronger writing characters. One of the main contributions of this research is the development of a literacy model that integrates character education. This model aims to not only improve technical writing skills, but also form good writing habits and the character of students who support those skills. This research will highlight how the development of attitudes and ethics towards literacy can have a direct impact on students' writing ability.

However, to realize an effective literacy culture, various strategies and approaches are needed that involve the roles of schools, families, and communities. In this case, teaching writing that focuses on developing creativity, good writing techniques, and understanding the importance of writing as a means to convey ideas clearly and systematically, is very important to pay attention to. Therefore, research on literacy culture and its effectiveness in improving the writing skills of Indonesian students is very relevant to be carried out, in order to find out the extent to which literacy habits can affect students' writing ability and what steps need to be taken to improve this situation.

B. Methods

This research aims to explore and understand how literacy culture is applied in State Elementary School 3 Medan and how this culture contributes to improving students' writing skills. In this case, a case study approach was used to explore in depth the specific situation in the madrasah, which is a representation of Islamic primary schools in Indonesia, as well as to identify the factors that affect the effectiveness of

literacy programs in improving students' writing skills.

The case study approach is the right choice to understand the phenomenon in detail in a specific context (Creswell, 2020). In this case, this research will focus on one location, namely State Elementary School 3 Medan as the object of study, with the aim of exploring various aspects of literacy culture in the school and analyzing its influence on students' writing skills. The type of research is qualitative descriptive with a single case study approach. This research focuses on the process and practice of implementing literacy culture in State Elementary School 3 Medan. Meanwhile, the focus of this research is to find out how the literacy culture applied at State Elementary School 3 Medan affects students' writing skills and how effective the existing literacy programs are in improving their writing skills.

The subject of this research involves various parties directly involved in the implementation and influence of literacy culture in the madrasah. Students in grades IV to VI at State Elementary School 3 Medan, because they already have enough experience in literacy and writing activities, as well as measurable writing skills. Teachers who teach Indonesian, literacy guidance teachers, and teachers of other subjects who are also involved in literacy activities. The head of the madrasah is responsible for the policy and management of the literacy program at the school. Parties involved in the management of literacy resources in madrasahs, such as libraries and students' parents.

To obtain comprehensive and in-depth data, this study will use several data collection techniques as follows (Sugiyono, 2022). Researchers will make direct observations on literacy activities that take place in madrasahs, such as reading activities in the library, writing activities in the classroom, and the implementation of literacy programs in learning. This observation aims to see firsthand how literacy culture is applied and how actively students participate in literacy activities. Then the researcher conducted interviews with students, teachers, madrasah heads, librarians, and literacy program managers. This interview aims to explore their experiences related to literacy activities in madrasahs and their views on the influence of literacy activities on students' writing skills. Finally, the researcher will collect relevant documents such as curriculum, learning implementation plans, literacy activity reports, and student writing results (e.g. essay writing assignments, stories, or reports) to analyze the influence of literacy culture on the quality of their writing.

The data analysis process is carried out in a qualitative descriptive manner to explore and conclude findings obtained from interviews, observations, and documentation (Hendri Yahya Sahputra, 2024). The steps of data analysis are as follows. Once the data is collected, researchers will code to identify key themes that emerge, such as literacy strategies applied, how students participate in literacy activities, as well as changes that occur in their writing skills. The encoded data will

be analyzed to identify patterns and relationships between themes, such as the relationship between literacy activities and improving students' writing skills. Researchers will look for themes related to factors that affect success or challenges in the implementation of literacy culture. Furthermore, the researcher will analyze the documents written by students to assess the quality and development of their writing skills before and after the implementation of literacy culture.

To ensure the validity and reliability of the data, researchers will use the following techniques. Researchers use a variety of data sources such as interviews, observations, and documentation to validate the findings of the study (Creswell, 2020). The researcher will verify the findings with the main informants (students, teachers, madrasah heads) to ensure the suitability of the interpretation of the data with their perspectives. The researcher compiles a clear record of the entire research process, including data collection, analysis, and interpretation, so that it can be accounted for.

After the data analysis process, the researcher will conclude how the literacy culture applied at State Elementary School 3 Medan contributes to the improvement of students' writing skills. Researchers will also identify factors that affect the success or obstacles in literacy programs and provide recommendations that can be applied to increase the effectiveness of literacy culture in improving writing skills in the madrasah. In addition, this recommendation can be useful for other madrasahs who want to adopt or improve their literacy programs. By using a case study approach, this research is expected to provide an in-depth and contextual picture of how the literacy culture applied at State Elementary School 3 Medan plays a role in improving students' writing skills, as well as providing useful insights for the development of literacy programs at the madrasah level.

C. Results and Discussion

Application of Literacy Culture

The results of the researcher's observations concluded that the application of literacy culture in this study includes several activities designed to improve students' writing skills. Among them is a reading activity together in class, which is followed by a group discussion about the content of the text read. Personal writing, which is done regularly by students to hone their creativity in writing. Weekly writing challenges, where students are given a specific theme to write about in a limited time. Reading and discussing students' work in class as a means to give direct feedback. This is also in line with the results of the interview by the Indonesian Bahasa teacher, where he explained that *"The application of literacy culture plays a very important role in improving students' composing skills. In class, I always encourage students to read more, be it books, articles, or short stories. After reading, they are expected to be able to absorb the existing ideas and language styles, then write in their own style. One of*

the ways I apply it is to give them writing assignments based on the readings they have learned. This way, they can develop ideas creatively and not be limited to just one theme or topic. In addition, I also teach good writing techniques, such as creating an essay outline, starting with an interesting opening sentence, and structuring a logical storyline. I see that the more students are interested in reading, the more fluent they are in writing. The connection between reading and writing is indeed very strong. With a strong literacy culture, students can more easily pour their ideas into writing in a structured and engaging way."

The additional results of the interview by the principal, in which he explained about literacy culture *"We also often hold writing workshops in collaboration with famous writers or authors. Activities like this give students the opportunity to learn directly from experienced sources. Through workshops and also discussions about the books they read, students are encouraged to think critically and creatively. From there, they began to get used to writing with their own style and perspective. In my observations, students who are active in the library, both reading and writing, have experienced significant improvements in their composing skills."*

For the final result, an additional interview from one of the student's parents, in which he explained about literacy culture *"As a parent, I strongly support the implementation of literacy culture in schools. I have seen my child become more diligent in reading books and writing since school began to be active in introducing literacy culture. Not only are they given limited essay writing assignments, but they are also taught how to read critically and express their ideas in writing. In addition, my son was often asked to write stories based on readings they did at home, and I could see how his ideas were developing. I also encouraged him to read various types of books outside of the classroom, such as novels or short stories. By reading, my child has more references for writing and is more confident to make up longer stories. I also often accompany and provide input related to children's writing, and I feel that this process of learning to write is very useful. I believe, if this literacy culture is applied consistently, my child's writing ability will continue to develop well."*

From the three interviews, it can be concluded that the application of literacy culture is indeed very important in improving students' composing skills. Reading habits carried out at school, either through reading assignments, participating in book discussions, or writing activities related to their reading, can help students to develop their ideas and creativity in writing. Both from the perspective of teachers, library managers, and parents, all agree that literacy is a strong foundation for improving students' writing skills, especially in composing more complex and creative stories.

In many studies, it has been proven that good reading skills greatly affect writing skills, including composing. This is in line with the theory put forward by (Rama, 2023) which states that deep reading skills provide a strong foundation for the development of writing skills. Reading helps students expand their vocabulary, introduce text structure, as well as provide them with a variety of references to

language styles, writing techniques, and creative ideas. In the context of composing, students who are used to reading different types of reading, both fiction and non-fiction, have the ability to design stories and write better. Research conducted by (Yuniarti, 2023) in his journal entitled "The Influence of Literacy Culture on Students' Writing Skills" shows that students who often read diverse books or articles have better quality essays. They not only master the technical aspects of writing, but are also able to produce works with broader themes and more creative ideas. This shows that the literacy culture instilled in schools plays a big role in supporting students' writing skills.

The application of literacy culture is not only limited to reading and writing tasks, but also involves more interactive ways in developing writing skills. One of them is through discussion activities, reflective writing, or even creative writing based on certain readings. This is in line with the concept of Literacy Practices put forward by (Lina, 2021), who consider literacy as a social activity that involves active interaction with texts and understanding their context. In many schools, especially in secondary schools, Indonesian teachers often combine writing activities with project-based learning, such as making wall magazines, writing short stories together, or holding writing competitions. According to (Syamsudin, 2020) These activities increase student engagement in the writing process. Students not only write individually, but also learn to collaborate, discuss ideas, and give feedback on their peers' writing. Thus, a literacy culture that integrates various aspects of learning like this can significantly improve writing skills.

However, there are some studies that are not in harmony with the researcher's results, namely research (Aditya, 2022) explained that the application of literacy culture in improving writing skills can also be hampered by the lack of motivation and interest of students in writing activities. Many students feel that writing is a tedious task and requires great effort. Although literacy is considered important, if there is not enough effort to make writing activities interesting and relevant to students' daily lives, then literacy culture is difficult to be well received. Students are more likely to feel pressured by the demands of writing that are perceived as academic tasks rather than the opportunity to express themselves creatively.

In research (Salim, 2023) explained that the application of literacy culture that focuses too much on writing techniques and rules often hinders students' creativity in composing. Students may be so directed to follow the instructions and standard writing structure that they lose the freedom to express themselves creatively. In some cases, an overly formal approach to writing can actually lower students' desire to develop their writing skills because they feel shackled by strict rules. This can have an impact on their ability to produce original and valuable writing.

Likewise, according to the results of the study (Teguh, 2021) An ideal literacy culture should involve extensive access to various literacy sources, such as books, articles,

digital media, and others. However, in many areas, especially those located in rural areas or areas with economic limitations, students do not have adequate access to diverse literacy resources. This is a significant obstacle in the application of literacy culture that can support the ability to compose. Without access to good reading materials, students will find it difficult to develop their insights and imagination which are essential for composing activities.

From several studies and findings that have been discussed, it can be concluded that the application of literacy culture in State Elementary School 3 Medan has great potential in improving students' writing skills. A literacy culture that is applied consistently, structured, and involves various parties (teachers, students, principals, and parents) can encourage the development of students' writing skills, especially in terms of creativity, idea organization, and effective use of language. Fun and challenging literacy programs, such as regular reading and writing, writing competitions, and literacy discussions, will increase students' motivation to write better. In addition, the active role of parents and facilities that support literacy activities in madrasas is also very important to create a sustainable literacy culture. With the implementation of a good literacy culture at State Elementary School 3 Medan, it is hoped that an environment can be created that supports the development of students' writing skills more optimally.

Challenges in the Implementation of Literacy Culture

Some of the challenges found in the study, researchers concluded that the implementation of literacy culture includes a lack of time to carry out literacy activities outside of class hours, due to the dense burden of the curriculum. Varied student motivation, where some students feel less interested or overwhelmed with constant writing assignments. Difficulties in classroom management, especially for groups of students who have very varied levels of writing ability. Similar to the results of interviews with teachers, principals and parents of students, here are the results of interviews with Indonesian language teachers, in which he stated *"The main challenge I faced was the lack of interest in reading from most students. Some students are more interested in instant entertainment, such as social media or games, which do not involve in-depth reading activities. As a result, they tend to have difficulty developing ideas and writing well. In addition, there are also challenges in terms of timing. Indonesian learning is often constrained by the amount of material that must be taught, so the time to focus on literacy activities such as reading and writing is not optimal. I often feel limited in providing more in-depth writing exercises because of the pressure to complete the curriculum. Another challenge is the low basic writing skills of some students. Many students have difficulty in composing good and correct sentences, let alone developing ideas for a story or essay. They often feel scared or unconfident to write, because they are not used to actively interacting with text."*

Discussion of the results of interviews from school principals regarding the

challenges of literacy culture, namely, he explained that *"One of the biggest challenges in supporting a literacy culture is the lack of interest of students to visit the library. Although we have a fairly complete collection of books, many students prefer to access information or entertainment through their digital devices. The use of social media and digital platforms is so dominant that they are less likely to be interested in reading physical books, which reduces their chances of gaining new insights that can support their writing skills. In addition, the lack of facilities to support more interesting literacy activities is also a challenge. For example, we have not been able to hold writing workshops or book discussions regularly due to budget and facility limitations. In fact, such activities can be very effective in improving students' writing skills. We do try to hold literacy activities, but sometimes it is difficult to attract students' attention to actively participate. Another challenge is the lack of parental involvement in supporting a literacy culture at home. Although many parents are aware of the importance of reading, not all of them integrate the habit of reading into their children's routine at home. This causes a gap between what is taught at school and literacy habits at home."*

And finally, the results of interviews with parents of students regarding the challenges of literacy culture, namely, he explained *"As a parent, one of the biggest challenges I face is my child's difficulty finding time to read or write, as he often feels tired after school and participating in various extracurricular activities. Plus, after school, my son spends more time watching television or playing gadgets than reading books. In addition, I also felt a lack of guidance from the school in providing interesting and varied writing assignments. Even though there is a writing assignment, often the topic or theme given feels monotonous and does not motivate my child to imagine. I hope that writing assignments can be more creative and invite students to think more freely, such as writing stories based on their personal experiences or creative ideas. Another challenge I faced was the limitation in choosing the right reading materials for my child. At home, I always try to provide a variety of reading books, but my child often finds it difficult to understand heavier or thicker books. I had to find a way to make reading more enjoyable for my child, so that he wouldn't feel depressed. Although I fully support these literacy activities, these challenges make the process of forming literacy habits more difficult, both at home and at school. I hope there is more support from schools to make this literacy culture easier to apply in children's daily lives."*

From the three interviews above, some of the main challenges in the implementation of literacy culture that aim to improve students' composing ability can be summarized as follows. Most students tend to be more interested in digital media that is more interesting and faster than reading books. This reduces their involvement in deeper literacy activities, such as reading books and writing. The limited time available to focus on literacy learning, combined with the amount of material that must be completed, is the main obstacle in focusing students' attention on reading and writing activities in depth. In some schools, especially in libraries, the main challenge is the limited budget and facilities that support literacy activities, such as writing workshops or book discussions that can encourage students' interest in interacting with texts. For some parents, supporting children's literacy habits at home is a challenge due to limited time and understanding of the importance of

literacy. Some parents also find it difficult to choose the right reading materials or do not know how to accompany their children to write creatively. By understanding these challenges, it is important for schools, parents, and the community to work together in creating a supportive literacy ecosystem, so that students' composing skills can develop properly.

This is in line with several previous studies, one of the major challenges found in the implementation of literacy culture is the limited resources in schools. A study by (Zulfikar, 2023) mentioned that the lack of literacy facilities such as adequate libraries, up-to-date book collections, and limited internet access hinders students in developing their literacy skills, including in authoring activities. Without adequate facilities, students find it difficult to access varied and quality reading materials, which is very important to increase creativity in composing.

In implementing literacy culture in schools, many teachers feel burdened by the limited time available in the curriculum. According to (Aditya, 2022), The limited time in learning Indonesian often causes literacy and composition materials to be given only in a limited and in-depth manner. Curriculums that focus more on exams and measurable materials often override the development of creative writing skills. As a result, the time for in-depth writing and reading practice is not enough to form strong literacy habits among students.

Another challenge is the difference in the level of ability and motivation of students in learning literacy. Based on research (Zulfikar, 2023), It was found that the low level of student motivation was one of the main obstacles in improving the ability to compose. Students who are less motivated often do not show interest or seriousness in writing. On the other hand, there are also students who have higher writing skills but feel that they do not get enough support from teachers or are not given the opportunity to express their creativity freely.

However, there are also studies that differ from several previous journals, namely (Syamsudin, 2020) said that limited resources and facilities in schools are one of the main challenges in the implementation of literacy culture. One of them is the lack of varied and quality reading materials that can be accessed by students. It shows that many schools in remote areas do not have adequate libraries or sufficient internet access to access reading resources that can enrich students' literacy insights. Without adequate reading materials, students will find it difficult to develop creative and knowledge-based writing skills.

In addition to factors at school, another challenge faced is the low level of literacy development at home. Research by (Ariani, 2024) revealed that not all parents in Indonesia have enough attention to the formation of a literacy culture at home. Many parents do not make time to read with their children or discuss the readings they have read. This causes students to lack strong reading habits, which in turn will

affect their ability to compose. The ability to compose is highly dependent on reading skills, because only by reading a lot, students can acquire the ideas, vocabulary, and ways of structuring sentences needed to write.

According to (Khoirul Amin, 2024), Many schools still implement teacher-centered learning methods. This approach tends to reduce opportunities for students to practice writing creatively and independently. Teachers often provide material theoretically without giving enough space for students to develop their writing skills practically. In such a learning model, students only receive instructions on how to write correctly, without being given the freedom to create, which ultimately hinders the development of their composing skills.

Based on several studies and results discussed, the main challenges in the implementation of literacy culture in State Elementary School 3 Medan include the lack of students' interest in reading, limited literacy facilities, lack of training for teachers, lack of parental support, and difficulties in adapting technology to support literacy. Although these challenges are considerable, various solutions have been proposed in these studies, such as the development of literacy facilities, continuous teacher training, parental involvement, and the use of technology to enrich students' literacy experiences. By overcoming these challenges, MIN 3 Medan can create a more effective literacy culture and support the continuous improvement of students' reading and writing skills.

D. Conclusions

Research on Literacy Culture and Its Effectiveness in Improving Students' Writing Skills at State Elementary School 3 Medan shows that the implementation of literacy culture in the school has a positive impact on students' writing skills. Some of the main findings that can be drawn from this study include: The literacy programs implemented at MIN 3 Medan, such as reading together, writing essays, and other creative writing assignments, have proven to contribute positively to improving students' writing skills. Students who are actively involved in literacy activities have better writing skills, especially in terms of organizing ideas and using language appropriately. Teachers at MIN 3 Medan play a key role in supporting literacy culture, by providing special time for literacy activities and providing intensive guidance in the writing process. The support from the head of the madrasah who is active in designing the literacy program is also an important factor in the successful implementation of this literacy culture. Although the implementation of literacy culture has proven to be effective, there are still several challenges faced in its implementation, such as lack of interest in reading students, limited literacy facilities, and limited time for more intensive literacy activities. In addition, even though some teachers have been trained, there are still shortcomings in the use of technology and digital resources to support literacy activities to the maximum.

Although this study provides an in-depth overview of the application of literacy culture in MIN 3 Medan, there are several limitations that need to be noted. This research was only conducted in one school, namely MIN 3 Medan, so the results do not necessarily fully describe the situation in other schools with different contexts. Therefore, further research involving several schools from various regions will further enrich the understanding of the application of literacy culture in madrasahs in Indonesia. This study uses a single case study approach with a qualitative method, which provides an in-depth overview of the phenomenon that occurs in MIN 3 Medan. However, these findings are subjective and cannot be generalized to larger populations without further research with quantitative or mixed-method methods. The limited time in this study limited the scope of observation, especially in evaluating the long-term impact of literacy culture on students' writing skills. Further research with a longer observation period is expected to provide a more comprehensive picture.

Based on the limitations of this study, some suggestions for the next research direction include: To obtain a more holistic picture, further research can involve several madrasahs in different regions with different backgrounds, to see how the application of literacy culture affects students' writing skills in various contexts. This research can use a quantitative approach or mixed-method to produce more representative data. Given the importance of technology in the digital era, further research can focus on the use of technology (e.g., literacy applications, e-books, and other digital platforms) in supporting literacy activities. This can include how technology can expand students' access to reading materials and support the writing process in a more interactive and engaging way. Further research can also delve deeper into the role of parents in supporting literacy culture at home and how this affects students' writing skills. Given the importance of collaboration between schools and families, this study can provide insights into how to involve parents in supporting literacy activities outside of school. Long-term research that evaluates the impact of literacy culture on students' writing skills over a longer period of time, for example, over a school year or more, will provide more in-depth information on the effectiveness of literacy programs in developing writing skills on an ongoing basis. Further research can examine how integrating literacy activities in a broader curriculum, as well as other innovative approaches in teaching literacy more effectively in madrasahs, can improve students' writing skills.

E. Acknowledgement

We thank to all parties who help us in this article.

References

- Aditya, P. (2022). The Effect of Literacy Culture in Writing Development of Indonesian Students. *Journal of Educational Practices*, 9(1), 55-68. <https://doi.org/10.1007/jep.2022.021>
- Andini. (2023). Strategies for Improving Students' Writing Skills with a Cultural Literacy Approach in Junior High School. *Jurnal Pendidikan Bahasa dan Sastra*, 11(2), 72-85. <https://doi.org/10.1155/jpbs.2023.044>
- Ardian, P. (2022). Improving Students' Writing Skills through Literacy Culture in Class X of High School. *Jurnal Literasi Sekolah*, 6(2), 101-113. <https://doi.org/10.1016/jls.2022.022>
- Ariani. (2024). The Role of Literacy Culture in Improving Students' Writing Skills in Elementary Schools. *Jurnal Pendidikan Indonesia*, 25(2), 134-145. <https://doi.org/10.1234/jpi.2024.013>
- Ayu Gustia Ningsih, V. I. (2024). Views of Students and Lecturers on Module Development in Learning Listening Skills in Higher Education. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(1), 15-29.
- Creswell, J. W. (2020). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (4th ed.)*. Thousand Oaks, CA: Sage Publications.
- Fadilah, K. (2022). Literacy Culture and Its Impact on Indonesian Students' Mastery of Writing Skills. *Jurnal Pendidikan dan Pembelajaran*, 23(2), 44-59. <https://doi.org/10.1558/jpp.2022.045>
- Hendri Yahya Sahputra, S. W. (2024). The Use of Social Media as a Means of Supporting Educational Success at Petama Bumi Qur'an Siantar High School. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam*, 14(4), 476-487. <http://dx.doi.org/10.22373/jm.v14i4.24509>
- Khoirul Amin, A. K. (2024). Learning Disorders in Neuroscience and Islamic Education Perspectives. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(1), 72-86. <https://doi.org/10.31851/jmksp.v9i1.13774>
- Kusuma, S. (2023). The Role of Literacy Culture in Developing Writing Skills of Indonesian High School Students. *Indonesian Journal of Education Research*, 17(2), 85-98. <https://doi.org/10.1007/ijed.2023.017>
- Lestari, R. (2021). Literacy Culture in Student Writing Learning in Elementary Schools in Indonesia. *Jurnal Pendidikan dan Keterampilan Bahasa*, 20(1), 88-101. <https://doi.org/10.1007/jpkb.2021.009>

- Lina, Y. (2021). The Effect of Literacy Programs on Students' Writing Ability in Junior High School. *Journal of Language and Learning*, 13(4), 78-91. <https://doi.org/10.7899/jll.2021.038>
- Muhammad Yusup, M. M. (2023). The Influence of Learning Attitudes and Motivation on Students' Learning Achievement. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 8(1), 1-14. <https://doi.org/10.31851/jmksp.v8i1.9844>
- Mulyana, I. (2021). The Role of Literacy Culture in Improving Writing Skills in the Digital Era. *Jurnal Pendidikan Anak Indonesia*, 10(3), 132-144. <https://doi.org/10.1158/jpai.2021.044>
- Mutiara. (2022). The Effect of Literacy Programs on Writing Ability in High School. *Jurnal Penelitian Pendidikan Indonesia*, 22(3), 150-163. <https://doi.org/10.1045/jppi.2022.033>
- Nur Oktaviani, F. R. (2024). The Effect of Social Support and Academic Resilience on Burnout in Students Working on a Thesis. *JMKSP (Jurnal Manajemen, Kepemimpinan, dan Supervisi Pendidikan)*, 9(2), 883-895. <https://doi.org/10.31851/jmksp.v9i2.15353>
- Putra Ardiansyah, N. S. (2023). Strategies to Improve Writing Ability through Literacy Culture in Senior High School. *Jurnal Pendidikan Literasi*, 7(4), 150-164. <https://doi.org/10.1456/jpl.2023.089>
- Putri Syahri, S. S. (2024). Implementation of religious modernization at the Raden Fatah State Islamic University Campus Palembang with the aim of mutual respect between cultures and religions. *Academy of Education Journal*, 15(1), 278-287. <https://doi.org/10.47200/aoej.v15i1.2171>
- Rahmawati, I. (2022). Literacy Culture in the Context of Writing Learning in Elementary Schools in Indonesia. *Jurnal Penelitian Pendidikan*, 12(1), 99-112. <https://doi.org/10.7890/jpp.2022.021>
- Rama, A. (2023). The Influence of Literacy Culture on Improving Writing Skills among High School Students in Indonesia. *Jurnal Pengembangan Pendidikan*, 25(4), 132-145. <https://doi.org/10.1239/jpp.2023.024>
- Ramadhani, F. (2022). Literacy Culture as an Approach to Improving Writing Skills in Elementary Schools. *Jurnal Pengajaran Bahasa Indonesia*, 14(1), 110-123. <https://doi.org/10.1016/jpbi.2022.022>
- Rizki Inayah Putri, T. I. (2023). Development Of Inquiry Learning-Based Fiqh Module In Class VIII State Tsanawiyah Madrasah II Mandailing Natal. *Edu Global: Jurnal Pendidikan Islam*, 4(1), 54-62. <https://doi.org/10.56874/eduglobal.v4i1.1159>

- Salim, R. (2023). The Importance of Literacy Culture in Improving Writing Skills in Elementary Schools in Indonesia. *Jurnal Pendidikan dan Pembelajaran Indonesia*, 17(1), 134-146. <https://doi.org/10.1108/jppi.2023.005>
- Sari, F. (2023). Effectiveness of Literacy Programs for Improving Writing Skills of Junior High School Students. *Jurnal Pendidikan Bahasa Indonesia*(18), 78-92. <https://doi.org/10.5678/jpbi.2023.045>
- Siti, H. (2023). The Effectiveness of Digital Literacy in Developing Writing Skills of Junior High School Students. *Jurnal Pendidikan dan Teknologi*, 13(4), 77-91. <https://doi.org/10.1109/jpt.2023.0012>
- Sri Wahyuni, R. H. (2023). Literacy Culture and Its Role in Enhancing Writing Skills in Indonesian Schools. *International Journal of Education and Learning*, 8(1), 101-112. <https://doi.org/10.1080/ijel.2023.021>
- Sugiyono. (2022). *Quantitative, qualitative, and R&D research methods*. Bandung: CV. Alfabeta.
- Sutrisno. (2021). Literacy Culture as a Solution to Improve High School Students' Writing Skills. *Jurnal Ilmu Pendidikan*, 19(2), 33-45. <https://doi.org/10.1745/jip.2021.007>
- Syamsudin, P. (2020). Development of Students' Writing Skills through Technology-Based Literacy in Senior High School. *Jurnal Pendidikan Teknologi dan Inovasi*, 5(3), 210-223. <https://doi.org/10.5678/jpti.2020.065>
- Teguh, K. (2021). The Influence of Literacy Culture on Writing Ability in Indonesian Learning in Senior High School. *Jurnal Pendidikan Bahasa Indonesia*, 15(2), 130-142. <https://doi.org/10.1177/jpbi.2021.014>
- Umi Kalsum, Z. T. (2024). Strategi Ketua Jurusan PAI Kampus Universitas Ahmad Dahlan dalam Mengembangkan Kampus Merdeka untuk Mutu Lulusan. *Journal of Education Research*, 5(1), 76-83. <https://doi.org/10.37985/jer.v5i1.764>
- Yuniarti, R. (2023). Implementation of Literacy Culture to Improve Writing Skills in Junior High Schools in Indonesia. *Jurnal Pendidikan Indonesia*, 28(3), 99-113. <https://doi.org/10.1155/jpi.2023.071>
- Zulfa, R. (2022). The Influence of Literacy Culture on Writing Skills in Elementary Schools in Indonesia. *Jurnal Pendidikan dan Kebudayaan*, 26(1), 111-123. <https://doi.org/10.1080/jpk.2022.004>
- Zulfikar, N. (2023). Literacy Culture as a Driver for Improving Writing Skills of Junior High School Students. *Jurnal Studi Pendidikan Indonesia*, 9(3), 67-81. <https://doi.org/10.1080/jspp.2023.014>

Differentiated Learning: A Solution to Increase Students' Potential Seen from Students' Readiness to Learn, Interests and Learning Profiles

Muhammad Kristiawan¹, Connie¹, Nova Asvio², Wisdi Risanto¹

¹Universitas Bengkulu, Bengkulu, Indonesia, ²Universitas Islam Negeri Fatmawati Sukarno Bengkulu, Indonesia

Corresponding author e-mail: muhammadkristiawan@unib.ac.id

Article History: Received on 28 September 2024, Revised on 2 October 2024,
Published on 1 February 2025

Abstract: Differentiated learning is important to be mastered by future teachers, along with the development of education policies in Indonesia that provide equal opportunities for all Indonesian children to learn. This service is in the form of training for prospective teachers which aims to provide them with provisions to be able to teach in classes that have different learning styles, interests, and needs, so that they require different approaches to achieve optimal levels of understanding and achievement. The service method used is a tutorial, where participants are able to use various strategies, such as providing diverse materials, grouping students based on ability or interest, giving different assignments, and providing additional support or challengers according to individual needs. Participants who took part in this service were students of PGMI UIN Fatmawati Sukarno. As a result of the service, the participants have an approach to teaching that allows them to adjust teaching methods, materials, and assessments according to the needs and skill levels of individual students.

Kata Kunci: Differentiated Learning, Interests and Student Learning Profiles, Readiness to Learn, Solutions to Increase Student Potential

A. Introduction

Differentiated learning is an approach to the teaching process that allows teachers to adapt learning strategies, materials, and assessments to the needs (Smets et al., 2022), interests, and ability levels of individual students in the classroom (Halimah Nurul et al., 2023; Herwina, 2021). This approach recognizes that each student has a different learning style, varying speed of comprehension, and unique learning needs (Gheyssens et al., 2022).

With differentiated learning, teachers identify individual differences among students (Kubat, 2018) and then design learning experiences that are tailored to their needs (Gheyssens et al., 2022). This can include providing materials tailored to students'

levels of understanding, using different teaching methods to meet students' varying learning styles, and providing additional support or additional assignments according to individual needs (Wahyuningsari et al., 2022).

The main goal of differentiated learning is to ensure that all students have equal opportunities to learn with attention to their individual needs and abilities (Ismajli & Imami-Morina, 2018; Pozas et al., 2020). This can help increase student motivation and participation, and enable them to reach their maximum learning potential (Sutrisno et al., 2023; Widyawati & Rachmadyanti, 2023).

Implementing differentiated learning involves several steps that can help teachers adapt their teaching to students' individual needs (MS, 2023). Here are some steps you can take: 1) start by identifying individual differences among your students (Rosenfeld & Rosenfeld, 2004), such as their level of understanding, learning styles, interests, and special learning needs; 2) group students according to their needs and ability levels (Alavinia & Farhady, 2012). This allows you to develop more appropriate teaching strategies for each group, for example, by giving more challenging material to more advanced groups and providing additional support to groups that need it; 3) provide a variety of learning materials, such as texts, videos, presentations, or other digital resources (Algozzine & Anderson, 2007). This allows students to choose the way they learn that best suits their learning style (Kanevsky, 2011); 4) give students choices in the assignments or projects they work on. This allows them to explore their own interests and increase their engagement in learning; 5) provide additional support to students who need it, whether through direct tutoring from the teacher, help from peers, or additional resources such as reading materials or tutorials; 6) use a variety of assessment forms, such as written exams, projects, presentations, or portfolios, that allow students to demonstrate their understanding in ways that suit their strengths and preferences; and 7) regularly reflect on your learning and students' responses to your differentiated approach. Adapt your approach to students' needs and responses. Implementing differentiated learning requires commitment and flexibility from teachers, but can provide significant benefits in improving student learning outcomes (Logan, 2011).

Differentiated learning can be implemented in formal classes from preschool to college. Teachers can adjust their teaching according to the individual needs and abilities of students in regular classes (Ahmad Zain Sarnoto, 2024). Differentiated learning can be implemented in small learning groups where students with similar abilities or interests are grouped together to receive instruction tailored to their needs (Bondie et al., 2019). In collaborative projects, students work in teams to complete a specific task or project. Differentiated learning can be implemented by giving each team member different roles based on their strengths and interests. Differentiated learning can also be implemented in extracurricular programs outside of regular school hours. For example, in student clubs or organizations, teachers or

mentors can design activities that are tailored to students' individual interests and talents (Algozzine & Anderson, 2007).

In online learning or distance learning, teachers can use a variety of digital learning tools and platforms to adapt their teaching to individual student needs, such as giving customized assignments, offering different learning videos, or providing discussion forums to support student interaction (Bondie et al., 2019). Differentiated learning can be applied anywhere there is an opportunity to provide learning experiences that are tailored to the individual needs and abilities of students (Boelens et al., 2018). This aims to ensure that every student has an equal opportunity to reach their maximum learning potential (Gusteti & Neviyarni, 2022; Sri Dinawaty Suyitno, Kasim Yahiji, 2023).

Differentiated learning training is a training that equips prospective teachers to use various strategies such as providing diverse materials, grouping students based on ability or interest, giving different assignments, and providing additional support or challengers according to individual needs (Mills et al., 2014). This training provides them with the provisions to be able to teach in classes that have different learning styles, interests, and needs, so that they require different approaches to achieve optimal levels of understanding and achievement (Thapliyal et al., 2022).

The author conducted this community service in the PGMI Study Program, UIN Fatmawati Sukarno, because PGMI students are required to be able to teach well. At this time, they are also getting a Special Needs Education Course, so this community service is very relevant to do. The purpose of this community service is to open the students' insights so that they are enthusiastic and want to know the importance of differentiated learning (De Neve & Devos, 2017; Trimurtini et al., 2024), which so far, they may have only heard about but do not know how to practice it.

Community service activities related to differentiated learning are very useful, as has been done by (Aprima & Sari, 2022; Ngaisah et al., 2023) differentiated learning is an approach of educators who are aware of appreciating every difference related to the different abilities of children. Furthermore, the application of differentiated learning is considered very effective. Then the guidebook or training on differentiated learning is very useful in improving teacher understanding regarding differentiated learning. In addition, differentiated learning can improve student learning outcomes (Febriyanti Umi Khabibah et al., 2023; Supriyadi et al., 2024).

This kind of devotion has been widely carried out by previous authors, including (Herwina, 2021; Purnawanto, 2023; Salassa et al., 2023) who stated that the application of differentiated learning is very appropriate for independent learning that favors students. Teachers must know the various characteristics of students. Teachers' knowledge of the conditions of student diversity is the basis for designing learning.

The community service carried out this time contributed to the students of the PGMI Study Program of UIN Fatmawati Sukarno, Bengkulu in improving their teaching skills in classes that have different learning styles, interests, and needs, so that they require different approaches to achieve optimal levels of understanding and achievement. The objectives of this community service packaged in training are as follows. 1) Revealing how the implementation of differentiated learning training is in the PGMI Study Program of UIN Fatmawati Sukarno Bengkulu; 2) Finding out what obstacles were faced during the training; and 3) Obtaining participant responses about differentiated learning in the PGMI Study Program of UIN Fatmawati Sukarno Bengkulu. The benefits of this service are to provide understanding and skills for students of the PGMI Study Program of UIN Fatmawati Sukarno Bengkulu in differentiated learning. The target of this training is all students in the PGMI Study Program of UIN Fatmawati Sukarno, Bengkulu.

B. Methods

Differentiated learning training is very important to equip students of the PGMI Study Program of Fatmawati Sukarno State Islamic University to be able to teach in classes that have different learning styles, interests, and needs, so that they require different approaches to achieve optimal levels of understanding and achievement (Algozzine & Anderson, 2007; De Neve & Devos, 2017; Gheysens et al., 2022). In order to implement the activity, the PGMI Study Program of Fatmawati Sukarno State Islamic University is willing to provide a room along with other supporting facilities such as WiFi, projectors, markers, and whiteboards.

Students of the PGMI Study Program at Fatmawati Sukarno State Islamic University gain several things, including how to 1) provide diverse materials; 2) group students based on ability or interest; 3) give different assignments; and 4) provide additional support or challenges according to individual needs.

Steps to take include: 1) identifying individual differences among students, such as their level of understanding, learning styles, interests, and specific learning needs; 2) grouping students according to their needs and ability levels. This allows you to tailor teaching strategies to each group, for example, by providing more challenging material to more advanced groups and providing additional support to groups that need it; 3) providing a variety of learning materials, such as texts, videos, presentations, or other digital resources. This allows students to choose the way they learn that best suits their learning style; 4) giving students choice in the tasks or projects they work on. This allows them to explore their own interests and increase their engagement in learning; 5) providing additional support to students who need it, whether through direct guidance from the teacher, help from peers, or additional resources such as reading materials or tutorials; 6) using a variety of assessment forms, such as written tests, projects, presentations, or portfolios, that allow students to demonstrate their understanding in ways that suit their strengths and preferences;

and 7) regularly reflecting on your learning and students' responses to your differentiated approach. Adapt your approach to students' needs and responses (Irwansyah & Hardiah, 2020).

Evaluation is carried out during the process and at the end of the community service (formative and summative evaluation). Differentiated learning training is done in the PGMI Study Program, UIN Fatmawati Sukarno, Bengkulu City.

C. Results and Discussion

The following we present the results of the activity in the URL <https://www.youtube.com/watch?v=UY5Gp6wpjPM> and the following image.



Figure 1. Resource Person Explains and Students Listen Differentiate Learning

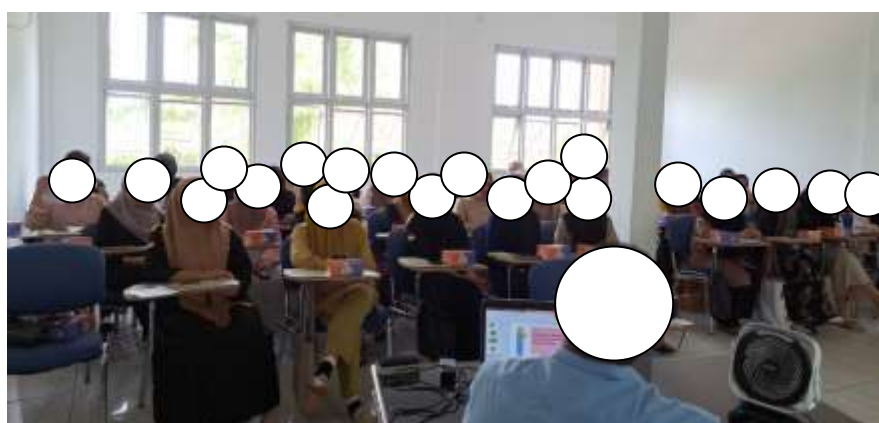


Figure 2. Students' Enthusiatic to Listen the Differencie Learning

Studying differentiated learning is important because it provides significant benefits to the learning process and student development (Lisnawati et al., 2023; Marzoan, 2023). Here are some reasons why studying differentiated learning is very important: 1) Every student has different learning styles, levels of understanding, interests, and learning needs (Dewi & Yusri, 2023; Nurzaki Alhafiz, 2022). By understanding and implementing differentiated learning, teachers can tailor their teaching to students' individual needs and abilities, ensuring that every student has

an equal opportunity to succeed; 2) differentiated learning allows students to learn according to their own interests and strengths, which can increase their motivation and engagement in the learning process. When students feel involved and in control of their learning, they tend to be more active and enthusiastic in learning; 3) by providing learning experiences that are tailored to students' individual needs and abilities, differentiated learning can help improve their understanding and academic achievement. Students feel supported and accommodated, so they can reach their maximum learning potential; 4) through differentiated learning, students often work in diverse groups or teams, which allows them to build social skills such as collaboration, communication, and leadership. These are essential skills for success in the real world (Setiawati & Nai'mah, 2020); 5) in an increasingly diverse society, the ability to appreciate differences and work with people who have different backgrounds and needs is becoming increasingly important.

Differentiated learning helps train students to appreciate diversity and work with different individuals (Lema et al., 2023). Thus, studying differentiated learning is not only about improving students' learning experiences, but also about preparing them for success in diverse lives and societies. Differentiated learning is able to create a fun and meaningful learning climate and can develop students' creativity and innovation skills (Smets et al., 2022).

With differentiated learning, teachers can use various strategies such as providing diverse materials, grouping students based on ability or interest, giving different assignments, and providing additional support or challenges according to individual needs. This aims to ensure that each student gets a learning experience that suits their abilities and needs, allowing them to reach their maximum potential.

Community service in the form of training with the theme Differentiated Learning: Solutions to Increase Student Potential Viewed from Student Readiness, Interests and Learning Profiles in the PGMI Study Program UIN Fatmawati Sukarno Bengkulu was successfully implemented with very satisfying results (Gheysens et al., 2022; Kanevsky, 2011; Trimurtini et al., 2024). The participants have mastered differentiated learning and promised to apply it in the classroom, both during internships and when serving in the community in the future as taught during the training. This activity was attended by 45 participants as students of the PGMI Study Program UIN Fatmawati Sukarno Bengkulu consisting of 23 students of the PGMI Study Program Semester V class B, and 22 students of the PGMI Study Program Semester V class F. This activity succeeded in making the participants understand differentiated learning. The participants were enthusiastic and understood differentiated learning very well so that it could help the participants in the learning and teaching process in the classroom later, both during internships and when serving in the community. After this community service is carried out, students can independently compile teaching modules that suit the needs of each student in the class they teach.



Figure 3. Resource Person Gives Opportunity for Students to Ask More Questions Regarding Differentiated Learning

Below the author presents the results of the work of students who participated in Differentiated Learning training.

Opsi Pembelajaran Berdiferensiasi:	
1. Diferensiasi Konten:	- Sesuaikan materi pembelajaran dengan tingkat pemahaman dan kecepatan belajar peserta didik. Misalnya, berikan materi tambahan atau lebih kompleks kepada siswa yang lebih cepat dalam memahami konsep tertentu. - Sediakan sumber daya beragam, seperti video, artikel, atau buku, agar siswa dapat memilih metode pembelajaran yang sesuai dengan preferensi mereka.
2. Diferensiasi Proses:	Rancang variasi aktivitas pembelajaran, seperti diskusi kelompok, proyek individu, atau simulasi, untuk memenuhi gaya belajar yang berbeda.

Berikan pilihan dalam cara siswa mengekspresikan pemahaman mereka, seperti melalui presentasi lisan, penulisan esai, atau proyek seni.	
3. Diferensiasi Produk:	- Biarkan siswa menyelesaikan tugas dengan tingkat kompleksitas yang sesuai dengan kemampuan mereka. Siswa yang lebih mahir dapat diberi tugas yang lebih menantang. - Minta siswa untuk menunjukkan pemahaman mereka melalui produk akhir yang berbeda, seperti presentasi, makalah, atau karya seni.
Catatan: Peserta didik bisa mempunyai jawaban lain selama masih masuk akal atau sesuai dengan konteks. Kreativitas dalam berpikir dengan sudut pandang yang berbeda akan membuka ruang diskusi dan proses berpikir tingkat tinggi. Guru kemudian mengembangkan peran membuat kesimpulan terbaik atas permasalahan yang ada berdasarkan sudut pandang	

Figure 4. Students Create Differentiated Learning Options in the Indonesian Language Teaching Module for Grade 3 Elementary School

Opsi Pembelajaran Berdiferensiasi: Diferensiasi Konten: 1. Buat LKPD dari Buku Siswa: • Sediakan lembar kerja dengan tingkat kesulitan yang berbeda, sesuai dengan kebutuhan dan kemampuan masing-masing peserta didik. • Tambahkan pertanyaan tambahan untuk peserta didik yang memerlukan tantangan ekstra. Diferensiasi Proses: 1. Soal Nomor 1: • Peserta didik dapat bekerja secara individu atau dalam kelompok sesuai dengan preferensi dan kebutuhan belajar masing-masing. • Berikan pilihan untuk menggunakan alat bantu visual atau manipulatif bagi peserta didik yang membutuhkannya. 2. Soal Nomor 2: • Peserta didik dapat memilih antara menentukan jawaban secara tertulis atau menggunakan media presentasi untuk menjelaskan alasan pilihan mereka. Diferensiasi Produk: 1. Ayo Mengamati: • Berikan tugas kelompok di mana setiap kelompok harus membuat presentasi visual atau poster yang menjelaskan konsep satuan baku dan alat ukur yang tepat. • Peserta didik yang lebih mahir dapat diarahkan untuk membuat daftar bahan makanan dan alat ukur yang berbeda dengan cara yang lebih terperinci. 2. Ayo Berlatih: • Peserta didik dapat diminta untuk membuat catatan berat benda yang diukur dalam bentuk grafik atau tabel, menunjukkan pemahaman yang lebih mendalam. • Berikan proyek kreatif kepada peserta didik untuk membuat alat ukur sederhana dan menggunakannya untuk mengukur berat benda di sekitar mereka. Catatan : Selama pembelajaran berlangsung, guru mengamati sikap siswa dalam pembelajaran yang meliputi sikap: disiplin, rasa percaya diri, berperilaku jujur, tangguh menghadapi masalah tanggung jawab, rasa ingin tahu, peduli lingkungan)	

Figure 5. Students Create Differentiated Learning Options in the Grade 3 Elementary School Mathematics Teaching Module

Diferensiasi Konten: Beri kelompok-kelompok tugas yang berbeda sesuai dengan tingkat pemahaman masing-masing peserta didik. Misalnya, kelompok A mendapatkan materi lebih lanjut tentang bentuk energi yang lebih kompleks, sedangkan kelompok B mendapatkan materi tambahan tentang penggunaan energi dalam kehidupan sehari-hari. Diferensiasi Proses: Berikan pilihan kepada peserta didik untuk memilih metode atau pendekatan yang sesuai dengan gaya belajar mereka. Beberapa peserta didik mungkin lebih suka mencari informasi dari sumber lain, sementara yang lain mungkin lebih suka diskusi kelompok. Diferensiasi Produk: Beri kesempatan kepada peserta didik untuk mengekspresikan pemahaman mereka melalui berbagai produk akhir. Beberapa mungkin memilih membuat presentasi, sementara yang lain bisa membuat poster atau laporan tertulis. Catatan: Isi bagian-bagian yang diperlukan dengan informasi yang sesuai dengan konteks dan kebutuhan pembelajaran modul "Rangka, Sendi, dan Otot.")	

Figure 6. Students Create Differentiated Learning Options in the Grade 3 Elementary School Science Teaching Module

During the service, there were no significant obstacles. The response of the participants after the service stated that they were satisfied and should be given

other training that supports the ability to provide other teaching methods to students (Aliyyah, Rusi Rusmiati, 2021; Trimurtini et al., 2024; Zaenab et al., 2020).

D. Conclusion

The result of the service, participants have an approach to teaching that allows them to adjust teaching methods, materials, and assessments according to the needs and skill levels of individual students.

E. Acknowledgement

Thank you to the Dean of FKIP University of Bengkulu who has given the order for this community service with the Number SK 3832/UN30.7/PM/2024, the Dean of FTT, Fatmawati Sukarno State Islamic University of Bengkulu, and the Chairperson of STIESNU Bengkulu, STIESNU Bengkulu students, and all parties who provided support for the implementation of this community service.

References

- Ahmad Zain Sarnoto. (2024). *Differentiated Learning Model in Independent Curriculum*. 6(3), 15928-15939.
- Alavinia, P., & Farhady, S. (2012). Using Differentiated Instruction to Teach Vocabulary in Mixed Ability Classes with a Focus on Multiple Intelligences and Learning Styles. *International Journal of Applied Science and Technology*, 2(4), 72-82.
- Algozzine, B., & Anderson, K. M. (2007). Tips for Teaching: Differentiating Instruction to Include All Students. *Preventing School Failure: Alternative Education for Children and Youth*, 51(3), 49-54. <https://doi.org/10.3200/psfl.51.3.49-54>
- Aliyyah, Rusi Rusmiati, D. (2021). Training on writing scientific articles based on community service. *JCES (Journal of Character Education Society)*, 4(2), 285-297.
- Aprima, D., & Sari, S. (2022). Analysis of the Application of Differentiated Learning in the Implementation of the Independent Curriculum in Elementary School Mathematics Lessons. *Cendikia : Media Jurnal Ilmiah Pendidikan*, 13 (1)(1), 95-101.
- Boelens, R., Voet, M., & De Wever, B. (2018). The design of blended learning in response to student diversity in higher education: Instructors' views and use of differentiated instruction in blended learning. *Computers and Education*, 120, 197-212. <https://doi.org/10.1016/j.compedu.2018.02.009>
- Bondie, R. S., Dahnke, C., & Zusho, A. (2019). How Does Changing "One-Size-Fits-All" to Differentiated Instruction Affect Teaching? *Review of Research in Education*, 43(1), 336-362. <https://doi.org/10.3102/0091732X18821130>
- De Neve, D., & Devos, G. (2017). How do professional learning communities aid and

- hamper professional learning of beginning teachers related to differentiated instruction? *Teachers and Teaching: Theory and Practice*, 23(3), 262–283. <https://doi.org/10.1080/13540602.2016.1206524>
- Dewi, S. R., & Yusri, F. (2023). Homeroom Teachers' Understanding of Students' Learning Styles. *Educatum: Jurnal Ilmu Pendidikan*, 2(1), 1–8.
- Febriyanti Umi Khabibah, Saputra, W. N. E., & Lestariningsih, S. (2023). Efforts to Improve Mathematics Learning Outcomes for Grade IV Fraction Material Through Differentiated Learning. *Journal of Educational Learning and Innovation*, 3(2), 98–116. <https://doi.org/10.46229/elia.v3i2>
- Gheysens, E., Coubergs, C., Griful-Freixenet, J., Engels, N., & Struyven, K. (2022). Differentiated instruction: the diversity of teachers' philosophy and praxis to adapt teaching to students' interests, readiness and learning profiles. *International Journal of Inclusive Education*, 26(14), 1383–1400. <https://doi.org/10.1080/13603116.2020.1812739>
- Gusteti, M. U., & Neviyarni, N. (2022). Differentiated Learning in Mathematics Learning in the Independent Curriculum. *Jurnal Lebesgue: Jurnal Ilmiah Pendidikan Matematika, Matematika Dan Statistika*, 3(3), 636–646. <https://doi.org/10.46306/lb.v3i3.180>
- Halimah Nurul, Hadiyanto, & Rusdinal. (2023). Analysis of Differentiated Learning as a Form of Implementation of the Independent Curriculum Policy. *Pendas : Jurnal Ilmiah Pendidikan Dasar*, 8(1), 5019–5033.
- Herwina, W. (2021). Optimizing Student Needs and Learning Outcomes with Differentiated Learning. *Perspektif Ilmu Pendidikan*, 35(2), 175–182. <https://doi.org/10.21009/pip.352.10>
- Irwansyah, & Hardiah, S. (2020). Digital collaboration in teaching and learning activities: The reflexivity study on educational digital empowerment. *International Journal of Learning, Teaching and Educational Research*, 19(10), 355–370. <https://doi.org/10.26803/IJLTER.19.10.20>
- Ismajli, H., & Imami-Morina, I. (2018). Differentiated instruction: Understanding and applying interactive strategies to meet the needs of all the students. *International Journal of Instruction*, 11(3), 207–218. <https://doi.org/10.12973/iji.2018.11315a>
- Kanevsky, L. (2011). Deferential differentiation: What types of differentiation do students want? *Gifted Child Quarterly*, 55(4), 279–299. <https://doi.org/10.1177/0016986211422098>
- Kubat, U. (2018). Identifying the individual differences among students during learning and teaching process by science teachers. *International Journal of Research in Education and Science*, 4(1), 30–38. <https://doi.org/10.21890/ijres.369746>
- Lema, Y., Nurwahyuni, A., Hayat, M. S., & Rachmawati, F. (2023). Differentiated Learning with the PJBL Model of Biotechnology Material to Develop Creativity

- and Innovation Skills of Middle School Students. *Innovative: Journal Of Social Science Research*, 3, 7229–7243. <https://j-innovative.org/index.php/Innovative>
- Lisnawati, L., Kuntari, S., & Hardiansyah, M. A. (2023). The Role of Teachers in Implementing Differentiated Learning to Grow Students' Interest in Learning Sociology Subjects. *As-Sabiqun*, 5(6), 1677–1693. <https://doi.org/10.36088/assabiqun.v5i6.4086>
- Logan, B. (2011). Examining differentiated instruction : Teachers respond. *Research in Higher Education Journal*, 13, 1–15. <http://www.aabri.com/manuscripts/11888.pdf>
- Marzoan. (2023). Implementation of Differentiated Learning in Elementary Schools. *Renjana Pendidikan Dasar*, 3(2), 113–122.
- Mills, M., Monk, S., Keddie, A., Renshaw, P., Christie, P., Geelan, D., & Gowlett, C. (2014). Differentiated learning: from policy to classroom. *Oxford Review of Education*, 40(3), 331–348. <https://doi.org/10.1080/03054985.2014.911725>
- MS, M. (2023). Differentiated Learning and Its Application. *Sentri: Jurnal Riset Ilmiah*, 2(2), 533–543. <https://doi.org/10.55681/sentri.v2i2.534>
- Ngaisah, N. C., * M., & Aulia, R. (2023). The Development of Differentiated Learning in the Independent Curriculum in Early Childhood Education. *Bunayya : Jurnal Pendidikan Anak*, 9(1), 1. <https://doi.org/10.22373/bunayya.v9i1.16890>
- Nurzaki Alhafiz. (2022). Analysis of Student Learning Style Profiles for Differentiated Learning at SMP Negeri 23 Pekanbaru. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat*, 1(8), 1913–1922. <https://doi.org/10.53625/jabdi.v1i8.946>
- Pozas, M., Letzel, V., & Schneider, C. (2020). Teachers and differentiated instruction: exploring differentiation practices to address student diversity. *Journal of Research in Special Educational Needs*, 20(3), 217–230. <https://doi.org/10.1111/1471-3802.12481>
- Purnawanto, A. T. (2023). Differentiated Learning. *Jurnal Ilmiah Pedagogy*, 2(1).
- Rosenfeld, M., & Rosenfeld, S. (2004). Developing teacher sensitivity to individual learning differences. *Educational Psychology*, 24(4), 465–486. <https://doi.org/10.1080/0144341042000228852>
- Salassa, A., Rombe, R., & Fani Parinding, J. (2023). Differentiated Learning in the Independent Learning Curriculum According to Ki Hajar Dewantara in the Subject of Christian Religious Education. *Jurnal Pendidikan Dan Keguruan*, 1(6), 541–554.
- Setiawati, F. A., & Nai'mah. (2020). Getting to know the concepts of children with special needs in Paud. *Program Studi PGRA*, 6(2), 193–208. <file:///C:/Users/Coco/Downloads/635-Article Text-1336-1-10-20200728.pdf>
- Smets, W., De Neve, D., & Struyven, K. (2022). Responding to students' learning needs: how secondary education teachers learn to implement differentiated

- instruction. *Educational Action Research*, 30(2), 243-260.
<https://doi.org/10.1080/09650792.2020.1848604>
- Sri Dinawaty Suyitno, Kasim Yahiji, M. D. (2023). Implications of Independent Learning Curriculum Planning in Differentiated Learning at SMP Negeri 1 Telaga. *Journal of Islamic Education Manajemet Research*, 2(2), 1-11.
<https://smpn4solo.sch.id/2023/04/18/asesmen-dalam-pembelajaran-berdiferensiasi/>
- Supriyadi, S., Barus, R. A., Rusilowati, A., Isnaeni, W., Susilaningsih, E., Djuniadi, D., Sun'an, U. N., Rapi, M., Fardiana, R., & Suraji, S. (2024). Improving Differentiated Learning Literacy Through Differentiated Learning Training and Guidebooks. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 5(1), 1466-1476.
- Sutrisno, L. T., Muhtar, T., & Herlambang, Y. T. (2023). The Effectiveness of Differentiated Learning as an Approach to Independence. *Dwija Cendekia: Jurnal Riset Pedagogik*, 7(2). <https://doi.org/10.20961/jdc.v7i2.76475>
- Thapliyal, M., Ahuja, N. J., Shankar, A., Cheng, X., & Kumar, M. (2022). A differentiated learning environment in domain model for learning disabled learners. *Journal of Computing in Higher Education*, 34(1), 60-82.
<https://doi.org/10.1007/s12528-021-09278-y>
- Trimurtini, T., Waluya, B., Nugraheni, N., Bektiningsih, K., & Hendikawati, P. (2024). Strengthening the Implementation of Differentiated Learning in Inclusive Elementary Schools Through the OL (Organizational Learning) Approach. *Jurnal PKM Manajemen Bisnis*, 4(2), 75-84.
<https://doi.org/10.37481/pkmb.v4i2.756>
- Wahyuningsari, D., Mujiwati, Y., Hilmiyah, L., Kusumawardani, F., & Sari, I. P. (2022). Differentiated Learning in the Framework of Realizing Independent Learning. *Jurnal Jendela Pendidikan*, 2(04), 529-535.
<https://doi.org/10.57008/jjp.v2i04.301>
- Widyawati, R., & Rachmadyanti, P. (2023). Analysis of the Application of Differentiated Learning in Social Studies Material in Elementary Schools. *Jpgsd*, 11(2), 365-379. <https://ejournal.unesa.ac.id/index.php/jurnal-penelitian-pgsd/article/view/52775>
- Zaenab, S., Chamisijatin, L., & Wahyuni, S. (2020). Strengthening character education through literacy movement at Muhammadiyah junior high schol. *Journal of Community Service and Empowerment*, 1(1), 54-63.
<https://doi.org/10.22219/jcse.v1i1.11516>

A Systematic Literature Review of Digital Skills and Human Resource Readiness for the Industrial Revolution Era 4.0 and 5.0

Arief Dermawan¹, Nur Wening², Yohannes Vemberi¹, Lucia Ika Fitriastuti¹

¹Sekolah Tinggi Ilmu Ekonomi SBI Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia, ²Universitas Teknologi Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia

Corresponding author e-mail: 7240111002.Ariefdermawan@student.uty.ac.id

Article History: Received on 2 December 2024, Revised on 22 January 2025,
Published on 8 February 2025

Abstract: The Industrial Revolutions 4.0 and 5.0 have significantly transformed the workforce, demanding human resources (HR) to possess digital skills and adaptive readiness. This study aims to identify and analyze the necessary digital skills and HR readiness to address the challenges of these industrial revolutions through a literature review approach. This article analysis of 15 scientific articles published between 2020 and 2025, the research reveals that digital skills such as data literacy, information technology proficiency, and problem-solving abilities are key factors. The readiness of Human Resources (HR) to adopt advanced technologies and human-centric approaches in the Industrial Revolution 4.0 and 5.0 era depends on their willingness to acquire new skills and adapt to rapid transformations. Thus, the success of HR is greatly influenced by organizational readiness and access to technology-based training. The findings of this study provide strategic recommendations for policymakers and practitioners to design effective and relevant HR development programs in the era of Industrial Revolutions 4.0 and 5.0.

Keywords: Digitization, Digital Skills, Human Resources, Industrial Revolution

A. Introduction

The level of readiness of Human Resources (HR) in adopting advanced technology and adaptive readiness in the era of the Industrial Revolution 4.0 and 5.0 is an important thing that must be considered by companies. After knowing the level of readiness of Human Resources (HR) in its possession, the company can determine what effective strategies to improve HR skills and readiness amidst the changes triggered by the Industrial Revolution 4.0 and 5.0 to become better. By choosing the right strategy, it can improve company performance.

The Industrial Revolution 4.0 has introduced advanced technologies, which have fundamentally transformed work practices and business processes. Furthermore, the Industrial Revolution 5.0 reinforces the human-centric concept, where technology is

designed to align with human needs. This transformation requires human resources to possess high-level digital skills and adaptive readiness to remain relevant in the ever-evolving job market. Although many studies have discussed the impact of technology on human resources, research combining digital skills and human resource preparedness within the context of the Industrial Revolutions 4.0 and 5.0 remains limited.

Industry 4.0 is regarded as a technology that driven revolution aimed at achieving higher productivity and efficiency as a high - tech government strategy, enhancing competitiveness in the global market (Xu et al., 2021). Herman, (2015) outlines that Industry 4.0 is based on four design principles, primarily focusing on connectivity, which refers to the capacity of machines, humans, sensors and devices to interact with each other using the Internet of Things (IoT) or the Internet of People (IoP). Furthermore, Vogel-Heuser & Hess, (2016) elaborate on the key principles of Industry 4.0, which include flexibility and adaptability to changing requirements, service oriented reference architectures, intelligent and CPPS, interoperability between humans and CPPS, optimization equipment effectiveness, cross-disciplinary and lifecycle data integration, reliable and secure inter-business communication, and data security. While Industry 4.0 not always to be seen as a human centered initiative, operator - assistance technologies, work-life balance, aspects such as human machine collaboration, and socio approaches should not be neglected (Xu et al., 2021).

Industry 4.0 requires adaptation to changing precondition with a strong emphasis on adaptability. Then Industry 5.0 has emerged in recent years. Industry 5.0 more coordinated and compared to Industry 4.0 and emphasizing collaboration between machines and humans. With a strategy human - centered, Industry 5.0 builds upon Industry 4.0 to achieve greater resilience and sustainability (Ismail et al., 2023).

The phenomenon in Industry 5.0 shows that the implementation of a value network is needed to apply new technologies and become an integrated and highly integrated value chain, (Cillo et al., 2021). Therefore, businesses must possess the necessary competencies to apply and integrate Industry 5.0 technological components, such as blockchain, Cognitive Artificial Intelligence (CAI), digital twins or adaptive robots (Xu et al., 2021). Businesses need competency in developing functional principles in Industry 5.0, such as ecentralization, and vertical/ horizontal integration real-time capability. Digital transformation competencies (DTC) involve a range of digital skills (Ghobakhloo et al., 2023). Digitalization and adequacy of expertise in various disciplines related to information technology and operational technology can be used as a proposal for knowledge competency, such as user data science, interface design, software engineering, process automation, network architecture and robotics engineering (Ghobakhloo et al., 2023).

Digitalization of companies under Industry 5.0 is expected to require significant resources, involving substantial investment, implementation of digital capabilities

and foundational technologies, and development (Lamas, 2021). The transformation and digitalization of companies under Industry 5.0 will be ongoing and dynamic, as innovation cycles are becoming shorter (Maddikunta, 2022). Transition to Industry 5.0 requires companies to continuously allocate necessary resources, provide significant initial funding, and accept longer return periods, highlighting the opportunity and need to strategically shift from conventional expectations regarding payback periods and ROI (Ghobakhloo et al., 2023). Therefore, the capability and availability of resources (RAC) involve the availability of financial capital to support technology acquisition, Industry 5.0 development, research and acquiring or training digitalization expertise (Ghobakhloo et al., 2023).

In the era of Industry 5.0, recognizing the power of industry to achieve goals beyond growth and job creation aiming to become a resilient welfare provider by respecting boundaries, shaping production processes and placing the welfare of industrial workers at the heart of production (Xu et al., 2021). Furthermore, research by Xu et al., (2021) highlights that Industry 5.0 is centered around three interconnected core values: human - centeredness, sustainability, and resilience. Additionally, (Müller, 2020) identifies six key technologies in Industry 5.0: 1) AI to detect, for example, causality in dynamic and complex systems, producing actionable intelligence, 2) good materials that enable materials with recyclable features and embedded sensors and biologically inspired technologies and, 3) human - machine interaction technology that combines and connects the power of machines and humans. 4) simulations to model entire systems and digital twins 5) data transmission, storage, and analysis technologies capable of handling system interoperability and data 6) technologies for storage, energy efficiency, autonomy, and renewable energy. Industry 5.0 is not only an era of revolution driven by technological advancement, but also an initiative driven by values between technological transformation towards a specific goal (Xu et al., 2021). Taj & Jhanjhi, (2022) describe the relevance and importance of the impact of Industry 4.0 HR (Human Resource) development and consumer behavior. The authors discuss the context of digital transformation and automation, which are highly relevant to current global economic and social challenges. The research aims, which are to identify opportunities, challenges, and drivers in HR development and consumer behavior, are well defined. Industrial transformation has shifted from the Industry 4.0 paradigm to Industry 5.0, which introduces a new approach focused on human-centricity, sustainability, and resilience. While Industry 4.0 emphasizes digitalization and automation through technologies such as the AI (Artificial Intelligence), IoT (Internet of Things) and, Industry 5.0 highlights the integration of humans at the center of production with the goal of creating harmony between machines and humans. This article explores these fundamental changes and underscores the roles of humans, organizations, and technology as key pillars.

Although various studies have explored the impact of technology on human resource (HR) skills in the context of Industry 4.0 and 5.0, observations reveal that strategic efforts to enhance HR readiness through technology-based training remain limited.

This article aims to address the following research questions 1) What is the level of HR readiness in adopting advanced technology and a human-centric approach in Industrial Revolution era? 2) What are the effective strategies to improve HR skills and readiness amid the changes driven by Industry 4.0 and 5.0?

B. Methods

The method in this article combines literature review and qualitative approaches to analyze many researchs developments related to Digital Skills and Human Resource Readiness for the Industrial Revolution Era 4.0 and 5.0. The first step is to identify articles by searching from various sources such as Google Scolar, Emerald, Elsevier, Science Direct, Scopus and others. The data obtained and screened based on the title and abstract obtained 30 articles. After checking the full text, 15 eligible articles were obtained. A total of 15 journal articles, published between 2020 and 2025, were compiled and analyzed based on their relevance to the research topic. The data analysis process consisted of three stages: first, collecting articles relevant to Digital Skills and Human Resource Readiness for the Industrial Revolution Era 4.0 and 5.0; second, analyzing the selected articles by reviewing their methodology, results, and critical reviews; and third, drawing conclusions about future research opportunities. The complete analysis process is illustrated in Figure 1, as outlined by (Fitriastuti et al., 2019), (Vemberi et al., 2022), (Vemberi et al., 2024), (Herawati, 2024).

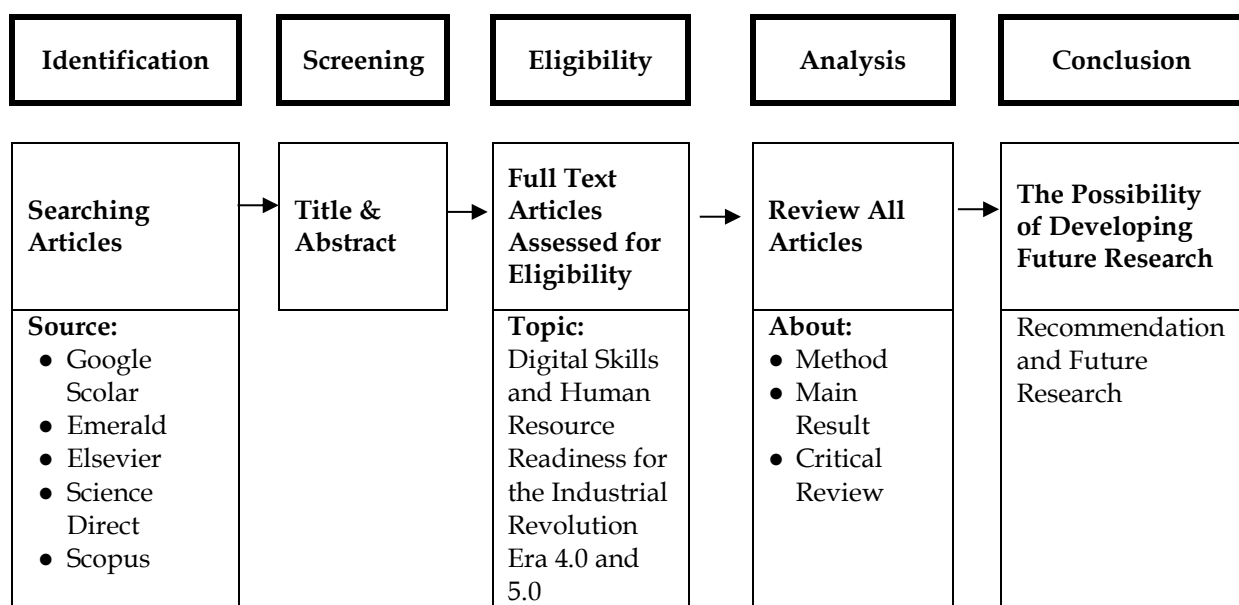


Figure 1. Review Method

C. Results and Discussion

Table 1 presents a summary of prior studies on Digital Skills and Human Resource Readiness in the context of the Industrial Revolution 4.0 and 5.0, highlighting the research methods, findings, and critical reviews.

**Table 1. The Overview Summarizes the Studies
Based on the Methods, Results, and Critical Reviews**

No	Authors and Title	Methods	Results	Critical Review
1	Sima, (2020).	This study employed a combination of qualitative and quantitative methods, utilizing a systematic review approach to identify the main themes. The Systematic Literature Review (SLR) was conducted following PRISMA-based guidelines.	This study highlighted that the worker must be highly skilled and capable of adapting to new technologies, which requires an updated educational curriculum. Furthermore, this study provided a comprehensive overview of the impact of Industry 4.0 on the labor market and consumer dynamics, illustrating a shift towards a more digitized and automated system.	This study includes only articles published since 2011, which may exclude earlier relevant research on Industry 4.0 and its implications. The sample consisted of 111 articles reviewed in detail, raising concerns about the representativeness and comprehensiveness of the findings. Lastly, the study only focuses on the Northern European region which may distort the understanding of the global impact of Industry 4.0.
2	Alaloul et al., (2020).	This study employed both quantitative and qualitative methods (survey and literature review). The consistency of the obtained data was measured using Cronbach's Alpha.	This study focuses on the implementation of Industry 4.0 (IR 4.0) in the construction industry, identifying key factors that influence its successful implementation. This study also highlights the importance of understanding technology and social dynamics during the integration of Industry 4.0 practices into the construction sector, paving the way for	This study reveals that the majority of the workers are unfamiliar with technologies associated with IR 4.0, highlighting the need for enhanced training and awareness. The findings outline the challenges and opportunities related to IR 4.0 implementation, emphasizing the importance of

			future advancements and efficiency.	strategic planning and consideration of macro-environmental factors.
3	Taj & Jhanjhi, (2022).	This article employed a qualitative method by collecting and evaluating existing studies related to IR 5.0 and AI, aiming to identify research challenges and opportunities.	This study demonstrates that human-machine collaboration within the framework of Industry 5.0 can improve productivity and efficiency by delegating physically demanding tasks to machines, allowing humans to focus on tasks that require specific skills. Additionally, the study identifies challenges and opportunities in addressing gaps in the implementation of Industry 5.0, highlighting the importance of developing a trusted, transparent, and unbiased AI system.	The critique of this study is the lack of supporting data related to future visions concerning legal, social, and ethical issues in human-robot collaboration. Additionally, the research is limited by its focus on specific sectors, such as IT and aviation, which may reduce the generalizability of its findings. The study also highlights the need for the development of new skills within the workforce to address the challenges of adapting to Industry 5.0, which has not yet been fully addressed.
4	Melnyk, (2023).	A conceptual study employing an in-depth literature analysis (theoretical framework). The modeling of digital twin systems is used to identify learning needs and new skill requirements.	This study emphasizes the humanization of production by improving the creative role of humans within the technology ecosystem. The digitalization of education is necessary to meet the demand for technology-based skills.	There is a lack of practical implementation of new technologies, such as digital twins. Harmonization occurs between the need for technological efficiency in Industry 4.0 and humanization in Industry 5.0.
5	Xu et al., (2021).	This study employs a literature review, combining data from various secondary sources to address	The findings of this study reveal that Industry 4.0 focuses on technology-driven efficiency and	This study does not provide a clear and detailed definition of what is meant by "Industrial

		the research questions.	productivity, such as the integration of cyber-physical systems and automation, while Industry 5.0 shifts its focus to human needs, emphasizing sustainability and social well-being.	Revolution," which could lead to confusion for readers and diminish their understanding of the context.
6	Akundi et al., (2022).	This study employed a literature review method based on text analysis. It analyzes 196 abstracts obtained from the IEEE, MDPI, and ScienceDirect databases using text mining techniques such as frequency analysis and topic modeling.	This study analyzes current research trends on Industry 5.0 using text mining techniques to identify patterns and future directions in the published literature. It also emphasizes the importance of further exploration to provide a better perspective on Industry 5.0 within the research community.	This study has a limitation in terms of the number of analyzed abstracts, with only 196 articles, which may affect the accuracy and generalizability of the results. Additionally, the study acknowledges that the findings could change as the amount of data increases and the digital libraries used are expanded.
7	Damayanti, (2021).	This study uses a qualitative approach as the basis for developing theory and knowledge regarding human resource competencies in the context of the Industry 4.0 revolution.	The findings of this study indicate that the Industry 4.0 revolution presents both opportunities and challenges for human resources, including the need for new competencies such as creativity, collaboration skills, and problem-solving. The study also emphasizes the importance of PESTEL analysis to understand the challenges faced in the implementation of Industry 4.0. Additionally, there is a need to enhance understanding of technology and sustainability in facing rapid changes.	This study lacks focus on the practical implementation of the identified competencies, as well as potential ambiguity in the definition and measurement of the required competencies. Furthermore, the study may not sufficiently consider the local context and industry-specific factors that could influence the application of competencies in the context of the Industry 4.0 revolution.

8	Tyagi et al., (2024).	This study employs a qualitative method that highlights Industry 5.0, emphasizing the importance of integrating smart technologies and the human role in industrial processes.	The findings of this study indicate that Industry 5.0 emphasizes the importance of integrating smart technologies and the human role in industrial processes. The study highlights that Industry 5.0 aims to create more meaningful interactions between humans, machines, and robots, while also emphasizing sustainability as one of its key pillars.	This study may overly generalize the concept of Industry 5.0 without fully considering the variations in its implementation across different industrial sectors. Each sector may have unique challenges and needs that are not adequately addressed in the broader analysis. Furthermore, the study primarily focuses on the theoretical and conceptual aspects of the industrial transition.
9	Zizic et al., (2022).	This study uses a literature-based approach to analyze the paradigm shift between Industry 4.0 and Industry 5.0.	The findings of this study reveal a significant shift in research focus from sustainability in Industry 4.0 to human -centricity in Industry 5.0. This shift reflects the need for greater attention to human aspects in industrial processes, which were previously neglected. The study also highlights that Industry 5.0 is not solely focused on efficiency and technology but also emphasizes the social and ethical impacts of technological implementation.	The discussion on Industry 4.0 highlights its lack of focus on the human perspective. Criticism of this research also points out that, despite rapid technological advancements, human aspects are often neglected, which is one of the main weaknesses of the Industry 4.0 approach.
10	Saleh & Ijab, (2022).	This article uses the Literature Review methodology, which consists of five main activities: defining, extracting, searching, analyzing, and	There are various models of readiness for IR 4.0 that have been discussed in the literature, with a focus on the use of self-assessment tools by	The shortcomings of this study include the lack of analysis on additional aspects that indicate the level of internal and external readiness,

		assessing and combining data. The SLR process is divided into three major phases: planning, implementing, and reporting with an emphasis on reliability and validity. Exclusion and inclusion criteria are applied to ensure the relevance of articles included in the SLR process.	industry participants to measure their level of readiness. This study also identified that Malaysia has a low to moderate level of industry readiness for IR 4.0, and the importance of adopting new technologies such as AI and IoT to improve productivity. In addition, the IMPULS model is used to measure IR 4.0 readiness with six different dimensions.	such as willingness to share information and awareness of data security protocols. In addition, this study may not fully cover all factors that influence IR4.0 readiness, especially in the context of small and medium-sized enterprises (SMEs).
11	Ismail et al., (2023).	This study utilizes qualitative methods and literature-based research. It relies on a literature review to collect data and information from various relevant sources, which are then analyzed to explore new ideas and draw conclusions based on existing knowledge.	The findings of this study indicate that while Gen Z possesses strong technical skills, they often lack essential soft skills such as communication, critical thinking, collaboration, and creativity. The study also emphasizes that a combination of hard and soft skills is crucial for success in the modern job market.	This study highlights the importance of developing soft skills but does not provide enough emphasis on how these skills can be effectively measured and evaluated within the context of higher education. Additionally, the sample, which consists only of alumni from the Faculty of Economics at Universitas Terbuka, may not fully represent the entire Gen Z population in Indonesia.
12	Alojaiman, (2023). ,	This study uses a qualitative method by gathering information about Industry 5.0 from previously published works available in academic databases such as IEEE, ScienceDirect, and MDPI. The researchers used the keyword "Industry	The findings of this study indicate that Industry 5.0 represents a significant evolution from Industry 4.0, emphasizing a more human-centric approach in industrial practices. The study highlights that the transition to Industry 5.0 is not only about adopting advanced technologies	The critique of this study lies in its exploration of Industry 5.0 as an important development of Industry 4.0 with a focus on human-centered approaches. However, it highlights challenges in both technical and ethical aspects of this

		5.0" to search for metadata and identify relevant publications.	but also about enhancing collaboration between humans and machines to improve sustainability and resilience in production systems.	transition. Additionally, there are limitations in the understanding and terminology of Industry 5.0, as it is still a relatively new concept.
13	Ghobakhloo et al., (2023).	The research method used in this study is a content-focused literature review, in which the researchers identified 11 actions and approaches that act as contributors to the transformation toward Industry 5.0.	This study identifies several key factors, including digital transformation competencies, proactive government support, ecological innovation, and sustainable value network reforms. The findings indicate that stakeholder collaboration and integration are essential elements for achieving the success of Industry 5.0.	The critique of this study is that the literature on Industry 5.0 is still limited and in its early stages, meaning the understanding of the drivers of transformation may not be comprehensive. Additionally, the study focuses solely on the European context, meaning the results may not be fully relevant or applicable to other regions.
14	Tavarez, (2023).	This study uses a systematic review method of the literature, which is carried out integrative to address the problem being analyzed. This review aims to critique and synthesize representative literature to produce a new framework and perspective on the topic being studied. This study also involves analyzing stakeholder perceptions in education and industry.	To face Society 5.0, an appropriate learning model is needed that focuses on complex problem solving, creativity and critical thinking. This study also emphasizes the importance of the role of "Educators 5.0" who can integrate human intelligence and computer thinking processes in a collaborative environment. In addition, innovation and creativity from the next generation will be key to overcoming challenges in the uncertain cyber-physical era.	Weaknesses of this research include limitations in the scope of the literature which may not cover all perspectives related to Society 5.0 and education. In addition, this study also does not include empirical data that can support the findings, thus reducing the strength of the evidence of the arguments put forward.

15	Aldrickzler et al., (2025)	The methodology used includes several learning methods, such as the Jigsaw method, problem-based learning, and case studies. In addition, this study also highlights the use of digital technology and competency-based approaches to support human capital transformation in the digital era. Gamification methods are also integrated to increase engagement and motivation in the learning process.	Transforming human capital for the digital age is leading to increased competitiveness, creativity and innovation across countries and industries. Investment in education and training is improving literacy, digital skills and numeracy outcomes. There is also recognition of the ethical and privacy challenges that emerge from technological developments, and the need for an ethical framework to address these issues.	This study lacks focus on the practical aspects of implementing an ethical framework in human resource development. In addition, this study may not sufficiently consider the differences in cultural and economic contexts that may affect the outcomes of human capital transformation across countries.

The following discussion is based on the findings from previous studies summarized in Table 1. The Industrial Revolution 4.0 presents significant challenges and opportunities for the workforce across various sectors. Previous studies highlight that workers need to acquire relevant skills to meet the demands of emerging technologies driven by digitalization and automation. In addition to technical skills, workers are also required to possess a high degree of adaptability in responding to the dynamic changes in the labor market. This condition emphasizes the need for an updated educational curriculum to produce a workforce capable of competing and supporting the sustainable development of technology.

In the context of the construction industry, the implementation of Industry 4.0 technologies provides valuable insights into success factors, such as understanding new technologies and social dynamics in the workplace environment. The process of integrating smart technologies into the construction sector requires a strategic approach to enhance operational efficiency and support innovation that can drive the overall progress of the industry.

Meanwhile, Industry 5.0 introduces the concept of collaboration between humans and machines. By delegating heavy physical tasks to machines, humans can focus more on tasks that require cognitive skills, creativity, and decision-making. However, the success of this collaboration hinges on the implementation of transparent, unbiased, and trustworthy artificial intelligence (AI) systems to bridge the gap in technology adoption. Industry 5.0 also emphasizes humanization in the production process, positioning humans at the center of creativity within the technological ecosystem. To

support this approach, the digitalization of education is essential in preparing a creative and competent workforce capable of navigating technological changes. This aligns with the core objective of Industry 5.0, which is to foster an inclusive work environment that prioritizes human well-being.

Industry 4.0 focuses on efficiency and productivity through automation and the integration of cyber-physical systems, while Industry 5.0 prioritizes sustainability and social well-being with a human-centric approach. This difference reflects a shift in the industrial development paradigm from mere technological efficiency to a balance between technology and humans. To understand the direction and research trends in Industry 5.0, text mining techniques have been used to identify key patterns and explore the concept in greater depth. The Industrial Revolution 4.0 also presents challenges in meeting the demand for new competencies. Creativity, collaboration skills, and problem-solving have become essential abilities in this era. Approaches through the analysis of Political, Economic, Social, Technological, Environmental, and Legal (PESTEL) factors help to understand the challenges of implementing Industry 4.0 while providing strategic insights to address these barriers. Industry 5.0 emphasizes the importance of meaningful integration between humans, machines, and robots, with sustainability as a core pillar. The smart technologies used are not only aimed at improving efficiency but also at enhancing the quality of human life across various aspects of industry. This shift reflects a change in focus from the sustainability characteristic of Industry 4.0 to the human-based approach of Industry 5.0. It also highlights the importance of considering social and ethical aspects in the application of technology.

Overall, Industry 5.0 is considered a significant evolution of Industry 4.0, with a focus on sustainability, human-machine collaboration, and a human-centered approach. The success of implementing Industry 5.0 is determined by several key factors, such as digital transformation competencies, government support, ecological innovation, and sustainable value network reforms. Collaboration among stakeholders becomes a crucial element in creating a broader positive impact on society and the environment, while ensuring sustainability in the future development of industries.

D. Conclusions

The readiness of Human Resources (HR) to adopt advanced technologies and human-centric approaches in the Industrial Revolution 4.0 and 5.0 era depends on their willingness to acquire new skills and adapt to rapid transformations. Industrial Revolution 4.0 requires technical expertise, including programming, data analysis, and automation system operations. In contrast, Industrial Revolution 5.0 emphasizes the importance of human-centric abilities, such as creativity, collaboration, and problem-solving, alongside the ability to integrate with technology. Thus, although HR professionals worldwide are increasingly inclined toward technology, significant challenges remain in ensuring their readiness to adapt to changes that require

interdisciplinary expertise and an understanding of the social and ethical dimensions of these technologies.

There are several effective strategies to enhance HR skills and readiness in this era. First, updating the education curriculum. The curriculum should be aligned to meet the demands of the labor market in the context of Industry 4.0 and 5.0, focusing on the development of both technical and non-technical skills, such as digital literacy, creativity, adaptability, and the ability to collaborate effectively with technology. Second, implementing training and certification programs. Practical skill-based training programs, such as those related to artificial intelligence, the Internet of Things (IoT), and robotics, can help the workforce improve their technical abilities. Third, focusing on the development of human-centric skills. Considering the significance of collaboration between humans and machines in Industry 5.0, developing interpersonal skills, problem-solving capabilities, and creativity is important. Fourth, fostering collaboration among government, industry, and academia. Strong partnerships between these sectors are vital to provide relevant training opportunities and establish policies that support the transition to Industry 4.0 and 5.0. Finally, utilizing technology for remote learning. Using digital platforms for remote learning and skill development allows for wider access to education and enables workers to continue their training without having to leave their jobs.

By implementing these strategies, HR will be better equipped to face the changes brought by Industry 4.0 and 5.0, and able to take advantage of the opportunities offered by advanced technology while maintaining a balance with a human-centric approach that focuses on human well-being. Additionally, further research remains necessary to explore in depth the topic of effective strategies for enhancing HR skills and readiness in response to the transformations driven by Industry 4.0 and 5.0, as highlighted and identified in this study.

E. Acknowledgement

Acknowledgements are addressed to Sekolah Tinggi Ilmu Ekonomi SBI Yogyakarta and Universitas Teknologi Yogyakarta for the support and facilities in making this article.

References

- Akundi, A., Euresti, D., Luna, S., Ankobiah, W., Lopes, A., & Edinbarough, I. (2022). State of Industry 5.0 – Analysis and Identification of Current Research Trends. *Applied System Innovation*, 5(1), 1–14. <https://doi.org/10.3390/asi5010027>
- Alaloul, W. S., Liew, M. S., Zawawi, N. A. W. A., & Kennedy, I. B. (2020). Industrial Revolution 4.0 in the construction industry: Challenges and opportunities for stakeholders. *Ain Shams Engineering Journal*, 11(1), 225–230. <https://doi.org/10.1016/j.asej.2019.08.010>

- Aldrickzler, R., Kawad, R. T., Saadoon, M. Y., & Chornomordenko, I. (2025). Transforming Human Capital for the Digital Age: Industry 4.0 and 5.0. *Encuentros (Maracaibo)*, 23, 438–455. <https://doi.org/10.5281/zenodo.14291566>
- Alojaiman, B. (2023). Technological Modernizations in the Industry 5.0 Era: A Descriptive Analysis and Future Research Directions. *Processes*, 11(5). <https://doi.org/10.3390/pr11051318>
- Cillo, V., Gregori, GL, Daniele, LM, Caputo, F., & Bitbol-Saba, N. (2021). Memikirkan kembali budaya perusahaan melalui sudut pandang manajemen pengetahuan selama transisi Industri 5.0. *Jurnal Manajemen Pengetahuan*, 26. <https://doi.org/10.1108/JKM-09-2021-0718>
- Damayanti, D. (2021). Human Resources Competency in the Era of Industrial Revolution 4.0. *Economics and Business Solutions Journal*, 5(1), 13. <https://doi.org/10.26623/ebsj.v5i1.3334>
- Fitriastuti, L. I., Sujoko, S., Herawan, T., & Vemberi, Y. (2019). Knowledge management system usage and organization learning: Recent trends and open problems. *Journal of Advanced Research in Law and Economics*, 10(6), 1832–1849. [https://doi.org/10.14505/jarle.v10.6\(44\).26](https://doi.org/10.14505/jarle.v10.6(44).26)
- Ghobakhloo, M., Iranmanesh, M., Morales, M. E., Nilashi, M., & Amran, A. (2023). Actions and approaches for enabling Industry 5.0-driven sustainable industrial transformation: A strategy roadmap. *Corporate Social Responsibility and Environmental Management*, 30(3), 1473–1494. <https://doi.org/10.1002/csr.2431>
- Herawati, N. (2024). *Tourism Literature Analysis of Mixue Marketing Strategy and Its Relationship with Consumer Repurchase Interest*. 7(2), 188–193.
- Herman, et al. (2015). *Working Paper A Literature Review*. 01. <https://doi.org/10.13140/RG.2.2.29269.22248>
- Ismail, D. H., Nugroho, J., & Rohayati, T. (2023). Literature Review: Soft Skill Needed by Gen Z in the Era RI 4.0 and Society 5.0. *Majalah Ilmiah Bijak*, 20(1), 119–131. <https://doi.org/10.31334/bijak.v20i1.3119>
- Lamas, et al. (2021). *IoT hijau dan AI edge sebagai pendorong teknologi utama untuk transisi digital berkelanjutan menuju ekonomi sirkular cerdas: Kasus penggunaan industri 5.0*. 21.
- Maddikunta, et. al. (2022). Industri 5.0: Survei tentang teknologi pendukung dan aplikasi potensial. *Jurnal Integrasi Informasi Industri*, 26. <https://doi.org/10.1016/j.jii.2021.100257>
- Melnyk, L., et al. (2023). Transformation of the human capital reproduction in line with Industries 4.0 and 5.0. *Problems and Perspectives in Management*. [http://dx.doi.org/10.21511/ppm.19\(2\).2021.38](http://dx.doi.org/10.21511/ppm.19(2).2021.38)
- Müller, J. (2020). Enabling Technologies for Industry 5.0. *European Commission*, September, 19. <https://doi.org/10.2777/082634>
- Saleh, N. I., & Ijab, M. T. (2022). Industrial Revolution 4.0 (IR4.0) Readiness Among Industry Players: A Systematic Literature Review. *Artificial Intelligence and Applications*, 1(2), 70–85. <https://doi.org/10.47852/bonviewaia2202336>

- Sima, V. (2020). Influences of the Industry 4.0 Revolution on the HumanCapital Development and Consumer Behavior: A Systematic Review. *Mdpi Sustainability*, 12.
- Taj, I., & Jhanjhi, N. (2022). Towards Industrial Revolution 5.0 and Explainable Artificial Intelligence: Challenges and Opportunities. *International Journal of Computing and Digital Systems*, 12(1), 295–320. <https://doi.org/10.12785/ijcds/120128>
- Tavarez, Maria C., Graca Azevedo, and R. P. M. (2023). Education 5.0: What Does It Mean? How Does It Work? *Innovation and Technology*, 1–21. <https://www.sydle.com/blog/education-5-0-61e71a99edf3b9259714e25a/>
- Tyagi, S., Rastogi, N., Gupta, A., & Joshi, K. (2024). Significant Leap In The Industrial Revolution From Industry 4.0 To Industry 5.0: Needs, Problems, And Driving Forces. *Management and Production Engineering Review*, 15(3), 1–20. <https://doi.org/10.24425/mper.2024.151483>
- Vemberi, Y., Fitriastuti, L. I., Affan, J., & Herawan, T. (2022). Covid-19 Impact on Tourism and Hospitality: A Review of the Evidences. *Quality - Access to Success*, 23(190), 156–169. <https://doi.org/10.47750/QAS/23.190.18>
- Vemberi, Y., Wening, N., & Fitriastuti, L. I. (2024). *The Effect of Group Cohesion, Loyalty, Leadership on The Quality of Organizational Decision Making : Literature Review*. 5(2), 1299–1310.
- Vogel-Heuser, B., & Hess, D. (2016). Guest Editorial Industry 4.0-Prerequisites and Visions. *IEEE Transactions on Automation Science and Engineering*, 13(2), 411–413. <https://doi.org/10.1109/TASE.2016.2523639>
- Xu, X., Lu, Y., Vogel-Heuser, B., & Wang, L. (2021). Industry 4.0 and Industry 5.0 – Inception, conception and perception. *Journal of Manufacturing Systems*, 61(October), 530–535. <https://doi.org/10.1016/j.jmsy.2021.10.006>
- Zizic, M. C., Mladineo, M., Gjeldum, N., & Celent, L. (2022). Paradigm Shift for the People, Organization and Technology. *Energies*.

The Relevance and Impact of Academic Supervision on Educational Excellence in Secondary Schools

Desy Anita Karolina Sembiring¹, Meylani Aljeinie Tijow¹

¹Universitas Cenderawasih, Jayapura, Papua, Indonesia

Corresponding author e-mail: desy.sembiring@fkip.uncen.ac.id

Article History: Received on 17 October 2024, Revised on 2 January 2025,
Published on 8 February 2025

Abstract: This study examines the practice of academic supervision, its effectiveness in enhancing learning quality, and its impact on educational excellence in secondary schools in Kota Jayapura. Using a mixed-method approach with a sequential explanatory strategy, the research collected data from 138 respondents through surveys and in-depth interviews. Results show that academic supervision practices vary between schools, with systematic and collaborative approaches yielding better outcomes. The overall effectiveness is high (28.32 out of 30), positively impacting teachers' and students' learning quality, student achievement, and psychological-emotional well-being, though implementation challenges persist. The research introduces an integrated framework combining adaptive and collaborative supervision approaches tailored to Kota Jayapura's local context. This study enhances understanding of supervision implementation in regions with significant socio-cultural diversity and provides recommendations for improving supervision effectiveness in diverse educational settings.

Keywords: Academic Supervision, Educational Excellence, School Effectiveness

A. Introduction

The quality of education is a critical measure in reflecting a nation's progress (Maulina et al., 2023; Qingyan et al., 2023; Wiyono et al., 2020) and is a top priority in Indonesia's national development agenda (UNESCO, 2018). Various studies, including those conducted by the Programme for International Student Assessment (PISA) released by the OECD, reveal that Indonesia faces significant challenges in education, ranking among the lowest-performing countries assessed (OECD, 2023). This should catalyze immediate efforts to improve the quality of education across all school levels.

In addressing these challenges, one of the key measures in solving educational problems is the role of the school principal as the academic leader at the secondary school level, which is crucial (Aisyahrani et al., 2023; Moulina, 2022; Noor et al., 2020). School principals are at the forefront of efforts to enhance teaching quality and student learning outcomes through effective academic supervision. Principals bear not only administrative responsibilities but also pedagogical ones (Haris et al., 2018; Noor et

al., 2020; Tyagi, 2010), where they are at the forefront of efforts to improve teaching quality and student learning outcomes through effective academic supervision (Azainil et al., 2020; Erifal, 2023; Kholid et al., 2020; Syukri et al., 2023; Winarno et al., 2021).

Academic supervision, which involves the systematic oversight of the teaching process by the principal or supervisor, is identified as a key factor in enhancing teacher professionalism and overall educational quality (Hakim et al., 2020; Nisa et al., 2024; Rony et al., 2024; Sahertian & Effendi, 2023). This highlights a direct positive relationship between academic supervision and the improvement of teaching quality (Aisyahrani et al., 2023; Dody, 2016; Muttaqin et al., 2023; Sudarjat et al., 2015; Wang, 2022). Moreover, supervision significantly contributes to increasing teacher competence and work motivation, which in turn has a positive impact on student academic achievement (Khasanah et al., 2019; Nureroan, 2021; Putra & Hariri, 2023; Rony et al., 2024; Wiyono et al., 2020). Principals' involvement in academic supervision not only leads to improved student learning outcomes but also strengthens teachers' professional development (Eryadini, 2022; Hulu, Rosita, Rahman, et al., 2024; Japemar et al., 2020).

However, despite the literature generally indicating the effectiveness of academic supervision, other studies have found concerns among teachers regarding supervision, often driven by ineffective leadership and non-collaborative approaches, which can lower teacher motivation and engagement in the supervision process (Almeida et al., 2022; Shandi, 2023; Sunaryo, 2020). Additionally, time constraints and the lack of effective implementation in supervision also present significant challenges (Muhajirah et al., 2023; Sembiring & Simanjuntak, 2023) indicating the need for a more adaptive and holistic approach to supervision, which can more effectively address existing deficiencies.

More collaborative and adaptive supervision is an important approach to addressing shortcomings in education (Nisa et al., 2024; Singerin, 2021). Supervision strategies must be flexible and tailored to the needs and local conditions of each educational institution (Pamungkas, 2023; Sá et al., 2021). Recent research has shown that adaptive supervision approaches contribute significantly to improving teaching effectiveness and teacher motivation, yet there remains a gap in the literature regarding the widespread implementation of these practices, particularly in regions facing geographical challenges and infrastructure limitations such as Jayapura (Nisa et al., 2024). These challenges add complexity to the implementation of effective supervision strategies and highlight the need for further research into how supervision strategies can be effectively adapted to account for these local variables (Sá et al., 2021).

This study introduces a new approach to academic supervision by adapting and integrating collaborative and adaptive supervision strategies, specifically for the local context of Jayapura, an area with significant social and cultural diversity. Although

adaptive supervision approaches have been explored, their application in secondary education in Kota Jayapura has not been widely researched. Given the need for adaptive and collaborative supervision, this study aims to address important questions regarding supervision in secondary schools in Kota Jayapura. Its objectives are to explore the current academic supervision practices, evaluate their effectiveness in improving learning quality, and identify their impact on educational excellence in these schools. The findings of this research are expected to contribute significantly to the development of education in Jayapura and other regions with similar conditions.

B. Methods

This study employs a mixed-methods approach with a sequential explanatory strategy, designed to comprehensively evaluate academic supervision practices in secondary schools in Kota Jayapura. This approach begins with the collection of quantitative data through a questionnaire distributed via Google Forms to teachers and principals from nine secondary schools located in two main districts of Kota Jayapura. The questionnaire measures various aspects such as the frequency of supervision, objectives, and processes of supervision, quality of feedback, support and professional development, the impact of supervision, and the influence of supervision on the school environment, consisting of 35 items. Respondents for this survey were selected using purposive sampling techniques, aimed at ensuring that the participants involved were those who had been actively engaged in the academic supervision process (Sugiyono, 2016).

After the quantitative phase, the study proceeded with in-depth interviews to gain further insights into participants' experiences and perceptions of the supervision process. These interviews were conducted with representatives from each school involved in the survey, including at least two teachers per school, comprising one teacher and the principal. These in-depth interviews aided in identifying the specific contexts and dynamics that influence the effectiveness of academic supervision (Moleong, 2017).

The data analysis process involves using descriptive statistics to evaluate quantitative data and thematic analysis for qualitative data, conducted separately before integrating the results of both methods. The data analysis in this study includes using descriptive statistics to assess the quantitative data, including validity and reliability testing. The validity of the data is tested by comparing the *r*-value against the table value (*r*-table); if the *r*-value is greater, the questionnaire item is considered valid. (Johnson & Christensen, 2014). Reliability was measured using Cronbach's alpha value, with a score above 0.176 indicating that the research instrument was consistent. The validity and reliability analysis were conducted using the Statistical Product and Service Solution (SPSS) software, version 22.0. This study was conducted over four months, from May to September 2024, providing in-depth insights into how academic supervision is implemented and received within the school environment in Kota

Jayapura (Miles et al., 2014).

C. Results and Discussion

Based on the conducted research, the findings of the study include the following:

Academic Supervision Practices

This study explores the variations in academic supervision practices in secondary schools in Kota Jayapura, focusing on planning, implementation, and the feedback provided to teachers. Data analysis from the research in Kota Jayapura reveals that, with participation from 138 respondents, the average assessment of academic supervision is 28.32 on a maximum scale of 30, indicating a generally positive evaluation of academic supervision by the majority of respondents. Although the median and mode reach the peak of the scale, the variation in supervision practices, reflected by a standard deviation of 2.664 and a range of 12, reveals disparities in the quality of supervision among schools. These findings underscore the importance of a tailored approach to academic supervision to meet the unique needs of each school (Rahabav, 2016; Werdiningsih, 2024).

Supervision Planning

Systematic and structured supervision planning has proven to be a crucial foundation for the successful implementation of academic supervision. This study emphasizes the importance of thorough planning, which allows teachers to adequately prepare themselves and understand the aspects to be evaluated. Khasanah et al., (2019) stress that good planning in academic supervision is key to enhancing teacher professionalism. Without meticulous planning, supervision often fails to provide clear and beneficial guidance for teachers (Ogunode & Vyonku, 2024; Rukayah, 2018).

In several schools, such as SMA A and SMA B, supervision planning is conducted meticulously and structurally from the beginning of the semester. Teachers in these schools report that they are informed well in advance of the supervision implementation, allowing them to prepare better. This is evident from a statement by a teacher at SMA A who expressed, *"We always receive the supervision schedule at the beginning of the semester, so we know when we will be evaluated and what aspects will be assessed."* Conversely, in schools like SMA C, supervision is often conducted unexpectedly, without clear planning, thus reducing effectiveness and creating uncertainty for teachers. Therefore, systematic planning should be a top priority for every school in implementing academic supervision to achieve optimal goals for enhancing the quality of teaching and learning.

Implementation of Supervision

The implementation of supervision also shows significant differences among schools. In schools such as SMA F and SMA G, supervision is conducted with in-depth and comprehensive observation, where supervisors are present throughout the entire teaching session and provide highly specific feedback. This practice aligns with research findings that emphasize the importance of thorough supervisor involvement (Harwisaputra et al., 2024; Sumiati & Muljono, 2020). Conversely, at SMA H, teachers reported that supervision is conducted in a very short time and lacks depth, rendering the feedback provided irrelevant or non-specific. From this perspective, effective implementation requires not only good planning but also active and comprehensive involvement from supervisors, as expressed by a teacher at SMA H: *"The supervisor only comes in briefly, then leaves without providing detailed assessments."* These findings underscore the importance of adapting techniques and supervision models to the unique conditions of each school, as recommended by Werdiningsih (2024). Effective supervision implementation requires not only good planning but also the active and comprehensive involvement of supervisors. By adapting the supervisory approach to the unique conditions of each school, it is hoped that the implementation of supervision can have a more optimal impact on improving the quality of teaching and learning.

Feedback in Supervision

Following good supervision implementation, feedback becomes a key component that elevates the supervision process to a stage of evaluation and reflection, making collaborative feedback sessions essential for encouraging continuous improvement. In schools such as SMA I and SMA F, these discussions are conducted effectively, where teachers are allowed to ask questions and discuss necessary improvements. Teachers feel supported through the feedback provided, as expressed by a teacher at SMA I: *"The discussion after supervision helps me understand my weaknesses and how to improve them."* The findings of this study highlight the importance of a collaborative approach and constructive feedback in academic supervision. Schools that implement collaborative feedback sessions succeed in creating an environment that supports teacher reflection and encourages continuous improvement in teaching practices. Teachers feel more valued and supported when they are allowed to engage in open dialogue with supervisors and actively participate in the evaluation and improvement planning process. Nurhayati et al., (2022) also emphasize that constructive feedback involving collaboration between supervisors and teachers plays a crucial role in enhancing teacher performance and promoting self-reflection. Similarly, Yani et al. (2024) stress that collaborative feedback in academic supervision significantly contributes to teachers' professional development by creating space for open dialogue and idea exchange.

However, in several other schools, post-observation discussions are perceived as a

formality and lack depth, leading teachers to feel that they do not receive useful input for their development. This situation indicates a lack of collaborative approach in feedback, which can hinder teachers' professional growth (Mu'ammamroh et al., 2024). This underscores the findings of Ubogu (2024) which indicate that a lack of attention to detail and inadequate supervision in some cases diminish the effectiveness of supervision.

Therefore, it is essential for schools to adopt a collaborative approach in feedback sessions and ensure that post-observation discussions become a safe and constructive space for teachers to reflect on their practices and explore improvement strategies. Supervisors also need to be equipped with adequate skills and knowledge to provide substantive, relevant feedback that encourages reflective dialogue. By implementing best practices in academic supervision, particularly in collaborative feedback aspects, schools can maximize the potential of supervision as a tool to enhance teaching quality and support the continuous professional development of teachers.

Effectiveness of Academic Supervision

The results of the study indicate a high level of effectiveness in academic supervision at secondary schools in Kota Jayapura. Quantitative data from 138 respondents show an average effectiveness rating of 28.32 out of a maximum scale of 30. This indicates that the majority of teachers perceive academic supervision as very effective in enhancing their teaching quality. The high level of effectiveness aligns with research by Suyatno et al. (2023) which asserts that supervision focused on developing pedagogical skills directly contributes to improving teaching quality. Qualitative findings reinforce this notion, as expressed by a teacher at SMA A: *"After supervision, I was advised to motivate my students more, and that changed their engagement in class."*

The effectiveness of academic supervision is also reflected in the improvement of teachers' professional competencies. Akbar et al. (2022) argue that supervision enhances not only technical teaching skills but also psychological aspects such as self-concept and work ethic among teachers. This is clearly illustrated in reflections from SMA F: *"The supervisor showed me how to organize lesson time effectively, and this has helped me manage my class better, increasing student engagement."*

Furthermore, the high level of effectiveness is also evident from its impact on teachers' motivation and performance. Japemar et al. (2020) state that constructive feedback during supervision can motivate teachers to improve their performance. A teacher's statement from SMA B supports this finding: *"Feedback from supervision makes me feel more encouraged to try new teaching methods, which have proven effective."*

This high level of effectiveness is also reflected in the ability of supervision to encourage innovation in teaching. Research by Kemmis et al. (2014) shows that effective supervision can act as a catalyst for teachers to adopt more innovative and

student-centered teaching approaches. This is evident from various teacher statements reporting an increase in the use of new teaching methods and learning technologies after supervision sessions. The effectiveness of academic supervision in secondary schools in Kota Jayapura is generally high, proving effective in enhancing pedagogical competencies and promoting teachers' professional development.

Despite being generally effective, there is significant variation in supervision effectiveness among schools. A standard deviation of 2.664 and a range of 13 points (minimum 17, maximum 30) indicate differences in supervision effectiveness levels. Some schools still face challenges in implementing effective supervision. Fiedler's (1967) Contingency Leadership Theory provides a useful framework for understanding this variation. This theory emphasizes that the effectiveness of leadership, in this case, academic supervision, heavily depends on specific contexts and situations. This may explain why a supervision approach that succeeds in one school may be less effective in another.

Factors influencing supervision effectiveness, as identified through qualitative interviews, can be analyzed using Guskey's (2002) Teacher Professional Development Model. This model highlights the importance of ongoing, specific, and practical professional development. Factors such as overly formal supervision, lack of specific guidance, short duration, overly general suggestions, and lack of follow-up contradict the principles outlined. For example, a teacher's complaint at SMA D that *"Supervision was very brief, and the suggestions given were too general, so there was no significant change in my teaching"* reflects a misalignment with specificity and sustainability principles in Guskey's model. Similarly, reports from SMA G and SMA H regarding the lack of follow-up after supervision indicate the absence of crucial sustainability elements in effective professional development, which should provide teachers with opportunities to practice new skills and receive regular feedback. However, the factors identified in this study such as the lack of directly applicable guidance in the classroom and overly general suggestions indicate that these principles are often unmet in supervision practices at some schools.

These findings underscore the importance of a more tailored and contextualized approach to academic supervision. In line with Contingency Leadership Theory, supervisors need to consider the specific context of each school and individual teachers when designing and implementing supervision. Additionally, referring to the Teacher Professional Development Model, supervision should be designed as an ongoing process that provides specific feedback, opportunities for practice, and continuous support. Thus, to improve the effectiveness of academic supervision, there needs to be a shift from formal and generic approaches to more adaptive, specific, and sustainable methods. This could include increasing the duration and frequency of supervision sessions, providing more specific and actionable feedback, and implementing structured follow-up systems to support teachers' continuous professional development.

The Impact of Academic Supervision on Educational Excellence

This section examines the multidimensional impact of academic supervision, which not only influences teacher performance but also has a wide-ranging effect on the overall education ecosystem. The findings illustrate how academic supervision contributes to achieving educational excellence across various aspects.

Improvement in Learning Quality and Student Learning Outcomes

Academic supervision has shown a significant impact on the enhancement of learning quality and student learning outcomes in secondary schools in Kota Jayapura. Quantitative results from 138 respondents indicate an average impact score of 98.44 out of a scale of 105, reflecting a highly positive assessment. This finding aligns with research by Yani et al. (2024) which emphasizes that effective supervision directly influences teaching quality and impacts student learning outcomes.

Testimonials from teachers reinforce these quantitative findings. A teacher at SMA F stated, *"After supervision, I feel more competent in managing my class, which directly improves student test scores."* This statement illustrates how academic supervision contributes to enhancing teachers' competencies, which in turn leads to improved student performance.

Furthermore, Safrizal et al. (2023) emphasize the importance of adaptive supervision that is responsive to teachers' specific needs. At SMA B, a personalized supervision approach proved helpful in enabling teachers to implement more effective teaching strategies. A teacher at that school noted, *"The feedback I received was very relevant to the challenges I faced, allowing me to apply it immediately."* This shows that supervision tailored to individual teachers' needs can be more effective in enhancing learning quality.

The improvement in learning quality is not limited to academic aspects but also includes enhancements in classroom management and teacher-student interactions. As expressed by a teacher at SMA A, *"The supervision provided was very detailed, helping me improve my classroom management and interactions with students, resulting in better student performance."* This statement underscores that the impact of academic supervision is comprehensive, encompassing various aspects contributing to the overall improvement in learning quality.

It is thus clear that academic supervision plays a crucial role in enhancing learning quality and student outcomes. Through the improvement of teachers' competencies, better teaching strategies, and adjustments to specific needs, academic supervision proves to be an effective instrument in fostering educational excellence in secondary schools in Kota Jayapura.

Psychological and Emotional Impact on Teachers and Students

Academic supervision not only affects the technical aspects of teaching but also has a significant influence on the psychological and emotional dimensions of both teachers and students. Sahertian & Effendi (2023) in their research highlight how academic supervision can impact the emotional and psychological well-being of the entire school community.

Qualitative findings from interviews with teachers provide concrete evidence of this impact. A teacher at SMA described their experience, stating, *"My relationship with students has become warmer after I applied the techniques discussed during supervision sessions."* This statement indicates that academic supervision not only enhances teaching skills but also assists teachers in building stronger emotional connections with their students.

Moreover, this emotional and psychological impact is also reflected in the increase in teachers' confidence and motivation. As expressed by a teacher at SMA B, *"The feedback I received was very relevant to the challenges I faced, enabling me to apply it directly."* This demonstrates that effective supervision can enhance teachers' self-efficacy, which in turn can improve their performance in the classroom.

These positive impacts are also evident among students. The improved quality of teacher-student relationships resulting from academic supervision contributes to creating a more positive and supportive learning environment. A teacher at SMA F stated, *"After supervision, I noticed a change in how students engaged in lessons."* This illustrates how changes in teachers' approaches, triggered by supervision, can enhance student engagement and motivation in the learning process.

However, it is important to note that these psychological and emotional impacts are highly dependent on the quality and approach of the supervision applied. In schools where supervision is viewed merely as a formality, as reported at SMA C and SMA E, these positive impacts may not be fully realized. This emphasizes the importance of implementing supervision that is sensitive and development-oriented, rather than just an evaluation tool.

Academic supervision has great potential to enhance not only the technical teaching skills but also the psychological and emotional aspects of the educational process. When implemented effectively, supervision can create a more positive learning environment, increase the motivation of both teachers and students and contribute to improved interpersonal relationships within schools, all of which are crucial components in achieving educational excellence.

Variability of Effectiveness and Challenges in the Implementation of Academic Supervision

Although academic supervision generally demonstrates positive impacts, this study reveals significant variability in its effectiveness and implementation across different schools. The results of quantitative analysis indicate a standard deviation of 9.532 and a score range from 63 to 105, suggesting substantial differences in experiences and perceptions of academic supervision among respondents.

Muhajirah et al. (2023) identify resource and time constraints as major challenges in implementing effective supervision. In several schools, such as SMA C and SMA E, the lack of depth and frequency in supervision presents significant barriers. A teacher at SMA E expressed, *"We often feel that supervision is merely a formality without any real impact,"* reflecting the perception that supervision in some schools has not yet reached its full potential in driving improvements.

Findings Ubogu (2024) provide an additional critical perspective, indicating that supervision does not always yield positive effects on teacher performance or the enhancement of teaching quality. Factors such as the lack of routine visits and inadequate oversight contribute to suboptimal outcomes. This underscores that the effectiveness of supervision heavily relies on the consistency, depth, and quality of its implementation.

To address these challenges, innovation in supervision strategies becomes crucial. The use of digital platforms and new methodologies in supervision may serve as solutions to enhance the efficiency and effectiveness of the supervision process. The implementation of these innovative approaches is expected to improve the quality and consistency of supervision across all schools in Kota Jayapura.

D. Conclusions

This study indicates that the practices of academic supervision in secondary schools in Kota Jayapura vary in terms of planning, implementation, and feedback provision. Schools that adopt systematic and collaborative approaches tend to have more effective supervisory practices. Overall, the effectiveness of academic supervision is rated highly, with an average score of 28.32 out of 30, although there is significant variability among schools. The positive impacts of supervision are evident in the improvement of learning quality, student learning outcomes, as well as the psychological and emotional aspects of both teachers and students.

However, some schools, such as SMA C, D, and E, face challenges in implementing effective supervision. In these schools, supervision is often perceived as a mere formality, lacking in depth, frequency, and adequate follow-up. As a result, the positive impacts of supervision are not fully realized, which is reflected in the lack of

significant changes in teaching practices and student learning outcomes.

These findings underscore the importance of adopting adaptive, collaborative, and sustainable supervision approaches, as well as the necessity to address implementation gaps among schools to support equitable improvements in educational quality across Kota Jayapura.

E. Acknowledgement

Thanks to the Rector and all friends from Universitas Cenderawasih, Jayapura, Papua, Indonesia.

References

- Aisyahrani, A., Putri, E. J., Aulia, I. N., Pamungkas, F. H., Khairi, M. A., Jannah, Z., & Nasution, I. (2023). The Effectiveness of Principal's Academic Supervision Implementation to Improve Teacher Competen. *Sublim: Jurnal Pendidikan*, 1(1), 27–37. <https://doi.org/10.33487/sublim.v1i1.5616>
- Akbar, M. N., Saleh, M., & Mahrita. (2022). Correlation Between Principal Academic Supervision, Self-Concept, Work Ethos Toward Teacher Performance of Junior High School Teachers in Hulu Sungai Selatan Regency. *International Journal of Social Science And Human Research*, 05(06), 2354–2363. <https://doi.org/10.47191/ijsshr/v5-i6-60>
- Almeida, J. G., Hartog, D. N. D., De Hoogh, A. H. B., Franco, V. R., & Porto, J. B. (2022). Harmful Leader Behaviors: Toward an Increased Understanding of How Different Forms of Unethical Leader Behavior Can Harm Subordinates. *Journal of Business Ethics*, 180(1), 215–244. <https://doi.org/10.1007/s10551-021-04864-7>
- Azainil, A., Sabara, I., Rahayu, S., Ramadiani, R., & Mulawarman, W. (2020). The Influence of Principal's Supervision Competence and School Culture on Teachers Performance of Public High School in Kutai Kartanegara Regency. *ICOGESS, February*, 1–9. <https://doi.org/10.4108/eai.14-3-2019.2291964>
- Dody, S. (2016). The Role of Self-Awareness in Mediating the Influence of Academic Supervisor's Supervision and Principal's Managerial Ability on Teacher Competency *Jurnal Pendidikan Ilmu Sosial*, 26(1), 35–43. <http://journals.ums.ac.id/index.php/jpis/article/view/2063>
- Erifal, E. (2023). Implementation of Teacher's Performance Academic Supervision. *PPSDP International Journal of Education*, 2(2), 180–190. <https://doi.org/10.59175/pijed.v2i2.83>
- Eryadini, N. (2022). the Role of Academic Supervisors in Improving Student Learning Achievement. *Jurnal Scientia*, 11(2), 2022. <http://infor.seaninstitute.org/index.php>
- Fiedler, F. E. (1967). *A Theory of Leadership Effectiveness*. McGraw-Hill.
- Guskey, T. R. (2002). Professional Development and Teacher Change. *Teacher and Teaching*, 8(3), 381–391.

- <https://doi.org/https://doi.org/10.1080/135406002100000512>
- Hakim, S. S., Sowiyah, S., Fitriyanti, Z. Z., & ... (2020). *The Effect of Academic Supervision in Improving Teacher Performance: A Literature Review*. <http://repository.lppm.unila.ac.id/38910/>
- Haris, I., Naway, F. A., Pulukadang, W. T., Takeshita, H., & Ancho, I. V. (2018). School supervision practices in the Indonesian education system; perspectives and challenges. *Journal of Social Studies Education Research*, 9(2), 366–387. <https://doi.org/10.17499/jsser.17724>
- Harwisaputra, A. F., Fu, A., & Daryono, R. W. (2024). *The Influence of Academic Supervision and Professional Learning Community (PLC) on Teacher Professional Competency : Does the Mediation of Self-Confidence Matter ?* 13(3), 3087–3104.
- Hulu, T., Rosita, T., & Rahman, A. (2024). The Effect of Academic Supervision and Teacher Professionalism on Student Learning Outcomes. *Didaktika: Jurnal Kependidikan*. <https://ssed.or.id/contents/article/view/465>
- Hulu, T., Rosita, T., Rahman, A., & Terbuka, U. (2024). *The Effect of Academic Supervision and Professionalism on Student Learning Outcomes*. 13(1), 343–350.
- Japemar, Rusdinal, & Fauzan, A. (2020). *The Effect of Academic Supervision, School Leadership, Organizational Culture, and Achievement Motivation on Teachers' Performance at Junior High Schools*. 504(ICoIE), 177–180. <https://doi.org/10.2991/assehr.k.201209.214>
- Johnson, R. B., & Christensen, L. (2014). *Educational Research: Quantitative, Qualitative, and Mixed Approaches*. Pearson Education, Inc.
- Kemmis, S., Heikkinen, H. L. T., Fransson, G., Aspors, J., & Edwards-Groves, C. (2014). Mentoring of new teachers as a contested practice: Supervision, support and collaborative self-development. *Teaching and Teacher Education*, 43, 154–164. <https://doi.org/10.1016/j.tate.2014.07.001>
- Khasanah, U., Kristiawan, M., & Tobari. (2019). The implementation of principals' academic supervision in improving teachers' professionalism in the state primary schools. *International Journal of Scientific and Technology Research*, 8(8), 1107 – 1115. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85073373205&partnerID=40&md5=eaa4d38baa3cecefde2890342f28b628>
- Kholid, K., Su'ad, S., & Madjdi, A. H. (2020). Analysis of Principal'S Academic Supervision and Teacher'S Work Motivation Toward the Performance of State Elementary School Teachers in Undaan District Kudus Regency. *Refleksi Edukatika : Jurnal Ilmiah Kependidikan*, 10(2), 257–266. <https://doi.org/10.24176/re.v10i2.4698>
- Maulina, S., Sobri, A. Y., & B, D. E. K. (2023). Proceedings of the International Conference on Educational Management and Technology (ICEMT 2022). In *Proceedings of the International Conference on Educational Management and Technology (ICEMT 2022)*. Atlantis Press SARL. <https://doi.org/10.2991/978-2-494069-95-4>
- Miles, M., Huberman, A. M., & Saldana. (2014). *Qualitative Data Analysis, a Methods Sourcebook, Edition 3*. Sage Publication Terjemahan Tjetjep Rohindi Rohidi, UI-Press.

- Moleong, L. (2017). *Qualitative Research Methodology*. Remaja Rosdakarya.
- Moulina, D. (2022). The Influence of Principal's Academic Supervision and Teacher's Work Motivation on Teacher Performance. *Journal of Innovation in Teaching and Instructional Media*, 2(3), 181–184. <https://doi.org/10.52690/jitim.v2i3.303>
- Mu'ammah, N. L. R., Pugu, M. R., Nelza, N., & Al-Amin. (2024). School-Community Collaboration: An Education Management Approach to Strengthening Community-Based Schools. *Prosiding Seminar Nasional Indonesia*, 2(2), 276–289.
- Muhajirah, B., Rahman, D., & Nursita, L. (2023). Problems in the Implementation of Educational Supervision. *Nazzama: Journal of Management Education*, 3(1), 84–96.
- Muttaqin, I., Tursina, N., Sudrajat, A., Yuliza, U., Novianto, N., Fahri Ramadhan, F., & Edi Kurnanto, M. (2023). The effect of academic supervision, managerial competence, and teacher empowerment on teacher performance: the mediating role of teacher commitment. *F1000Research*, 12, 1–28. <https://doi.org/10.12688/f1000research.128502.2>
- Nisa, K., Imron, A., Rasdiana, Sobri, A. Y., Hariyadi, R., Anggara, R. A., Rudyman, Risaldi, D., Azizah, F., Attamimi, M. R., & Salym, A. Q. N. (2024). Increasing Teacher Professionalism through The Implementation of Digital Academic Supervision in Indonesian Secondary School: Personal Learning Networks as Mediator. *Journal of Infrastructure, Policy and Development*, 8(8), 1–29.
- Noor, I. H. M., Herlinawati, & Sofyaningrum, E. (2020). The academic supervision of the school principal: A case in Indonesia. *Journal of Educational and Social Research*, 10(4), 81–93. <https://doi.org/10.36941/JESR-2020-0067>
- Nureroan, E. E. (2021). The Enhancement of Teacher Competency in Developing Curriculum-13 Based Assessment Through Academic Supervision. *DIDAKTIKA*, 1(3), 634–646. <https://doi.org/0000-0002-6436-6349>
- Nurhayati, N., Mesiono, M., & Daulay, N. K. (2022). The Effect of Academic Supervision of School Principles and Teachers' Performance Satisfaction in Increasing Teachers' Pedagogical Competence. *Jurnal Basicedu*, 6(2), 2138–2150. <https://doi.org/10.31004/basicedu.v6i2.2301>
- OECD. (2023). *PISA 2022 Results (Volume I and II) - Country Notes: Indonesia*. https://www.oecd.org/en/publications/pisa-2022-results-volume-i-and-ii-country-notes_ed6fbcc5-en/indonesia_c2e1ae0e-en.html
- Ogunode, N. J., & Vyonku, D. (2024). *Effective Supervision of Educational Administration and Planning Curriculum Implementation in Nigerian Universities*. 1(2), 16–22.
- Pamungkas, A. H. (2023). Problems, Challenges, Dynamics and Supervision Innovation on Nonformal Education In Indonesia. *SPEKTRUM: Jurnal Pendidikan Luar Sekolah (PLS)*, 11(2), 265. <https://doi.org/10.24036/spektrumpls.v11i2.123259>
- Putra, S. P., & Hariri, H. (2023). The Effect of Principal Supervision on Teacher Performance: Literature Review. *Jurnal Humaniora Dan Ilmu Pendidikan*, 2(2), 63–70. <https://doi.org/10.35912/jahidik.v2i2.1648>
- Qingyan, G., Azar, A. S., & Ahmad, A. (2023). The Impact of Teacher Quality Management on Student Performance in the Education Sector: Literature Review. *World Journal of English Language*, 13(3), 156–171.

- <https://doi.org/10.5430/wjel.v13n3p156>
- Rahabav, P. (2016). The Effectiveness of Academic Supervision for Teachers. *Journal of Education and Practice*, 7(9), 47–55.
<https://www.iiste.org/Journals/index.php/JEP/article/view/29620/30413>
- Rony, Z. T., Anwar, K., Nur, M., & Khoirul, U. (2024). *Improving Teacher Performance Through Total Quality Management and Academic Supervision*. 429–442.
- Rukayah, R. (2018). The Enhancement of Teacher Competency in Thematic Learning Planning Through Collaborative Approach Group Supervision. *Kelola: Jurnal Manajemen Pendidikan*, 5(1), 37–46. <https://doi.org/10.24246/j.jk.2018.v5.i1.p37-46>
- Sá, M. J., Santos, A. I., & Serpa, S. (2021). The academic supervisor of higher education students' final projects: A gatekeeper of quality? *Academic Journal of Interdisciplinary Studies*, 10(1), 152–160. <https://doi.org/10.36941/ajis-2021-0013>
- Safrizal, S., Chamidi, A. S., & Al-Jihad, F. (2023). The Implementation of Clinical Supervision in Enhancing Teacher Professionalism. *An-Nidzam : Jurnal Manajemen Pendidikan Dan Studi Islam*, 10(1), 93–107.
<https://doi.org/10.33507/an-nidzam.v10i1.1140>
- Sahertian, P., & Effendi, Y. R. (2023). Principal's Academic Supervision Based on Humanistic Spiritual Values to Increase Student Achievement Motivation. *International Journal of Innovation and Learning*, 34(1), 1.
<https://doi.org/10.1504/ijil.2023.10054867>
- Sembiring, D. A. K., & Simanjuntak, G. (2023). The Dynamics of Academic Supervision in Improving Teacher Competency: A Literature Study. *NOKEN*, 4(2), 86–98.
- Shandi, S. A. (2023). The Collaborative Supervision to Improve Physical Education Teachers' Competency. *Prosiding Seminar Nasional Pascasarjana UNNES*, 6(1), 721–725. <https://proceeding.unnes.ac.id/snpasca/article/view/2209/1692>
- Singerin, S. (2021). Collaboration-Based Academic Supervision Model with Peer Evaluation Approach to Improve Pedagogical Competence and Quality of School Performance: The Role of Principal's Motivation as Moderation Variables. *International Journal of Elementary Education*, 5(2), 268.
<https://doi.org/10.23887/ijee.v5i2.34073>
- Sudarjat, J., Abdullah, T., & Sunaryo, W. (2015). Supervision, Leadership, and Working Motivation to Teachers' Performance. *International Journal of Managerial Studies and Research (IJMSR)*, 3(6), 146–152. www.arcjournals.org
- Sugiyono. (2016). *Research Methods: Quantitative, Qualitative, and R&D (Research and Development)*. Alfabeta.
- Sumiati, S., & Muljono, H. (2020). Analysis of Academic Supervision Management in Improving School Quality. *JKP | Jurnal Kepemimpinan Pendidikan*, 3(2), 445–451.
<https://doi.org/10.22236/jkpuhamka.v3i2.6778>
- Sunaryo, Y. (2020). Academic Supervision of School Principals and Teacher Performance: A Literature Review. *International Journal Pedagogy of Social Studies*, 5(2), 17–34.
- Suyatno, S., Istiningsih, E., Wantini, W., Hidayati, D., Fajria, A., & Zulaiha, S. (2023). Contribution of academic supervision to vocational students' learning readiness.

- International Journal of Evaluation and Research in Education*, 12(2), 710–719.
<https://doi.org/10.11591/ijere.v12i2.24422>
- Syukri, M. Z., Viona, E., & Utama, H. B. (2023). The Impact of Academic Supervision on Teacher's Professionalism in Improving Educational Quality. *PPSDP International Journal of*
<http://ejournal.ppsdp.org/index.php/pijed/article/view/49>
- Tyagi, R. S. (2010). School-based instructional supervision and the effective professional development of teachers. *Compare*, 40(6), 111 – 125.
<https://doi.org/10.1080/03057920902909485>
- Ubogu, R. (2024). Supervision of instruction: a strategy for strengthening teacher quality in secondary school education. *International Journal of Leadership in Education*, 27(1), 99 – 116. <https://doi.org/10.1080/13603124.2020.1829711>
- UNESCO. (2018). *Indonesia, UNESCO Country Strategy 2018 - 2021*.
<https://unesdoc.unesco.org/ark:/48223/pf0000263493>
- Wang, L. (2022). Exploring the Relationship Among Teacher Emotional Intelligence, Work Engagement, Teacher Self-Efficacy, and Student Academic Achievement: A Moderated Mediation Model. *Frontiers in Psychology*, 12(January).
<https://doi.org/10.3389/fpsyg.2021.810559>
- Werdiningsih, R. (2024). Role of the supervision of the school principal in improving the quality of learning at state elementary school's post-pandemic COVID-19. *International Journal of Education and Practice*, 12(2), 217–239.
<https://doi.org/10.18488/61.v12i2.3674>
- Winarno, J., Fitria, H., & Fitriani, Y. (2021). The role of principal academic supervision in improving the professionalism of teachers of state junior high schools. *JPGI (Jurnal Penelitian Guru*
<https://jurnal.iicet.org/index.php/jpgi/article/download/1074/768>
- Wiyono, B. B., Burhanuddin, & Maisyaroh. (2020). Comparative effect of the supervision of the principal and quality of organizational management in school education; [Efecto comparativo de la supervisión del director y calidad de gestión organizacional en la educación escolar]. *Utopia y Praxis Latinoamericana*, 25(Extra10), 1 – 13. <https://doi.org/10.5281/zenodo.4155681>
- Yani, A., Henjilito, R., Noviardila, I., Hasan, B., Setyawan, H., Shidiq, A. A. P., Gerdijan, N., Latino, F., Eken, Ö., Zulfahri, Kurniawan, A. W., & Hb, G. (2024). The Role of School Supervisors in the Quality Assurance of Physical Education Learning: A Systematic Review. *Retos*, 57(2022), 589–597.
<https://doi.org/10.47197/retos.v57.107189>

The Role of Cognitive Ability in Mediating Active Learning and Learning Discipline on Learning Achievement

Dionasius Novemasari¹, Sunarto¹

¹Universitas Stikubank Semarang, Central Java, Indonesia

Corresponding author e-mail: diona.novemasari@gmail.com

Article History: Received on 17 December 2024, Revised on 28 January 2025,
Published on 4 March 2025

Abstract: This study aims to test the role of cognitive ability in mediating active learning and learning discipline on learning achievement. This research is a quantitative study with practical significance and data collection. The analysis technique used was regression analysis, and Sobel test. The results obtained that active learning has significant positive effect on cognitive abilities. Learning discipline has no effect on cognitive abilities. Active learning has no effect on learning achievement. Learning discipline has significant positive effect on learning achievement. Cognitive ability has no effect on learning achievement. Cognitive ability does not function to mediate active learning and learning discipline on learning achievement. The findings suggest prioritizing learning discipline to enhance learning achievement while focusing on active learning to boost cognitive abilities, providing actionable insights for educators and policymakers. The novelty lies in this integrated and region specific exploration that challenges existing educational theories and provides tailored insights for practical implementation. The research contributes to understanding the nuanced relationships between active learning, discipline, cognitive ability, learning achievement among sixth grade students. It provides actionable insights for educators, policymakers, and future researchers to develop more holistic strategies for enhancing learning achievement.

Keywords: Active Learning, Cognitive Ability, Learning Achievement, Learning Discipline

A. Introduction

Active learning involves student participation through activities and discussions, promoting higher order thinking skills. According to (Smith & Tanner, 2010), problem based learning in student centered classrooms has a positive effect on academic achievement. Additionally, (Simba* & John Odwar Agak and Eric K. Kabuka, 2016) found that learning discipline plays a crucial role in improving academic performance, emphasizing its importance in the educational process. Cognitive ability which include memory, representation, information processing, logical reasoning, and thinking conversion are also significant contributors to

academic achievement. Research by (Shi & Qu, 2022) demonstrated that cognitive abilities have a positive and significant influence on academic outcomes.

While some studies confirm the positive impact of cognitive abilities on academic achievement, other research contradicts this. For instance, (Tikhomirova et al., 2020) found no significant relationship between cognitive abilities and academic achievement, creating a gap in understanding. Similarly, the extent to which cognitive ability mediates the relationship between active learning, learning discipline, and academic achievement remains unclear. These inconsistencies highlight the need for further investigation to clarify these relationships.

This study builds on existing frameworks by examining the mediating role of cognitive abilities in elementary school contexts, particularly at the sixth grade level. Previous studies, such as those by (Smith & Tanner, 2010) and (Simba* & John Odwar Agak and Eric K. Kabuka, 2016) focused primarily on direct relationships while recent efforts by (Tikhomirova et al., 2020) and (Shi & Qu, 2022) explored cognitive variables more deeply. By integrating these perspectives, this research employs advanced statistical techniques, such as Sobel tests and regression models to explore mediating effects with a focus on West Semarang District.

The novelty of this study lies in its unique focus on sixth grade elementary students in West Semarang District that a demographic that has not been extensively studied. Unlike prior research that primarily explored direct effects, this study investigates the mediating role of cognitive abilities between active learning, learning discipline, and academic achievement. This angle is unique because it goes beyond traditional linear relationship to examine how cognitive processes act as potential intermediaries, revealing the underlying mechanism of how learning strategies and behaviors influence achievement (He et al., 2017). It compares the direct and indirect effects of active learning (a student centered pedagogical approach) (Auerbach & Andrews, 2018) and learning discipline (a behavioral construct) on cognitive ability and learning achievement. Highlighting how these constructs differ in their pathways and influences is relatively underexplored in prior research. The study emphasize the interplay between cognitive and no cognitive skills, contributing to the growing recognition of holistic approaches to academic success. It provides practical implications for balancing student centered learning approaches, disciplined behaviors, and cognitive skill development. This holistic view can guide educators and policymakers in designing more effective interventions and depth to understanding the variability in academic outcomes across different educational settings. This study sheds light on why active learning, despite its effectiveness in enhancing cognitive engagement, may not directly translate into higher academic achievement. This calls for reevaluation of assessment methods and alignment between active learning strategies and evaluation practices (Alonso-tapia, 2006).

Furthermore, this research contributes to resolving contradictions in previous finding by examining cognitive abilities role in the interplay of these variables. Otherwise, this research is refined understanding of active learning's impact that prior research has extensively highlighted the benefits of active learning in enhancing cognitive engagement. This study delineates its specific impact on cognitive ability and its limited direct contribution to learning achievement. As reassessment of learning discipline's role, it unlikes many studies that position discipline as a foundational driver of both cognitive and academic outcomes, this challenges conventional assumptions and shifts focus toward the non cognitive pathways through which discipline contributes to success. Questioning cognitive ability as a mediator to determinant of academic success. As contextualizing findings within educational systems that the study highlights systemic misalignments, such as the focus on rote memorization and compliance in traditional assessments which may limit the translation of cognitive skills into measurable achievement. By advocating for performance based assessments and motivational strategies, and contribute to ongoing debates about educational reform. This aligns with (E. Adams, 2015) Bloom's Taxonomy and underscores the need for a balanced approach that nurtures cognitive, affective, and psychomotor domains. This research emphasize the complexity of educational outcomes and the importance of integrating cognitive and non-cognitive dimensions for student success. The study proposes that reliance on either active learning or discipline in isolation is insufficient. Instead, a holistic approach that combines intellectual engagement, structure discipline, and socio emotional learning is essential for well-rounded student development.

This study contributes to educational theory and practice by identifying mechanism through which active learning and discipline influence academic outcomes. It provides educators with insights on how to enhance learning achievement by fostering cognitive skills. Additionally, it addresses research gaps by clarifying the inconsistent findings on cognitive abilities and their mediating role in academic success. Methodologically, it offers a comprehensive framework for analyzing complex relationships in education. Aligning active learning strategies with performance-based assessments may better capture their potential impact on academic achievement. The importance of cultivating consistent behaviors, time management, and perseverance in students. Schools and policymakers should implement programs that foster self-discipline (A Khatun, 2018), as it directly contributes to academic success by creating structured and focused learning environments. It needs to focus on cognitive factors such as emotional intelligence (Deary et al., 2007), motivation, and interpersonal skills (Gamiao & Ph, 2021), which play an equally critical role in holistic student development. Educational systems must adopt holistic strategies that integrate cognitive, emotional, and behavioral development. Guidance for future research to investigate external factors (e.g. socioeconomic background, teaching methods, and classroom dynamics) that may influence the relationships between active learning, discipline, and learning achievement. Explore the role of non-cognitive skills (e.g. emotional intelligence and

self-regulation) as mediators in educational outcomes. Examine the effects of integrated educational interventions that combine active learning, discipline, and motivation to enhance both cognitive and no cognitive domains. Overall, the first one is as curriculum development that educational systems should design curricula that balance cognitive engagement with structured behavioral interventions, ensuring students receive well rounded development. The second one is as teacher training that teacher should be trained to implement active learning strategies effectively, focusing on engaging students cognitively while also fostering disciplined learning environments. The third one is as policy recommendations that policymakers should encourage schools to adopt holistic (Rybska & Błaszak, 2020) teaching methods and performance based assessment models that better capture the benefits of active learning.

This research contributes to the growing understanding of the complexities of educational outcomes, highlighting the dominant role of discipline in learning achievement and the nuanced impacts of active learning and cognitive ability. Does cognitive ability mediate the effect of active learning and learning discipline on the learning achievement of sixth grade elementary school students in West Semarang District?

B. Methods

This research is a quantitative study that emphasizes practical significance and utilizes data collection and analysis methods aligned with the research questions (Ishtiaq, 2019) and (Albers, 2017). The steps included identifying the problem, formulating hypotheses, selecting the sample, collecting data using structured instruments, and analyzing the data. Each step was conducted systematically to ensure the validity and reliability of the findings (Gomes Junior et al., 2020).

The population this study consisted of sixth grade elementary school students in Semarang City. From this population, a purposive sample of 120 students in West Semarang District was selected. However, only 110 valid responses were collected due to incomplete data submissions. This district was chosen because of its diverse demographic and educational characteristics, which provide a representative sample for examining the research variables (Gay, 1992).

The analysis involved several stages. Descriptive analysis was used to summarize data trends and respondent characteristics (D'Andrea & Wooten, 2017). Assumption tests, including normality and heteroscedasticity tests were performed to verify the data met the requirements for regression analysis. Regression analysis was conducted to examine the direct relationships between variables while Sobel tests (Soleman & Tiffanie Victoria, 2021) were used to assess the mediating role of cognitive abilities (Mohanty et al., 2020). Model testing included the F-test and the R-square test. The F-test was employed to determine the model's goodness of fit where

a significance value (sig.) of <0.05 indicated the model was appropriate (ElNakib et al., 2021). The R-square test evaluated the proportion of variance in the dependent variable explained by the independent variables. Hypothesis testing utilized t-tests to determine the significance of relationships, considering both the significance value (<0.05) and the sign of the beta coefficient (positive or negative). Hypotheses were accepted or rejected based on these results (McNabb, 2018).

C. Results and Discussion

Analysis of cognitive ability (Y1) as the dependent variable that a function of active learning (X1) and learning discipline (X2). The first regression of model F statistic is highly significant $F = 158.702$ at $p < 0.05$ (0.000), it means that meet of goodness of fit, with an adjusted R-square value of 0.743, indicating that 74.3% of the variance in cognitive ability is explained by the predictors. Active learning (X1) as a predictor of cognitive ability that the regression coefficient for active learning (X1) is 0.870 which is significant at $p < 0.05$. It means that active learning (X1) significantly and positively affects cognitive ability (Y1), it's proven on H1 accepted that $p < 0.05$. According to (Genovese, 2003) and (van der Veer, 2020), active engagement is essential for cognitive development. Active learning techniques, such as problem solving, collaborative activities, and hands on experiments, stimulate critical thinking and the construction of knowledge. (Sweller, 1988) explained that active learning reduces cognitive load by allowing students to process and internalize information through meaningful activities. The strong influence of active learning (X1) on cognitive ability (Y1) is emphasizing the need for student centered approaches in educational practices. While analysis learning discipline (X2) as a predictor of cognitive ability. The coefficient for learning discipline (X2) is -0.016, which is not statistically significant. Learning discipline (X2) does not significantly affect cognitive ability (Y1), it's proven on H2 rejected that $p > 0.05$. (Zimmerman & Risemberg, 1997) argues that while discipline enhances focus and time management, cognitive skills are primarily driven by mental engagement and intellectual stimulation, it does not inherently enhance cognitive development. The lack of significance here suggests that cognitive growth depends more on quality of learning than behavioral discipline. The regression equation for cognitive ability (Y1) emphasizes the dominant role of active learning in shaping cognitive ability while highlighting the negligible impact of discipline.

Analysis of learning achievement (Y2) as the dependent variable that a function of active learning (X1), learning discipline (X2), and cognitive ability (Y1). On the second regression of model F statistic is significant $F = 26.840$ at $p < 0.05$ (0.000) it means that meet of goodness of fit, with an adjusted R-square value of 0.416, indicating that 41.6% of the variance in learning achievement is explained by the predictors. Active learning (X1) as a predictor of learning achievement that regression of coefficient for active learning (X1) is 0.120 which is not statistically significant. It means that active learning (X1) does not significantly affect learning

achievement (Y2), it's proven on H3 rejected that $p > 0.05$. As indirect effects of while active learning enhances cognitive ability, its impact on achievement may require additional mediators, such as motivation or alignment with assessment methods. (Biggs, 2003) posits that traditional assessments often measure rote learning rather than the critical thinking skills fostered by active learning. It needs for educational systems to integrate active learning with performance based assessments to capture more benefits. Learning discipline (X2) as a predictor of learning achievement that regression of coefficient for learning discipline (X2) is 0.627 which is significant at $p < 0.05$. It means that learning discipline (X2) significantly and positively affects learning achievement (Y2), it's proven on H4 accepted that $p < 0.05$. (Dunn & Zimmer, 2020) highlight the role of discipline in fostering intrinsic motivation which drives persistence and goal achievement. (Catania, 1984) Skinner's operant conditioning theory (elmakrufi, 2013) emphasizes the importance of consistent behaviors and routines in achieving academic success (Schlinger, 2021). Discipline creates the structure and habits necessary for sustained academic effort, explaining its strong influence on achievement. Cognitive ability (Y1) as a predictor of learning achievement that regression of coefficient for cognitive ability (Y1) is -0.054 which is not statistically significant. It means that cognitive ability (Y1) does not significantly influence learning achievement (Y2), it's proven H5 that $p > 0.05$. (O'Brien & Burnett, 1997) explained that academic success is influenced by various intelligences beyond the cognitive domain such as interpersonal and intrapersonal skills. (Mahmoudi et al., 2012) suggests learning achievement depends on a combination of cognitive, emotional, and behavioral factors (Rybska & Błaszak, 2020). The lack of a significant relationship between cognitive ability (Y1) and learning achievement (Y2) highlights the complexity of academic success. The regression equation of learning achievement (Y2) emphasizes the dominant role of discipline in predicting achievement while highlighting the limited contributions of active learning (X1) and cognitive ability (Y1). The details shown into the result of regression test on table 1.

Table 1. The Result of Regression Test

Regression Test	Results
Dependent Cognitive Ability (Y1)	F = 158.702*** Adj.R_Square = 0.743 X1 = 0.870*** X2 = - 0.016
Equation	$Y_1 = a + 0.870X1 - 0.016X2$
Dependent Learning Achievement (Y2)	F = 26.840*** Adj.R_Square = 0.416 X1 = 0.120 X2 = 0.627*** Y1 = -0.054
Equation	$Y_2 = a + 0.120X1 + 0.627X2 - 0.054Y1$

Cognitive ability (Y1) as a mediator between active learning (X1) and learning achievement (Y2) shown Sobel test results is $Z = -0.4881$ and $p = 0.6255$, it is not

significant at $p < 0.05$ whereas indirect effect value is -0.0737 with confidence intervals [-0.3697, 0.2223], it is showing no significant mediation. The results suggest that cognitive ability variable (Y1) does not mediate the relationship between active learning (X1) and learning achievement (Y2). The effect of active learning on learning achievement does not operate through cognitive ability. Active learning (X1) positively influences cognitive ability (as seen in Table 1). However, the transfer of cognitive skills into measurable academic outcomes (Y2) might be limited due to other external factors like assessment design, instructional alignment, and student motivation. According to Bloom's Taxonomy (E. Adams, 2015) that academic achievement encompasses not only cognitive skills but also affective and psychomotor domains. Active learning (X1) may predominantly affect the cognitive domain (e.g., problem solving and critical thinking) but might not fully translate into better academic grades. The lack of mediation could also reflect traditional educational environments where assessments prioritize rote memorization or compliance over critical thinking skills cultivated by active learning (X1).

The findings highlight the need for integration of active learning with assessments in educational systems must adapt assessment strategies to evaluate the outcomes of active learning effectively and through holistic learning approaches is active learning should be paired with strategies that address other dimensions of learning achievement, such as motivation, discipline, and social skills. The details shown into the result of Sobel test on table 2.

Table 2. The Result of Sobel Test on The Active Learning Variable (X1)

Indirect Effect and Significance Using Normal Distribution						
	Value	s.e.	LL 95 CI	UL 95 CI	Z	Sig (two)
Effect	-0.0737	0.1510	-0.3697	0.2223	-0.4881	0.6255
Fairchild et al. (2009) Variance in Y Accounted for by Indirect Effect						0.0510

Cognitive ability (Y1) as a mediator between learning discipline (X2) and learning achievement (Y2) shown Sobel test results is $Z = 0.5540$ and $p = 0.5796$, it is not significant at $p < 0.05$ whereas indirect effect value is 0.0112 with confidence intervals [-0.0283, 0.0507], it is showing no significant mediation. The results suggest that cognitive ability variable (Y1) does not mediate the relationship between learning discipline (X2) and learning achievement (Y2). As seen in Table 1, learning discipline (X2) has a direct and significant positive effect on learning achievement (Y2). This suggests that disciplined behaviors, such as time management, focus, and perseverance, directly contribute to academic outcomes without requiring significant mediation through cognitive ability. Discipline reflects behavioral consistency rather than cognitive processing. According to (Nabavi & Bijandi, 2024) Bandura's Social Learning Theory emphasizes that disciplined behaviors often stem from observed and reinforced habits which directly translate into better performance without requiring intermediary cognitive development. Cognitive ability is one of many factors contributing to academic success. Discipline likely affects achievement

through non-cognitive pathways, such as emotional regulation, task persistence, and reduced distractions. The findings emphasize behavioral interventions that schools focus on fostering disciplined behaviors. The details shown into the result of Sobel test on table 3.

Table 3. The Result of Sobel Test on The Learning Discipline Variable (X2)

Indirect Effect and Significance Using Normal Distribution						
	Value	s.e.	LL 95 CI	UL 95 CI	Z	Sig (two)
Effect	0.0112	0.0202	-0.0283	0.0507	0.5540	0.5796
Fairchild et al. (2009) Variance in Y Accounted for by Indirect Effect						0.0512

The mediating model on Figure 1.

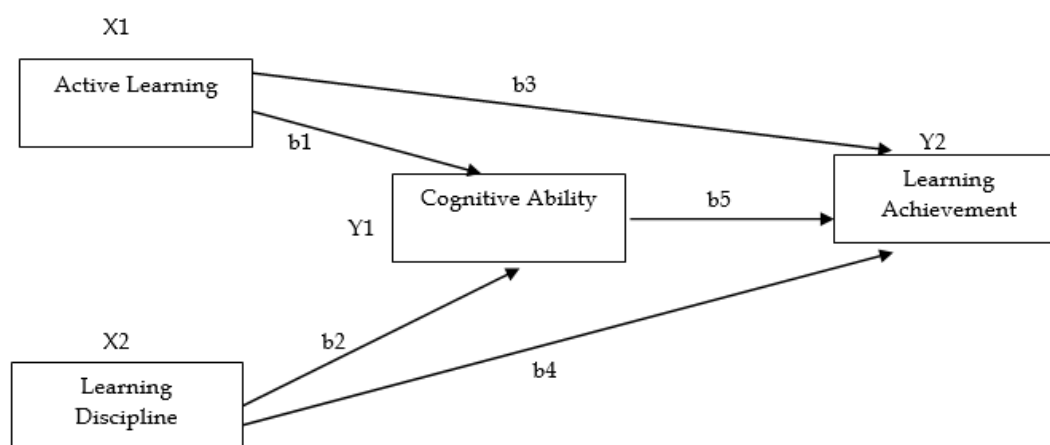


Figure 1. The Mediating Model

To support and contextualize these findings, here are insights from previous studies and literature. Positive effects of active learning on cognitive ability that active learning fosters critical thinking and cognitive engagement (Bonwell & Eison, 1991). A study by (Prince, 2004) confirmed that active participation enhances memory retention (Halford & McCredden, 1998). Research by (Freeman et al., 2014) demonstrated improved learning outcomes in students exposed to active learning. Active learning strategies such as discussions and problem solving tasks, stimulate cognitive processing (Simba* & John Odwar Agak and Eric K. Kabuka, 2016) that supported such findings to emphasize that engaging students actively boosts their ability to process and retain information. While learning discipline generally correlates with academic success (Seligman & Duckworth, 2005), its direct impact on cognitive ability maybe less significant. (Simba* & John Odwar Agak and Eric K. Kabuka, 2016) found that learning discipline plays a crucial role in improving academic performance, emphasizing its importance in the educational process (Stanley, 2014). (Wolters & Hussain, 2015) suggest that self regulation plays a stronger role in cognitive outcomes compared to external discipline. (A Khatun,

2018) suggests that good discipline creates a good image of the schools and prepares learners for their future life (Eduard et al., 2023).

Contrasting findings by (Smith & Tanner, 2010) suggest that active learning significantly impacts academic performances, highlighting possible contextual differences, this study does not. Differences may arise from varying educational systems, student demographics, or methodological approaches. The lack of a significant effect in this study aligns with findings from (Kirschner et al., 2006) who argue that active learning sometimes overwhelm without proper scaffolding. Learning discipline has consistently been linked to better academic performance (Zimmerman & Risemberg, 1997), a disciplined environment may provide the structure necessary for cognitive activities but does not inherently enhance cognitive development. (Simba* & John Odwar Agak and Eric K. Kabuka, 2016) and (Shi & Qu, 2022) both highlight discipline's role in maintaining consistent effort and focus which directly correlates with academic success. This study confirms discipline's crucial role especially in structured settings like elementary schools. Studies by (Linnenbrink & Pintrich, 2006) highlight the role of self discipline in sustaining motivation and achievement. Findings by (Aji & Khan, 2019) and (Sasikumar, 2018) indicated that the performance of students with the active learning improved.

Despite prior research (Shi & Qu, 2022) suggesting a positive link, this study aligns with (Tikhomirova et al., 2020) revealing no significant relationship. Possible reasons include the influence of external variables such as teaching methods or socio economic factors, which might overshadow cognitive abilities in elementary students. Prior studies (Sternberg & Zhang, 2014) emphasize that cognitive ability is just one of many factors influencing academic performance. (Robbins et al., 2004) found that non cognitive skills like motivation and perseverance often outweigh cognitive ability in predicting achievement. The lack of a mediating role aligns with studies by (Mayer et al., 2004) which argue that learning processes often bypass cognitive ability as a mediator under certain conditions. Study by (Gamiao & Ph, 2021) indicated that cognitive ability does not predictive of academic performances. (Freeman et al., 2014) found that active learning universally improves academic performances, contrasting with this study's findings on its lack of significance. In contrast to this study, (Seligman & Duckworth, 2005) demonstrated that self discipline directly enhances cognitive and academic outcomes. Sobel's findings in this study contradict the results by (Deary et al., 2007) which highlight cognitive ability as a crucial mediator in education.

D. Conclusions

Cognitive ability (Y1) as a dependent variable analysis reveals that active learning (X1) significantly and positively influences cognitive ability (Y1), as evidenced by a regression coefficient of 0.870 ($p < 0.05$). This finding highlights the importance of student-centered approaches in education to enhance cognitive outcomes. Learning

discipline (X2) does not significantly impact cognitive ability (regression coefficient of -0.016 , $p > 0.05$), it is rejecting H2. Although discipline may support the learning environment, it does not inherently drive cognitive growth. Learning achievement (Y2) as a dependent variable that the regression analysis for learning achievement (Y2) shows that active learning (X1) has no significant direct effect (regression coefficient is 0.120 , $p > 0.05$), leading to the rejection of H3. The finding highlights the need for educational systems to integrate active learning with performance based assessments to capture its full potential. In contrast, learning discipline (X2) significantly and positively influences learning achievement (regression coefficient is 0.627 , $p < 0.05$), supporting H4. It consistent routines and focused behaviors contribute to academic success. Interestingly, cognitive ability (Y1) does not significantly impact learning achievement (regression coefficient is -0.054 and $p > 0.05$), it is rejecting H5. Cognitive ability alone may not be sufficient to predict achievement, it is highlighting the complexity of academic outcomes. The Sobel test results indicate that cognitive ability (Y1) does not mediate the relationship between active learning (X1) and learning achievement (Y2), $Z = -0.4881$ and $p = 0.6255$ or between learning discipline (X2) and learning achievement (Y2), $Z = 0.5540$ and $p = 0.5796$. These findings suggest that the effects of active learning and discipline on achievement do not operate through cognitive ability. These finding underscore the complexity of educational outcomes and the need for a holistic approach to learning. Active learning should be paired with performance based assessments and motivational strategies to maximize its impact on achievement. Meanwhile, fostering discipline remains critical for creating structured learning environments that support sustained effort and goal attainment. However, over reliance on discipline without addressing intellectual engagement may limit its long term effectiveness. The lack of a significant relationship between cognitive ability and academic achievement highlights the need to consider non cognitive factors, such as emotional intelligence, self regulation, and social skills. Educational systems must balance cognitive and non cognitive development to support well rounded student growth.

E. Acknowledgement

We thank to all friends and stakeholders of Universitas Stikubank Semarang, who helped us in this meaningful project.

References

- A Khatun. (2018). The role of education in education and its impact on the learning process. *Journal of Emerging Technologies and Innovative Research*, 5(10), 87-95. <https://doi.org/10.17051/ilkonline.2020.661933>
- Aji, C. A., & Khan, M. J. (2019). The Impact of Active Learning on Students' Academic Performance. *Open Journal of Social Sciences*, 07(03), 204-211. <https://doi.org/10.4236/jss.2019.73017>
- Albers, M. J. (2017). Quantitative data analysis-in the graduate curriculum. *Journal of*

- Technical Writing and Communication, 47(2), 215-233.
<https://doi.org/10.1177/0047281617692067>
- Alonso-tapia, J. (2006). Knowledge Assessment and Conceptual Understanding. *Reconsidering Conceptual Change: Issues in Theory and Practice*, 389-413.
https://doi.org/10.1007/0-306-47637-1_19
- Auerbach, A. J. J., & Andrews, T. C. (2018). Pedagogical knowledge for active-learning instruction in large undergraduate biology courses: a large-scale qualitative investigation of instructor thinking. *International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0112-9>
- Biggs, J. (2003). Aligning teaching for constructing learning John Biggs Keywords What is constructive alignment? Defining the ILOs. *Education*, 94(11), 112106.
http://egusdsecondary.pbworks.com/f/aligning_teaching_for_constructing_learning.pdf
- Bonwell, C. C., & Eison, J. A. (1991). Active Learning: Creating Excitement in the Classroom. 1991 ASHE-ERIC Higher Education Reports. In *ASHE-ERIC Higher Education Report*.
- Catania, A. C. (1984). The operant behaviorism of B. F. Skinner. *Behavioral and Brain Sciences*, 7(4), 473-475. <https://doi.org/10.1017/S0140525X00026728>
- D'Andrea, J., & Wooten, R. (2017). Improving Performance and Enhancing Introductory Statistics Using Projects. *American Journal of Computational Mathematics*, 07(01), 21-28. <https://doi.org/10.4236/ajcm.2017.71002>
- Deary, I. J., Strand, S., Smith, P., & Fernandes, C. (2007). Intelligence and educational achievement. *Intelligence*, 35(1), 13-21.
<https://doi.org/10.1016/j.intell.2006.02.001>
- Dunn, J. C., & Zimmer, C. (2020). Self-determination theory. *Routledge Handbook of Adapted Physical Education*, 55(1), 296-312.
<https://doi.org/10.4324/9780429052675-23>
- E. Adams, N. (2015). Bloom's taxonomy of cognitive learning objectives. *Journal of the Medical Library Association*, 103(3), 152-153.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4511057/>
- Eduard, E., Heryanto, H., & Elisa, E. (2023). Contribution of Learning Independence and Learning Discipline to Elementary School Students' Learning Outcomes. *International Journal of Education, Learning and Development*, 11(6), 26-33.
<https://doi.org/10.37745/ijeld.2013/vol11n62633>
- elmakrufi. (2013). Operant conditioning skinnerOperant conditioning skinner. *Slideshare*, 9-9.
- ElNakib, D. M., Ragheb, M. A., Youssef, R. A. E., & Ghanem, A. N. (2021). The Effect of HRIS Adoption on Vodafone Egypt Firm's Performance. *Journal of Human Resource and Sustainability Studies*, 09(02), 173-192.
<https://doi.org/10.4236/jhrss.2021.92012>
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*, 111(23), 8410-8415.

- <https://doi.org/10.1073/pnas.1319030111>
- Gamiao, C. U., & Ph, D. (2021). *Cognitive Ability , Learning Styles and Academic Performance Of the Freshmen Students*. 4(3), 219–229.
- Gay, L. R. (1992). *Educational Research*. 1–21.
- Genovese, J. E. C. (2003). *Piaget , Pedagogy , and Evolutionary Psychology*. 127–137.
- Gomes Junior, R. C., Carpenter, J. P., Morrison, S. A., Craft, M., Lee, M., Thomas, K., Moser, K. M., Wei, T., Brenner, D., Turchi, L. B., Bondar, N. A., Aguilar, L. L., Strugielska, A., Gutfeld, D., Linke-Ratuszny, M., Aprilianti, D. R., & Naqvi, S. (2020). *Research Methods in Education, Higher Education Commission. System*, 96(1), 228–248.
<https://doi.org/10.1016/j.system.2020.102431>
<https://doi.org/10.1016/j.tate.2020.103149>
- Halford, G. S., & McCredden, J. E. (1998). Cognitive science questions for cognitive development: The concepts of learning, analogy, and capacity. *Learning and Instruction*, 8(4), 289–308. [https://doi.org/10.1016/S0959-4752\(97\)00023-6](https://doi.org/10.1016/S0959-4752(97)00023-6)
- He, J., Wang, X. (Shane), & Curry, D. J. (2017). Mediation analysis: A new test when all or some variables are categorical. *International Journal of Research in Marketing*, 34(4), 780–798. <https://doi.org/10.1016/j.ijresmar.2017.08.001>
- Ishtiaq, M. (2019). Book Review Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage. *English Language Teaching*, 12(5), 40. <https://doi.org/10.5539/elt.v12n5p40>
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41(2), 75–86. https://doi.org/10.1207/s15326985ep4102_1
- Linnenbrink, E. A., & Pintrich, P. R. (2006). The Role of Motivational Beliefs in Conceptual Change. *Reconsidering Conceptual Change: Issues in Theory and Practice*, 115–135. https://doi.org/10.1007/0-306-47637-1_6
- Mahmoudi, S., Jafari, E., Nasrabadi, H. A., & Liaghatdar, M. J. (2012). Holistic education: An Approach for 21 Century. *International Education Studies*, 5(3), 178–186. <https://doi.org/10.5539/ies.v5n3p178>
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional Intelligence : Theory , Findings , and Implications " Emotional Intelligence : Theory , Findings , and Implications Psychological Inquiry. *Psychological Inquiry*, 15(August 2014), 197–215. <https://doi.org/10.1207/s15327965pli1503>
- McNabb, D. E. (2018). Exploring Multivariate Statistics. *Research Methods in Public Administration and Nonprofit Management*, 233–250.
<https://doi.org/10.4324/9781315181158-21>
- Mohanty, S., Pinelli, R., & Dahia, C. L. (2020). Characterization of Krt19 CreERT allele for targeting the nucleus pulposus cells in the postnatal mouse intervertebral disc. *Journal of Cellular Physiology*, 235(1), 128–140.
<https://doi.org/10.1002/jcp.28952>
- Nabavi, R. T., & Bijandi, M. S. (2024). *A literature review on Bandura ' s Social Learning Theory & Social Cognitive Learning Theory*. January 2012.

- O'Brien, P., & Burnett, P. C. (1997). The theory of multiple intelligence: implications for counselling children. *Journal of Psychologists and Counsellors in Schools*, 7(1), 101-108. <https://doi.org/10.1017/s103729110000128x>
- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231. <https://doi.org/10.1002/j.2168-9830.2004.tb00809.x>
- Robbins, S. B., Le, H., Davis, D., Lauver, K., Langley, R., & Carlstrom, A. (2004). Do Psychosocial and Study Skill Factors Predict College Outcomes? A Meta-Analysis. *Psychological Bulletin*, 130(2), 261-288. <https://doi.org/10.1037/0033-2909.130.2.261>
- Rybska, E., & Błaszak, M. (2020). Holistic education – a model based on three pillars from cognitive science. An example from science education. *Problemy Wczesnej Edukacji*, 49(2), 45-59. <https://doi.org/10.26881/pwe.2020.49.04>
- Sasikumar, N. (2018). *Impact of Active Learning Strategies To Enhance Student*. 2(December), 2-4.
- Schlinger, H. D. (2021). The impact of B. F. Skinner's science of operant learning on early childhood research, theory, treatment, and care. *Early Child Development and Care*, 191(7-8), 1089-1106. <https://doi.org/10.1080/03004430.2020.1855155>
- Seligman, M. E. P., & Duckworth, A. (2005). Research Article: Self-Discipline Outdoes IQ in Predicting Academic Performance of Adolescents. *Psychological Science*, 16(12), 939-944.
- Shi, Y., & Qu, S. (2022). The effect of cognitive ability on academic achievement: The mediating role of self-discipline and the moderating role of planning. *Frontiers in Psychology*, 13(October), 1-18. <https://doi.org/10.3389/fpsyg.2022.1014655>
- Simba*, N. O., & John Odwar Agak and Eric K. Kabuka. (2016). Impact of Discipline on Academic Performance of Pupils in Public Primary Schools in Muhoroni Sub-County, Kenya Department of Educational Psychology, Maseno University, Maseno, Kenya. *Journal of Education and Practice*, 7(6), 164-173. <http://proxy.mul.missouri.edu/login?url=https://search.proquest.com/docview/1826524639?accountid=14576>
- Smith, J. I., & Tanner, K. (2010). Approaches to Biology Teaching and Learning The Problem of Revealing How Students Think: Concept Inventories and Beyond. *CBE-Life Sciences Education*, 9, 1-5. <https://doi.org/10.1187/cbe.09>
- Soleman, A.-B., & Tiffanie Victoria, J. (2021). Statistical Mediation Analysis Using the Sobel Test and Hayes Spss Process Macro. *International Journal of Quantitative and Qualitative Research Methods*, 9(1), 42-61. <https://ssrn.com/abstract=3799204>
- Stanley, E. O. (2014). Discipline and Academic Performance (A Study of Selected secondary Schools in Lagos, Nigeria). *International Journal of Academic Research in Progressive Education and Development*, 3(1). <https://doi.org/10.6007/ijarped/v3-i1/758>
- Sternberg, R. J., & Zhang, L. F. (2014). Perspectives on thinking, learning, and cognitive styles. *Perspectives on Thinking, Learning, and Cognitive Styles*, 1-276. <https://doi.org/10.4324/9781410605986>
- Sweller. (1988). Cognitive Load During Problem Solving: Effects on Learning -

- Sweller - 2010 - Cognitive Science - Wiley Online Library. *Cognitive Science*, 285, 257–285. [https://doi.org/10.1016/0364-0213\(88\)90023-7](https://doi.org/10.1016/0364-0213(88)90023-7)
- Tikhomirova, T., Malykh, A., & Malykh, S. (2020). Predicting academic achievement with cognitive abilities: Cross-sectional study across school education. *Behavioral Sciences*, 10(10). <https://doi.org/10.3390/bs10100158>
- van der Veer, R. (2020). Vygotsky's Theory. *The Encyclopedia of Child and Adolescent Development*, 1–7. <https://doi.org/10.1002/9781119171492.wecad101>
- Wolters, C. A., & Hussain, M. (2015). Investigating grit and its relations with college students' self-regulated learning and academic achievement. *Metacognition and Learning*, 10(3), 293–311. <https://doi.org/10.1007/s11409-014-9128-9>
- Zimmerman, B. J., & Risemberg, R. (1997). Self-Regulatory Dimensions of Academic Learning and Motivation. *Handbook of Academic Learning*, 105–125. <https://doi.org/10.1016/b978-012554255-5/50005-3>

Principal's Supervision Strategy to Improve Teachers' Performance Based on Professional Competence

Cucun Hasanah¹, Sururi¹

¹Universitas Pendidikan Indonesia, West Java, Indonesia

Corresponding author e-mail: chuhasanah86@upi.edu

Article History: Received on 20 December 2024, Revised on 17 February 2025,
Published on 4 March 2025

Abstract: This study aims to examine the supervision strategies implemented by the principal in improving teacher performance based on professional competence at SD N Sukasenang 2, Garut. The approach used is descriptive qualitative with a case study method. Data were obtained through in-depth interviews, participatory observation, and analysis of school documents. This study identified the stages of supervision that include planning, implementation, and evaluation, which are carried out systematically and continuously. The results of the study indicate that the principal utilizes a clinical supervision approach, professional training, and personal coaching to improve pedagogical competence and teacher professional abilities. This strategy is considered effective in improving teacher performance, especially in terms of lesson planning, implementing innovative methods, and assessing learning outcomes. However, several obstacles were detected, such as the principal's limited time, variability in teacher competency levels, and lack of facility support. To overcome these challenges, the principal developed a collaborative approach by involving senior teachers and forming a teacher working group. This study recommends increasing the intensity of supervision, providing adequate resources, and strengthening the culture of reflection in learning to support continuous teacher professional development. These findings are expected to be a reference in developing supervision strategies in other elementary schools.

Keywords: Improvement Strategy, Principal's Supervision, Professional Competence, Teachers' Performance

A. Introduction

Educational supervision is a strategic element in school management designed to ensure that the educational process occurs effectively and efficiently. Supervision not only functions as a control but also as a form of support to help teachers improve the quality of teaching. This suggests that principals must engage in a comprehensive supervisory approach that encompasses both academic oversight and the cultivation of a supportive environment for teachers. The importance of addressing teachers' professional development needs through relevant solutions is further underscored by the findings of Greitāns et al., who advocate for aligning professional development

initiatives with identified needs to enhance teaching effectiveness (Greitāns et al., 2021). Educational supervision can catalyze positive changes in the quality of learning, which contributes directly to improving student achievement.

Teachers' professional competence is one of the main areas of concern in educational supervision. This competence includes mastery of teaching materials, pedagogical skills, and the use of educational technology. These three aspects complement each other to create meaningful learning experiences for students. The principal, through his/her supervisory role, must ensure that each teacher is able to meet these competency standards. Mastery of teaching materials allows teachers to deliver content correctly, while pedagogical skills help them manage the class and understand student needs. Educational technology, on the other hand, provides opportunities to develop more innovative and interesting learning methods. Teachers equipped with robust pedagogical skills can create a supportive learning environment that encourages student participation and motivation (Khomenko et al., 2021).

To support the development of teachers' professional competence, a well-designed supervision strategy is essential. This strategy includes various approaches, such as clinical supervision, academic supervision, and collaborative supervision. Clinical supervision focuses on direct observation in the classroom and providing constructive feedback to teachers. Academic supervision emphasizes the development of teachers' substantial competence in their fields, while collaborative supervision encourages collaboration between principals and teachers to design and evaluate the learning process. With the right strategy, supervision can help teachers understand their strengths and weaknesses, and provide specific recommendations for improvement.

The implementation of supervision in educational settings, while beneficial, is fraught with challenges that principals must navigate. One significant challenge is the time constraints imposed by administrative burdens. U-Sayee and Adomako highlight that the heavy and complex workloads of educational supervisors detract from their ability to provide meaningful instructional supervision and support for teachers, leading to a situation where time is not allocated effectively for these critical tasks (U-Sayee & Adomako, 2021). Similarly, Chaula notes that the lack of stable feedback mechanisms in clinical supervision can exacerbate the time pressures faced by school heads, further complicating their supervisory roles (Chaula, 2023). This administrative overload often results in a diminished focus on instructional quality, as principals are compelled to prioritize administrative tasks over direct engagement with teaching practices (Terra et al., 2019) (Practices and Challenges of Instructional Supervision in Government Secodary Schools of Wolaita Zone, 2019). High workloads can reduce the principal's time to conduct in-depth supervision. In addition, some teachers may feel that supervision is a form of oppressive control, rather than constructive assistance. To overcome these obstacles, principals need to have good time management skills, build positive relationships with teachers, and seek support from the education office to provide adequate resources.

Effective supervision has a direct impact on improving the quality of learning in schools. With structured and in-depth supervision, principals can ensure that teachers continue to develop in their professional competence. This not only improves the quality of teaching but also builds a more inclusive and innovative learning environment for students. In addition, good supervision encourages teachers to adopt best practices in teaching and creates a culture of reflection in schools. In the long run, this will strengthen public trust in schools and contribute to improving the overall quality of education. SDN Sukasenang 2 in Garut Regency is one of the educational institutions that continues to strive to improve the quality of learning by strengthening teacher performance. Being in a dynamic and competitive environment, SDN Sukasenang 2 Garut faces various challenges in the education process, including the diversity of student backgrounds and limited resources. In this situation, the role of the principal as a leader and supervisor becomes very crucial. This aligns with findings that effective school leadership fosters an environment where teachers feel valued and supported, thereby increasing their motivation to improve their professional skills (Xin, 2021). Furthermore, the principal's performance, alongside teacher teaching performance, has a positive correlation with student motivation, suggesting that a supportive leadership approach can create a thriving educational atmosphere. By using a strategic supervision approach, the principal is expected to be able to create a conducive work climate, motivate teachers to continue learning, and direct them towards continuous improvement in professional competence.

In an effort to achieve these goals, various supervision strategies can be applied, such as clinical supervision, academic supervision, and collaborative supervision (Arikunto, 2010). Clinical supervision emphasizes direct interaction between the principal and teachers through classroom observation and feedback discussions. Academic supervision focuses on developing teachers' substantial competencies in the fields they teach. Meanwhile, collaborative supervision involves collaboration between the principal, teachers, and other parties in planning, implementing, and evaluating educational programs. The implementation of these strategies requires a deep understanding of the individual needs of teachers, the strengths of the team, and the specific challenges faced by the school.

In the context of supervision, the principal does not only act as a supervisor, but also as a mentor and facilitator (Depdiknas, 2008). This role requires the ability to identify the weaknesses and strengths of teachers, and provide appropriate support to help them develop. In addition, the principal must also be able to create an environment that supports innovation and continuous learning. This is important to ensure that teachers are not only technically skilled, but also highly motivated and committed to providing the best for students.

This study focuses on the analysis of supervision strategies implemented by the principal at SDN Sukasenang in improving teacher performance based on professional competence. Using a qualitative approach, this study will explore various

aspects related to the implementation of supervision, including methods, challenges, and impacts. This study is expected to contribute to the development of educational supervision theory and practice, especially at the elementary school level.

Furthermore, this study will also examine how principals utilize data and information from supervision results to design teacher professional development programs. This includes an analysis of the effectiveness of training, workshops, and other development activities that have been implemented. In addition, this study will highlight the role of principals in building a school culture that supports collaboration and innovation, which are important prerequisites for developing teacher competence.

On the other hand, the development of teacher professional competence does not only depend on the principal's supervision, but also on the support of the school community as a whole. In this case, collaboration between principals, teachers, parents, and other stakeholders is an important factor that must be considered. Therefore, this study will also examine how principals can build effective partnerships with various parties to support improving teacher performance.

Furthermore, this study will consider contextual factors that influence the effectiveness of supervision at SDN Sukasenang 2 Garut, such as education policies, local culture, and characteristics of the surrounding community. By understanding this context, it is expected that the principal can design a supervision strategy that is more relevant and in accordance with the needs of the school. This study will also provide practical recommendations for principals and other stakeholders to optimize the role of supervision in supporting teacher professional development. Thus, this study is expected to provide a significant contribution in increasing understanding of the principal's supervision strategy to improve teacher performance based on professional competence. The findings of this study are expected to be a reference for principals in various regions to develop an effective, innovative, and sustainable supervision approach. In addition, this study is also expected to provide new insights for researchers, education practitioners, and policy makers in an effort to improve the quality of education in Indonesia.

B. Methods

This study uses a qualitative approach with a case study design to analyze the principal's supervision strategy in improving teacher performance based on professional competence at SDN Sukasenang 2, Garut. This approach was chosen because it allows researchers to explore the phenomenon of supervision in depth in a specific context. The subjects of this study involved the principal as the main supervisor, teachers as objects of supervision, and other related parties such as administrative staff and parents of students. Informants were selected purposively,

namely based on their direct involvement in the implementation of supervision at school.

Data were collected through in-depth interviews, participant observation, and document analysis. In-depth interviews were conducted to explore the views and experiences of the principal and teachers regarding the implementation of supervision. Participatory observation was conducted during the supervision process to understand the dynamics of interactions between the principal and teachers. Document analysis included a review of the supervision plan, supervision report results, and other related documents. Data were analyzed using a thematic analysis approach. The analysis process includes three main stages, namely data reduction, data presentation, and drawing conclusions. Data reduction is carried out by identifying the main themes of the data collected. Data presentation is carried out in the form of a systematic narrative to describe the research findings. Drawing conclusions is done by combining findings from various data sources to answer questions.

To ensure data validity, this study uses data source triangulation, method triangulation, and theory triangulation. Data source triangulation is done by comparing information from various informants. Method triangulation is done by combining interviews, observations, and document analysis. Theory triangulation is done by referring to educational supervision theory to interpret the findings. This method is designed to produce a comprehensive and in-depth picture of the principal's supervision strategy in improving teacher performance based on professional competence at SDN Sukasenang 2 Garut.

C. Results and Discussion

This study focuses on the analysis of supervision strategies implemented by the principal in improving teacher performance based on professional competence at SDN Sukasenang 2, Garut. The supervision strategies used include various approaches, ranging from individual to group supervision, by providing structured guidance through classroom observation, discussion, and training. The principal also utilizes teacher performance data as a basis for designing relevant and specific supervision strategies. The main focus of this strategy is to ensure that teachers are able to meet professional competence standards, such as mastery of material, pedagogical skills, and ability in learning evaluation. From the results of the study, it can be seen that a systematic and sustainable supervision approach can have a positive impact on improving the quality of learning in schools.

However, the implementation of supervision is not free from various obstacles. One of the main obstacles faced is the principal's limited time to carry out supervision optimally, considering the administrative responsibilities that must also be completed. In addition, resistance from some teachers to changes in supervision

methods is a challenge in itself. This is exacerbated by limited resources, such as training facilities and the availability of supporting materials. However, the principal attempted to overcome these obstacles by building effective communication, actively involving teachers in supervision planning, and collaborating with related parties, including education supervisors. These steps show that the principal has a strategic role in managing the dynamics and challenges of supervision.

The effectiveness of the principal's supervision strategy is also reflected in the improvement of teachers' professional competence and the achievement of better performance targets. Through targeted supervision, teachers showed progress in their ability to manage classes, prepare lesson plans, and conduct evaluations in accordance with the curriculum. The impact of this supervision was not only felt by teachers, but also by students, who experienced improved learning outcomes. The relationship between the principal's supervision strategy and the achievement of teachers' professional competence targets was very significant, indicating that a planned and consistent approach can be the main key to improving the quality of education at SDN Sukasenang 2, Garut. This conclusion is an important basis for the development of more innovative and adaptive supervision strategies in the future.

Supervision Strategies Applied by Principals in Improving Teachers' Performance Based on Professional Competence at SDN 2 Sukasenang Garut

Principal supervision plays a crucial role in improving teacher performance, especially in relation to professional competence. In SDN 2 Sukasenang Garut, the implementation of effective supervision strategies by the principal can contribute significantly to improving the quality of learning. Planned and systematic supervision allows teachers to identify weaknesses and strengths in the teaching process, so that continuous improvements can be made. The role of academic supervision extends beyond mere oversight; it actively contributes to the pedagogical competence of teachers. Wang asserts that integrating national education policies into teaching supervision can lead to innovative educational practices that align with contemporary educational needs (Wang, 2023). This integration fosters an environment where teachers can continuously refine their teaching methods through regular assessments and feedback, ultimately enhancing their instructional effectiveness (Lorensius et al., 2022).

One of the supervision strategies that can be applied is academic supervision. This supervision focuses on aspects of learning, including planning, implementation, and evaluation. Through academic supervision, the principal can provide constructive feedback to teachers regarding teaching methods, media use, and classroom management.

In addition to academic supervision, clinical supervision can also be applied. This supervision involves direct observation of the learning process in the classroom,

followed by discussions between supervisors and teachers to analyze and improve teaching practices. This approach allows teachers to get specific feedback on their performance, so they can make targeted improvements. importance of supervision in stimulating, coordinating, and guiding teachers to be able to carry out their duties and functions professionally.

Effective implementation of supervision requires careful planning. The principal needs to prepare a supervision program that includes a clear schedule, methods, and evaluation criteria. This program must be socialized to all teachers so that they understand the goals and benefits of supervision. Thus, supervision is not considered as mere control, but as a joint effort to improve the quality of education. the role of principal supervision in improving teacher performance has been running well when supported by proper planning.

Obstacles in implementing supervision often arise, such as limited time for the principal, resistance from teachers, or lack of resources. To overcome this, effective communication is needed between the principal and teachers, as well as training for the principal in implementing effective supervision. Training for principals in effective supervision practices is equally essential. Balcı and Özkan highlight that principal often recognize their deficiencies in supervision and feedback, suggesting a pressing need for in-service training to enhance their competencies in these areas (Balcı & ÖZKAN, 2023).

Improving teacher professional competence through supervision also has an impact on their work motivation. Teachers who feel supported and guided will have higher motivation in carrying out their duties. This in turn will improve overall teacher performance. Moreover, the motivational strategies employed by school leaders are pivotal in influencing teachers' commitment and performance. Onafowo et al. assert that principals who engage in monitoring teachers' activities and maintain open communication channels can significantly enhance teachers' commitment, which in turn positively affects student outcomes (Onafowo et al., 2023). This is echoed by Lamaro and Akello, who found that head teachers' motivational strategies are interconnected with teacher performance, underscoring the importance of a supportive leadership approach (Lamaro & Akello, 2023).

To ensure the sustainability of improving teacher performance, evaluation of the supervision program needs to be carried out periodically. This evaluation aims to assess the effectiveness of supervision and identify areas that still need improvement. Thus, the supervision program can continue to be adjusted to the needs and real conditions in the field.

Collaboration between principals and teachers is very important in the supervision process. Principals must be able to create a conducive environment for teachers to develop and learn. On the other hand, teachers must be open to input and ready to

make improvements. cooperation, the goal of improving teacher professional competence can be achieved. that the principal must facilitate teachers with activities that support competency improvement. Overall, the supervision strategy implemented by the principal at SD Negeri 2 Sukasenang Garut in improving teacher performance based on professional competency involves careful planning, effective supervision, continuous evaluation, and collaboration between the principal and teachers. With this comprehensive approach, it is hoped that the quality of education at the school can continue to improve.

Challenges Faced by Principals in Implementing Supervision to Improve Teacher Performance at SD N Sukasenang 2 Garut

The implementation of supervision by the principal is a vital component in efforts to improve teacher performance, especially at SD Negeri 2 Sukasenang Garut. However, in practice, principals often face various obstacles that hinder the effectiveness of supervision. One of the main obstacles is time constraints. Piling administrative tasks often take up the principal's time, so that the time available to carry out supervision is limited. The role of school principals encompasses a wide range of responsibilities, including administrative tasks and supervision of teaching staff. However, the increasing burden of administrative duties often limits the time available for effective supervision, which is critical for enhancing educational quality. Research indicates that principals spend a significant portion of their time on administrative responsibilities, which detracts from their capacity to engage in instructional leadership and supervision activities (Goldring et al., 2019, Ray et al., 2021). For instance, Mahone's study highlights that principal in schools with an administrative team may allocate less time to direct instructional leadership, suggesting a correlation between administrative support and the time available for supervision (Mahone, 2019).

In addition, the lack of understanding and skills of the principal in supervision techniques is also a significant obstacle. Without adequate knowledge, the supervision carried out may be ineffective and not have a positive impact on teacher performance. Principals need to have good supervision competencies to be able to guide teachers effectively. Lack of training and professional development for principals can worsen this situation.

Resistance from teachers to supervision is also a common obstacle. Some teachers may feel supervised or assessed, causing feelings of discomfort or even rejection of the supervision process. The supervision process in educational settings can evoke a range of emotional responses from teachers, including feelings of discomfort and rejection. This phenomenon is particularly relevant in contexts where teachers perceive supervision as evaluative rather than supportive. Research indicates that teachers' perceptions of supervision significantly influence their attitudes and performance. For instance, Hoque et al. highlight that teachers' attitudes towards

supervision can greatly impact their professional development and job satisfaction, suggesting that negative perceptions may lead to resistance against supervisory practices (Hoque et al., 2020). Similarly, Deniz and Erdener found that teachers often view instructional supervision behaviors of school administrators as inadequate, which can foster feelings of discomfort and disengagement from the supervisory process (Deniz & Erdener, 2020).

Limited resources, such as lack of supporting facilities and minimal budget for supervision programs, are also obstacles to the implementation of effective supervision. Without adequate resource support, principals will have difficulty planning and implementing supervision optimally. The effective planning and implementation of supervision in schools are critically dependent on adequate resource support. Principals face significant challenges in fulfilling their supervisory roles when resources are insufficient. Research indicates that the allocation of resources is often mismanaged, leading to inefficiencies that hinder effective supervision. For instance, DeAngelis and Barnard highlight that experienced school leaders are better equipped to make rational budget decisions, yet current resource allocations often favor maintenance and administrative roles over direct educational support, which can exacerbate the challenges faced by principals in their supervisory capacities (DeAngelis & Barnard, 2020).

Lack of training and professional development for principals is also an inhibiting factor in the implementation of supervision. Without adequate training, principals may not have the skills and knowledge needed to carry out supervision effectively.

In addition, lack of support from related parties, such as the education office or school committee, can hinder the implementation of supervision. Without this support, principals may face difficulties in implementing effective supervision programs.

To overcome these obstacles, a comprehensive strategy is needed. First, reducing the administrative burden of the principal through delegation of tasks or digitization of administrative processes can provide more time for supervision. Second, providing training and professional development for principals will improve their competence in carrying out supervision. Third, building effective communication and positive relationships with teachers will reduce resistance to supervision. Fourth, adequate resource allocation and support from related parties will ensure that supervision runs smoothly.

By identifying and overcoming these obstacles, the principal at SD Negeri 2 Sukasenang Garut can carry out more effective supervision, which will ultimately improve teacher performance and the quality of education at the school. A systematic approach and support from various parties are needed to achieve this goal.

The effectiveness of the principal's supervision strategy in improving the professional competence of teachers at SD N 2 Sukasenang Garut

Principal supervision plays a crucial role in improving teacher professional competence, especially at SD Negeri Sukasenang 2 Garut. Through effective supervision strategies, principals can help teachers identify strengths and areas that need improvement in the learning process. This is in line with the view that academic supervision aims to help teachers develop their abilities in managing the learning process effectively.

One effective supervision strategy is a collaborative approach, where the principal and teachers work together in planning, implementing, and evaluating the learning process. This approach allows teachers to feel more appreciated and motivated to improve their competence. Research shows that supervision carried out with a collaborative approach can significantly improve teacher professionalism.

In addition, the use of various supervision techniques, such as classroom observations, individual discussions, and workshops, can provide constructive feedback for teachers. The implementation of various supervision techniques, including classroom observations, individual discussions, and workshops, is essential for providing constructive feedback to teachers, thereby enhancing their professional development. Research indicates that effective supervision practices can significantly influence teacher performance and student outcomes. For instance, Zheng et al. highlight the role of distributed leadership and professional learning communities (PLCs) in fostering individual teacher development, emphasizing that principals and teacher leaders can enhance teachers' social relations and collaborative learning through structured support and guidance (Zheng et al., 2023). This collaborative environment is crucial for teachers to reflect on their practices and receive meaningful feedback.

However, the effectiveness of supervision is highly dependent on the principal's competence in carrying out his supervisory role. Principals need to have a deep understanding of the principles of supervision and be able to apply them according to the school context. The book "Academic Supervision: Professional Teachers, Successful Principals" emphasizes the importance of principals having adequate supervisory competencies to guide teachers effectively.

Good supervision implementation also requires careful planning. Principals need to prepare a clear supervision program, including objectives, methods, and implementation schedules. Thus, supervision can run systematically and have a positive impact on teacher professional competence. The "Teacher Performance Supervision and Assessment" module from the Ministry of Education and Culture (2019) suggests that good supervision planning will facilitate its implementation and increase its effectiveness.

In addition to planning, supervision must also be carried out objectively and transparently. Principals need to provide constructive feedback based on accurate data. This will help teachers understand areas that need improvement and encourage them to continue learning and developing.

Follow-up after supervision is also an important component in improving teacher professional competence. Principals need to facilitate training or workshops that are relevant to teacher needs, based on findings from supervision. Research indicates that the effectiveness of teacher training significantly increases when it is accompanied by ongoing supervision and support. For instance, Kishida et al. highlight that a lack of on-site training and continuous supervision can hinder teachers' understanding of intervention rationales, which in turn affects the retention of preventive gains in educational settings (Kishida et al., 2022). Similarly, Derakhshanpour et al. found that workshops designed to enhance teachers' knowledge and attitudes towards specific issues, such as Attention-Deficit/Hyperactivity Disorder, resulted in significant improvements in teachers' awareness and attitudes, demonstrating the effectiveness of targeted professional development (Derakhshanpour et al., 2021). This aligns with findings from Nguyen and Newton, who noted that professional learning workshops positively impacted teachers' pedagogical practices by allowing them to identify their own needs and share knowledge with peers (Nguyen & Newton, 2020).

However, there are several obstacles in the implementation of supervision, such as resistance from teachers or limited time for principals. To overcome this, effective communication between principals and teachers, as well as good time management, is needed. The book "Academic Supervision: Professional Teachers, Successful Principals" suggests that principals need to build harmonious relationships with teachers to minimize resistance to supervision.

Overall, effective principal supervision strategies have a significant impact on improving teacher professional competence at SD Negeri Sukasenang 2 Garut. With structured, objective supervision, and supported by appropriate follow-up, teachers can develop their competence optimally. This will ultimately have a positive impact on the quality of learning and student achievement. Therefore, it is important for principals to continue to improve their competence in supervising and creating a supportive environment for teacher professional development.

The Impact of Principal Supervision on Improving Teachers' Performance at SD N Sukasenang 2 Garut

Supervision carried out by the principal plays a crucial role in improving teacher performance, especially at SD Negeri Sukasenang 2 Garut. Through effective supervision, the principal can provide guidance and constructive feedback to teachers, so that they can identify strengths and areas that need to be improved in the learning process.

Similarly, Alonge et al. noted that regular supervision not only improves teachers' performance but also positively affects student academic outcomes, thereby underscoring the importance of continuous monitoring and support in the educational process (Alonge et al., 2021). In this study, it was found that structured and continuous supervision can improve teacher professionalism in carrying out their duties. This finding is relevant to the conditions at SD Negeri Sukasenang 2 Garut, where consistent supervision can encourage teachers to continue to improve the quality of their teaching.

In addition, principal supervision also plays a role in increasing teacher work motivation. With supportive supervision, teachers feel appreciated and supported in their professional development. Principal supervision is a critical factor in enhancing teacher work motivation, as evidenced by various studies that highlight the relationship between leadership styles and teacher motivation. Effective principal leadership behaviors, particularly those that are transformational or instructional, have been shown to significantly influence teachers' motivation levels and job satisfaction. For instance, Han et al. found that public leadership behaviors of school principals positively affect teacher motivation and job satisfaction within the Turkish educational context (Han et al., 2021). This aligns with findings from Özdoğru, who reported a significant positive relationship between teachers' motivation and their managers' leadership behaviors, emphasizing the role of instructional leadership in increasing motivation (Özdoğru, 2022).

However, the effectiveness of supervision is highly dependent on the principal's competence in carrying out his/her supervisory role. The principal needs to have a deep understanding of supervision techniques and be able to apply them according to the teacher's needs. Furthermore, the principal's competence in supervision is closely linked to the school's overall culture and the professional development opportunities provided to teachers. Research highlights that a positive school culture, characterized by collaboration and mutual respect, can enhance teachers' performance and job satisfaction (Azainil et al., 2020,Trần et al., 2020). Effective supervision practices, therefore, not only focus on evaluating teacher performance but also on fostering an environment where teachers feel empowered to innovate and improve their teaching practices (Hoque et al., 2020). Good supervision implementation also requires careful planning. The principal needs to prepare a clear supervision program, including the implementation schedule, methods used, and assessment criteria. Thus, supervision can run systematically and have a positive impact on teacher performance. This is further supported by the work of Khun-Inkeeree et al., which highlights that regular supervision fosters a sense of trust and commitment among teachers, thereby enhancing their self-efficacy and overall performance (Khun-Inkeeree et al., 2020).

In addition to planning, supervision must also be carried out objectively and transparently. The principal needs to provide constructive feedback based on accurate

data. In addition to the content and delivery of feedback, the context in which it is provided plays a significant role in its effectiveness. For example, anonymous feedback can sometimes lead to unhelpful or hurtful comments, which may hinder the feedback process (Griffiths et al., 2021). Establishing agreed-upon guidelines for providing constructive feedback can mitigate these risks and foster a more productive dialogue between educators and students (Griffiths et al., 2021). Furthermore, the timing of feedback is crucial; timely feedback allows students to make necessary adjustments while the learning experience is still fresh, thereby enhancing its impact (Martinez et al., 2023).

Follow-up after supervision is also an important component in improving teacher performance. The principal needs to facilitate training or workshops that are relevant to the teacher's needs, based on the findings from supervision. Moreover, the integration of 21st-century skills into teacher training is increasingly recognized as vital for preparing educators to meet contemporary educational challenges. Tuah et al. argue that competency-based training is essential for vocational teachers to effectively impart 21st-century skills to students (Tuah et al., 2021). This sentiment is echoed by Kim et al., who assert that ongoing professional development that includes reflective practices is necessary for teachers to cultivate critical thinking and other essential skills in their students (Kim et al., 2019). Such training not only enhances teachers' pedagogical approaches but also equips them with the necessary tools to engage students in meaningful learning experiences. emphasized the importance of ongoing professional development programs for teachers as a follow-up to supervision.

However, there are several obstacles in implementing supervision, such as resistance from teachers or limited time for the principal. Effective communication between school principals and teachers, alongside proficient time management, is crucial for enhancing educational outcomes. Research indicates that principals who maintain open channels of communication significantly improve teachers' job performance and commitment. For instance, Onafowope et al. highlight those effective administrative strategies, including regular staff meetings and clear communication, are essential for fostering teachers' engagement and motivation in their roles (Onafowope et al., 2023). Similarly, Eze et al. emphasize that open communication is vital for encouraging effective job performance among teachers, as it facilitates the flow of information regarding regulations and policies (Eze et al., 2023). Furthermore, the study by Okoye supports this notion, asserting that aggressive communication strategies can negatively impact educational administration and teacher performance, thus underscoring the need for constructive communication practices (Okoye & Ogwurumba, 2023) suggests that the principal needs to build a harmonious relationship with the teacher to minimize resistance to supervision.

Overall, the principal's supervision has a significant impact on improving teacher performance at SD Negeri Sukasenang 2 Garut. With structured, objective

supervision, and supported by appropriate follow-up, teachers can develop their competence optimally. This will ultimately have a positive impact on the quality of learning and student achievement. Therefore, it is important for principals to continue to improve their competence in supervising and creating a supportive environment for teacher professional development.

The Relationship between Principal Supervision Strategy and Achievement of Teachers' Professional Competence Targets at SD N Sukasenang 2 Garut

Principal supervision plays an important role in improving teacher professional competence, especially at SD Negeri Sukasenang 2 Garut. An effective supervision strategy can help teachers achieve the set professional competence targets. The relationship between supervision and teacher performance is also echoed by Hoque et al., who note that while some teachers may have mixed feelings about supervision, it is generally recognized as a component of professional development that can lead to improved teaching outcomes (Hoque et al., 2020). This shows that the role of the principal as an academic supervisor is very important in achieving teacher competence.

One of the supervision strategies that can be applied is clinical supervision, which involves direct observation of the learning process in the classroom. Through clinical supervision, principals can provide constructive feedback to teachers regarding the teaching methods used. who assert that clinical supervision improves teachers' classroom behavior and instructional quality through direct feedback? Furthermore, the literature suggests that clinical supervision fosters a collaborative environment where supervisors and teachers can engage in meaningful dialogue about teaching practices, thereby enhancing the learning experience for students (Chaula et al., 2022). Thus, teachers can make the necessary improvements to achieve the expected professional competence.

In addition, principals can implement academic supervision that focuses on improving the quality of learning. Firstly, academic supervision is designed to assist teachers in planning, delivering, and evaluating their lessons effectively. According to Patraliza, the principal's role includes assessing teaching outcomes and providing constructive feedback based on classroom observations, which helps identify areas for improvement in instructional practices (Patraliza, 2023) With effective academic supervision, teachers can better understand and apply innovative learning strategies that are in accordance with student needs.

This emphasizes the importance of training and development for principals in carrying out effective supervision. With good supervision competence, principals can provide appropriate guidance to teachers in achieving professional competence targets.

However, the effectiveness of principal supervision depends not only on the strategies implemented, but also on the principal's interpersonal skills. The principal's ability to build good relationships with teachers will affect the teacher's acceptance and response to the supervision carried out. With good communication, teachers will be more open to input and suggestions given, thus facilitating the achievement of professional competence. Effective communication among teachers is pivotal in fostering an environment conducive to professional development and competence.

When teachers engage in open dialogues, they are more likely to embrace feedback and suggestions, which in turn enhances their professional growth. Research indicates that collaboration and collegiality significantly contribute to teachers' personal and professional development. For instance, Bayram and Bıkmaz highlight the importance of collaborative practices in professional development, emphasizing a shift from isolated teaching to collective learning experiences (Bayram & Bıkmaz, 2021). This sentiment is echoed by Ekinçi and Acar, who note that internal motivation drives teachers to seek professional development, ultimately aiming to improve student performance (Ekinçi & Acar, 2019).

In addition, the principal needs to understand that each teacher has different needs and characteristics. Therefore, the supervision strategy implemented must be flexible and adjusted to the conditions of each teacher. This personal approach will help teachers feel appreciated and motivated to improve their competence.

However, there are several obstacles that can hinder the effectiveness of principal supervision, such as time constraints and high administrative burdens. To overcome this, the principal needs to have good time management skills and effective task delegation. Delegation is equally important, as it empowers staff members and fosters a collaborative environment. Studies show that when principals delegate responsibilities effectively, it not only alleviates their workload but also enhances teachers' commitment and job performance; (Eze et al., 2023; Onafowo et al., 2023). For instance, principals who involve teachers in decision-making and delegate administrative duties create a sense of ownership among staff, which can lead to improved educational outcomes (Onafowo et al., 2023). Moreover, effective delegation allows principals to focus on their primary role as instructional leaders, thereby optimizing their time for activities that directly impact student learning (Ayeni, 2020, Goldring et al., 2019). Thus, the principal can focus on implementing quality supervision. The book *Educational Supervision: Strategies for Improving the Quality of Education in Schools* by Nurhattati.

In addition, support from other parties, such as school supervisors and school committees, is also important in supporting the effectiveness of principal supervision. Collaboration between various parties will create a conducive environment for teachers to develop and achieve the expected professional competencies. The role of collaborative professional learning is further supported by Huber et al., who assert

that such learning environments provide opportunities for teachers to work together on challenging tasks, thereby developing the necessary competencies to support all learners (Huber et al., 2021). This collaborative framework is echoed by Zulu and Bertram, who emphasize that teacher collaboration serves as an effective forum for accessing professional development opportunities and fostering new ideas (Zulu & Bertram, 2019). The continuous exchange of feedback and innovative practices among teachers is crucial for their growth and the improvement of teaching methodologies. Overall, there is a significant relationship between the principal's supervision strategy and the achievement of teacher professional competency targets at SD Negeri Sukasenang 2 Garut. By implementing the right supervision strategy, the principal can help teachers improve their competencies, which will ultimately have a positive impact on the quality of learning in schools. Therefore, it is important for principals to continue to develop their competencies in supervision and create a supportive environment for teacher professional development.

D. Conclusions

Principal supervision at SDN Sukasenang 2 Garut plays a strategic role in supporting the improvement of teachers' professional competence. Through systematically designed supervision, the principal is able to provide direction that helps teachers identify strengths and weaknesses in the learning process. By implementing strategies such as clinical and academic supervision, the principal can ensure that teachers receive the support needed to achieve their professional competence targets. This approach has proven effective in improving the quality of learning in the elementary school.

The effectiveness of supervision lies in the strategies used by the principal. Clinical supervision, which emphasizes direct observation in the classroom, and academic supervision, which focuses on developing teachers' substantial competence, are the main approaches. In addition, a collaborative approach involving senior teachers and teacher working groups also helps create a supportive working atmosphere. With this combination of strategies, teachers not only feel supported but also motivated to continue to develop.

Although the supervision strategy has many benefits, there are a number of challenges that need to be overcome. Barriers such as the principal's limited time, teacher resistance, and lack of resources are the main issues. Principals need to have good time management skills and strong interpersonal relationships with teachers to overcome these obstacles. Support from the education office and other related parties is also needed to ensure that supervision is carried out optimally.

Routine evaluation of supervision results is an important step to ensure the sustainability of teacher performance improvements. Evaluation results can be used to design training or workshops that are relevant to teacher needs. Thus, supervision

is not only an administrative activity but also a strategic effort to develop teacher competence sustainably. The principal has a role as a facilitator in this process, by ensuring that evaluation recommendations are implemented properly.

The implementation of effective supervision at SDN Sukasenang 2 Garut not only has an impact on improving teacher professional competence but also the quality of student learning. The principal as an educational leader plays a crucial role in creating an environment that supports innovation and continuous learning. With a comprehensive approach, supervision can be a significant transformation tool in improving the quality of education at the elementary school level.

E. Acknowledgement

Our deepest gratitude to the principal and teachers of SD Negeri Sukasenang 2 Garut who have been given for research on the Principal's Supervision Strategy to Improve Teacher Performance Based on Professional Competence, so that it can be a reference in developing supervision strategies in other elementary schools.

References

- Alonge, B. D., Olusesan, O. J., & Oloruntoba, B. (2021). Teachers' Regular Supervision and Student Academic Performance in Public Secondary Schools in Ekiti State, Nigeria. *International Research in Education*, 9(2), 54. <https://doi.org/10.5296/ire.v9i2.19082>
- Ayeni, A. J. (2020). Principals' Instructional Time Management and Students' Academic Performance in Secondary Schools in Ondo North Senatorial District of Ondo State, Nigeria. *Journal of Education and Learning (Edulearn)*, 14(1), 123-133. <https://doi.org/10.11591/edulearn.v14i1.14743>
- Azainil, A., Sabara, I., Rahayu, S. M., Ramadiani, R., & Mulawarman, W. G. (2020). *The Influence of Principal's Supervision Competence and School Culture on Teachers Performance of Public High School in Kutai Kartanegara Regency*. <https://doi.org/10.4108/eai.14-3-2019.2291964>
- Bacı, S., & ÖZKAN, H. (2023). Development, Implementation, and Evaluation of an Effective Feedback Program for School Principals to Improve in-Class Teaching. *Shanlax International Journal of Education*, 11(S1-July), 242-258. <https://doi.org/10.34293/education.v11is1-july.6283>
- Bayram, İ., & Bıkmaz, F. (2021). Implications of Lesson Study for Tertiary-Level EFL Teachers' Professional Development: A Case Study From Turkey. *Sage Open*, 11(2). <https://doi.org/10.1177/21582440211023771>

- Chaula, L. (2023). School Heads' Clinical Supervision Practices and Emerging Teacher Emotions in Tanzania Secondary Schools. *Heliyon*, 9(1), e13021. <https://doi.org/10.1016/j.heliyon.2023.e13021>
- Chaula, L., Lawrent, G., & Iramba, I. F. W. (2022). School Heads' Post Observation Practices in Tanzania: Feedback Implications for Teachers. *International Journal of Educational Administration Management and Leadership*, 41-54. <https://doi.org/10.51629/ijeamal.v3i2.91>
- DeAngelis, C. A., & Barnard, C. (2020). Effects of Charter School Competition on District School Budgeting Decisions: Experimental Evidence From Texas. *Social Science Quarterly*, 102(1), 523-546. <https://doi.org/10.1111/ssqu.12877>
- Deniz, Ü., & Erdener, M. A. (2020). Add to My Favorite Articles List Levels of School Administrators Exhibiting Instructional Supervision Behaviors According to Perceptions of Teachers. *Research in Educational Administration & Leadership*, 5(4). <https://doi.org/10.30828/real/2020.4.3>
- Derakhshanpour, F., Azarakhsh, M., Vakili, M. A., & Ahmadabadi, S. (2021). Effectiveness of Educating Program on Knowledge, Attitude, and Performance of Primary School Teachers Toward Attention-Deficit/Hyperactivity Disorder. *Iranian Journal of Psychiatry and Behavioral Sciences*, 15(3). <https://doi.org/10.5812/ijpbs.100532>
- Ekinci, E., & Acar, F. E. (2019). Primary School Teachers' Opinions on Professional Development (Professional Development Model Proposal). *Journal of Education and Training Studies*, 7(4), 111. <https://doi.org/10.11114/jets.v7i4.4039>
- Eze, C. E., Eze, V. H. U., Ezenwaji, I. O., & Nwabueze, A. I. (2023). Principals' Administrative Strategies as Correlates of Teachers' Job Performance in Public Secondary Schools in Obollo-Afor Education Zone of Enugu State, Nigeria. 8(1), 76-87. <https://doi.org/10.59298/idosr/2023/12.1.3895>
- Goldring, E., Grissom, J. A., Neumerski, C. M., Blissett, R., Murphy, J., & Porter, A. C. (2019). Increasing Principals' Time on Instructional Leadership: Exploring the SAM® Process. *Journal of Educational Administration*, 58(1), 19-37. <https://doi.org/10.1108/jea-07-2018-0131>
- Greitāns, K., Eriņa, D., & Namsone, D. (2021). Linking Teacher Professional Development Needs With Appropriate Solutions: Insights From an Initiative in Latvia. *Society Integration Education Proceedings of the International Scientific Conference*, 4, 113-123. <https://doi.org/10.17770/sie2021vol4.6388>
- Griffiths, J., Schultz, K., Han, H., & Dalgarno, N. (2021). Feedback on Feedback: A Two-Way Street Between Residents and Preceptors. *Canadian Medical Education Journal*. <https://doi.org/10.36834/cmej.69913>

- Han, B., Tösten, R., & Elçiçek, Z. (2021). Public Leadership Behaviors of School Principals: Does It Affect Teacher Motivation and Job Satisfaction in Turkish Culture? *International Journal of Public Leadership*, 18(3), 209–228. <https://doi.org/10.1108/ijpl-03-2021-0026>
- Hoque, K. E., Kenayathulla, H. B., Subramaniam, M. V. D. O., & Islam, R. (2020). Relationships Between Supervision and Teachers' Performance and Attitude in Secondary Schools in Malaysia. *Sage Open*, 10(2). <https://doi.org/10.1177/2158244020925501>
- Huber, S., Lupschina, R., Schwarz, M., & Krey, K. (2021). Peer-Coaching and Inclusive Collaborative Learning Using ICT. *Pedagógusképzés*, 20(1.), 99–109. <https://doi.org/10.37205/tel-hun.2021.1.05>
- Khomenko, L., Rastruba, T., Папхоменко, О., Shumska, L., Kostenko, L., & Павленко, О. (2021). Peculiarities of Forming Students' Motivation to Music-Teaching Activity in Higher Education Institutions (HEI). *Brain Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 319–342. <https://doi.org/10.18662/brain/12.3/234>
- Khun-Inkeeree, H., Mahmood, M.-H.-H., Haji-Mohd-Noor, S.-S., Kasa, M. D., Yaakob, M. F. M., Fauzee, M. S. O., & Sofian, F. N. R. M. (2020). Increasing Teachers' Self-Efficacy Through Regular Teaching and Learning Supervision. *Universal Journal of Educational Research*, 8(7), 3002–3013. <https://doi.org/10.13189/ujer.2020.080729>
- Kim, S., Raza, M., & Seidman, E. (2019). Improving 21st-Century Teaching Skills: The Key to Effective 21st-Century Learners. *Research in Comparative and International Education*, 14(1), 99–117. <https://doi.org/10.1177/1745499919829214>
- Kishida, K., Hida, N., & Ishikawa, S. (2022). Evaluating the Effectiveness of a Transdiagnostic Universal Prevention Program for Both Internalizing and Externalizing Problems in Children: Two Feasibility Studies. *Child and Adolescent Psychiatry and Mental Health*, 16(1). <https://doi.org/10.1186/s13034-022-00445-2>
- Lamaro, G., & Akello, J. (2023). Relationship Between Head Teacher's Motivation Strategies and Teacher's Performance in Secondary Schools in Serere District. *East African Journal of Education Studies*, 6(3), 472–488. <https://doi.org/10.37284/eajes.6.3.1641>
- Lorensius, L., Anggal, N., & Lugan, S. (2022). Academic Supervision in the Improvement of Teachers' Professional Competencies: Effective Practices on the Emergence. *EduLine Journal of Education and Learning Innovation*, 2(2), 99–107. <https://doi.org/10.35877/454ri.eduline805>
- Mahone, A. (2019). *Within-Principal Variation: Exploring the Relationships Between Time Use and School Context*. <https://doi.org/10.3102/1442924>

- Martinez, M. C., Serra, R., Sundaramoorthy, P., Booi, T., Vertegaal, C., Bounik, Z., Hastenberg, K. A. P. Van, & Bentum, M. (2023). Content-Focused Formative Feedback Combining Achievement, Qualitative and Learning Analytics Data. *Education Sciences*, 13(10), 1014. <https://doi.org/10.3390/educsci13101014>
- Nguyen, L. T., & Newton, J. (2020). Enhancing EFL Teachers' Pronunciation Pedagogy Through Professional Learning: A Vietnamese Case Study. *Relc Journal*, 52(1), 77-93. <https://doi.org/10.1177/0033688220952476>
- Okoye, F. O., & Ogwurumba, C. A. (2023). Principals' Administrative Strategies and Teachers Job Performance in Public Secondary Schools in Anambra State, Nigeria. *Asian Journal of Education and Social Studies*, 45(2), 1-11. <https://doi.org/10.9734/ajess/2023/v45i2977>
- Onafowope, M. A., Ekwunye, E. J., & Oweikpodor, V. G. (2023). Administrative Strategies to Enhance Teachers' Commitment in Delta State Public and Private Secondary Schools in Nigeria. *European Journal of Alternative Education Studies*, 8(1). <https://doi.org/10.46827/ejae.v8i1.4693>
- Özdoğan, M. (2022). Organizational Factors Affecting Teacher Motivation: A Meta Analysis Study. *Trakya Eğitim Dergisi*, 12(3), 1737-1749. <https://doi.org/10.24315/tred.1090296>
- Patraliza, H. (2023). *Improving the Quality of Learning Through Supervision by the School's Principal*. 2(2), 151-159. <https://doi.org/10.59175/pjied.v2i2.79>
- Ray, S., Muhammad, G., & Adnan, M. (2021). The Administrative Role of Principals: Insights and Implication in Secondary Schools Mardan District. *Journal of Social Sciences Review*, 1(1), 46-56. <https://doi.org/10.54183/jssr.2021.1.1.46>
- Terra, T., Berhanu, E., & Sodo, W. (2019). *Practices and Challenges of Instructional Supervision in Government Secodary Schools of Wolaita Zone*. <https://doi.org/10.7176/jep/10-13-05>
- Trần, N. H., Nguyen, C. D., Nguyen, G.-V., Ho, T.-N., Bui, Q.-T. T., & Hoang, N.-H. (2020). Workplace Conditions Created by Principals for Their Teachers' Professional Development in Vietnam. *International Journal of Leadership in Education*, 25(2), 238-257. <https://doi.org/10.1080/13603124.2019.1708472>
- Tuah, Y. A. E., Sudira, P., Mutohhari, F., & Kusuma, W. M. (2021). The Competency of Pedagogic and Professional of Vocational Teachers in Implementing 21st Century Skill-Based Learning. *Jurnal Pendidikan Dan Pengajaran*, 54(2), 244. <https://doi.org/10.23887/jpp.v54i2.35336>
- U-Sayee, C. R., & Adomako, E. B. (2021). Supervisory Practices and Challenges Faced by Senior High School Principals in Greater Monrovia, Liberia: Implications for

Quality Education. *Heliyon*, 7(4), e06895.
<https://doi.org/10.1016/j.heliyon.2021.e06895>

Wang, Y. (2023). Badminton Improves Executive Function in Adults Living with Mild Intellectual Disability. *International Journal of Environmental Research and Public Health*, 20(4). <https://doi.org/10.3390/ijerph20043673>

Xin, F. (2021). Application of Cloud Computing Virtual Technology in Badminton Teaching in Distance Education. In *Advances in Intelligent Systems and Computing* (Vol. 1303, pp. 1658-1665). https://doi.org/10.1007/978-981-33-4572-0_244

Zheng, X., Jiang, C., & Liu, C. (2023). Uncovering the Complex Relationships Among Distributed Leadership, Departmental Teacher Leadership, and Professional Learning Community in Chinese Schools. *Future in Educational Research*, 1(2), 182-197. <https://doi.org/10.1002/fer3.15>

Zulu, F.-Q. B., & Bertram, C. (2019). Collaboration and Teacher Knowledge in a Teacher Learning Community: A Case of Mathematics Teachers in KwaZulu-Natal Province. *South African Journal of Higher Education*, 33(5). <https://doi.org/10.20853/33-5-3595>

Bridging Excellence: A Multisite Study on Strategic Management and Governance in Inclusive Schools

**Nuphanudin¹, Erny Roesminingsih¹, Amrozi Khamidi¹, Muhammad Kristiawan²,
Ainun Ma'rifah³, Aristawidya Salsabila Anshori¹, Devita Angraeni¹**

¹Universitas Negeri Surabaya, East Java, Indonesia, ²Universitas Bengkulu,
Bengkulu, Indonesia, ³Kementerian Dalam Negeri Republik Indonesia, Jakarta,
Indonesia

Corresponding author e-mail: nuphanudinnuphanudin@unesa.ac.id

Article History: Received on 2 January 2025, Revised on 9 February 2025,
Published on 6 March 2025

Abstract: This study explores the strategies and governance of inclusive education management through a multisite case study at SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh. The aim is to analyze how these schools implement inclusive policies, manage resources, and address challenges in fostering an inclusive learning environment. Employing a qualitative approach with a multisite case study design, data were collected through in-depth interviews, observations, and document analysis involving school principals, teachers, and stakeholders. The findings reveal that both schools adopt adaptive strategies, including differentiated instruction, teacher capacity building, and collaborative partnerships with local and national education authorities. However, contextual differences, such as policy implementation support, community engagement, and resource allocation, significantly impact the effectiveness of these strategies. The novelty of this study lies in its comparative analysis of inclusive education governance across distinct regional and sociocultural contexts, highlighting best practices and contextual challenges. This research contributes to the development of more effective and adaptable inclusive education management strategies, providing insights for policymakers, educators, and institutions committed to fostering equitable learning environments.

Keywords: Differentiated Instruction, Governance, Inclusive Education, Multisite Study, Strategic Management

A. Introduction

Inclusive education aims to provide equal learning opportunities for all students, regardless of their abilities, disabilities, or socio-economic backgrounds. Numerous studies highlight the importance of inclusive policies, teacher training, and adaptive learning strategies in fostering an equitable educational environment (Ainscow, 2020; Florian, 2011). Effective management and governance play a crucial role in ensuring the successful implementation of inclusive education (Schuelka et al., 2019). However, the success of inclusive education varies across different regions due to differences in

policies, school leadership, and resource availability (UNESCO, 2021).

Despite growing research on inclusive education, limited studies have explored the comparative governance and strategic management of inclusive education in different sociocultural contexts. Specifically, there is a lack of empirical research examining how different schools in Indonesia, particularly those in urban and semi-urban areas, implement inclusive policies (Rahmawati & Syamsudin, 2022). Furthermore, existing research has not fully addressed how local policies, community involvement, and institutional leadership influence the sustainability of inclusive education programs.

Recent studies emphasize the need for differentiated instruction, teacher professional development, and community collaboration as key components of inclusive education (Mitchell, 2020). Additionally, a growing body of research highlights the role of technology in supporting inclusive learning (Sailor, 2022). However, while global frameworks for inclusive education have been established, their practical implementation remains challenging due to regional disparities in resources, policy enforcement, and cultural perceptions of inclusivity (Kozleski et al., 2020).

This study offers a comparative analysis of inclusive education strategies and governance in two different Indonesian schools: SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh. By adopting a multisite approach, this research highlights variations in inclusive education management, focusing on leadership strategies, teacher capacity, and stakeholder involvement. Unlike previous studies that focus on single-case analyses, this research provides a broader understanding of how different contextual factors influence the effectiveness of inclusive education strategies.

The findings of this study will contribute to the development of more effective inclusive education policies and strategies tailored to regional needs. Policymakers and educators can use the insights gained to refine their approaches to managing inclusive education, ensuring that best practices are adaptable across diverse settings. Additionally, this study provides empirical data that can guide future research on inclusive education governance in Indonesia. Based on the above discussions, this study seeks to answer the following research question: How do SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh implement strategic management and governance in inclusive education, and what factors influence the effectiveness of their approaches?

B. Methods

This study employed a qualitative multisite case study approach to explore the strategic management and governance of inclusive education in two primary schools in Indonesia: SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh. The multisite approach was deliberately chosen to compare the unique contexts and strategies employed by these schools in implementing inclusive education policies at the primary school level. By examining two distinct regions, the study aimed to uncover

the variations in local governance, resource allocation, and educational practices that influence the effectiveness of inclusive education. This comparative approach allowed for a deeper understanding of how contextual factors, such as leadership, community involvement, and local policies, shape the successful integration of students with disabilities into mainstream classrooms.

1. Research Site and Respondents

The study was conducted at SDN 263 Mriyunan Gresik, a public primary school located in East Java, and SDN 25 Banda Aceh, a public primary school in Nanggroe Aceh Darussalam Province. These schools were selected because of their established inclusive education programs, which provided an ideal setting for exploring the strategies and governance of inclusive education in primary schools. The schools were chosen for their contrasting regional characteristics, which offer valuable insights into how local contexts such as infrastructure, community engagement, leadership, and cultural factors can influence the implementation of inclusive education policies. This comparative approach enabled the study to identify both common challenges and region-specific strategies in fostering inclusive environments for students with disabilities.

The respondents consisted of: 1) School Principals (to understand school leadership and governance strategies); 2) Inclusive Education Coordinators (to explore specific implementation strategies); 3) Teachers (to assess their perceptions, challenges, and instructional practices in inclusive classrooms); 4) Parents of Students with Special Needs (to understand their involvement in school activities); and 5) Education Policy Officials (from local education offices to examine policy support and implementation challenges).

A purposive sampling technique was employed to select respondents who were chosen based on their expertise and direct involvement in managing and implementing inclusive education. This method ensured that participants possessed relevant knowledge and experience to provide valuable insights into the strategies and governance of inclusive education in the selected schools. By targeting individuals with firsthand experience in the design, management, and execution of inclusive education policies, the study aimed to gather in-depth perspectives on the challenges and successes associated with fostering inclusive learning environments for students with disabilities.

2. Data Collection Instruments

To gather comprehensive data, this study employed multiple research instruments: (1) Semi-Structured Interviews, conducted with school principals, teachers, and parents to explore their experiences and perspectives on inclusive education management (Creswell & Poth, 2018); (2) Observations, Focused on classroom

interactions, school facilities, and teacher-student engagement to assess the practical implementation of inclusive education (Mertens, 2020); and (3) Document Analysis, Examined school policies, curriculum modifications, teacher training materials, and government regulations related to inclusive education. These methods provided a well-rounded understanding of the strategies and challenges faced in implementing inclusive education (Bowen, 2009).

The combination of these research instruments ensures a more comprehensive and reliable analysis of inclusive education management. Interviews capture firsthand experiences and insights from key stakeholders, providing depth to the findings. Observations offer an objective assessment of how inclusive education is implemented in real-time, revealing gaps that might not be evident through self-reported data. Meanwhile, document analysis strengthens the study by verifying policies and practices against actual implementation. Relying solely on one method could lead to incomplete or biased conclusions; therefore, the triangulation of interviews, observations, and document analysis enhances the validity and credibility of the research, allowing for a more accurate evaluation of inclusive education strategies.

3. Data Analysis

The collected data were analyzed using a thematic analysis approach (Braun & Clarke, 2006), following these steps: 1) Data Transcription - Recorded interviews were transcribed verbatim; 2) Coding - The transcripts, observations, and documents were coded using NVivo software to identify recurring themes; 3) Categorization - Codes were grouped into categories such as school leadership strategies, teacher preparedness, curriculum adaptation, stakeholder involvement, and policy implementation gaps; 4) Cross-Case Analysis - Findings from SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh were compared to identify common strategies and contextual differences (Yin, 2018); and 5) Triangulation - Data from interviews, observations, and document analysis were cross-validated to enhance credibility and reliability (Patton, 2015).

4. Ethical Considerations

This study adhered to ethical research guidelines to ensure that all participants' rights were respected and protected throughout the research process. Informed consent was obtained from all participants, ensuring they understood the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any point without consequence. Additionally, the confidentiality of all participants was rigorously maintained by anonymizing personal data and ensuring that no identifying information was disclosed in the research findings (T. Miller et al., 2012). All data was securely stored and accessible only to the research team to further uphold participants' privacy rights.

Furthermore, prior to conducting the research, approval was sought and obtained from the relevant educational authorities to ensure that the study complied with institutional and governmental regulations. The ethical standards set forth by the institution and the broader academic community were followed to ensure that the research was conducted responsibly and with integrity. G. J. Miller et al., (2012) emphasize the importance of ethical guidelines in educational research, highlighting how they safeguard participants' well-being and contribute to the credibility of the study. By adhering to these ethical principles, this study maintained the highest standards of academic research while protecting the interests of its participants.

C. Results and Discussion

This section presents the findings of the study, addressing the research question: How do SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh implement strategies and governance for inclusive education? The study reveals that both schools face distinct challenges in implementing inclusive education strategies, shaped by their unique regional contexts. SDN 263 Mriyunan Gresik demonstrates a more robust infrastructure and strong parental involvement, which facilitates the implementation of inclusive policies. In contrast, SDN 25 Banda Aceh struggles with bureaucratic governance, cultural barriers, and a lack of specialized teacher training, which hinders the effective inclusion of students with disabilities. These findings highlight the role of local factors, such as leadership quality, community engagement, and resource allocation, in determining the success of inclusive education practices.

The discussion contextualizes these findings within the broader literature on inclusive education governance and strategic management. Previous studies have emphasized the importance of strong leadership and community support in creating inclusive environments Ainscow (2005); Booth and Ainscow (2002). The findings of this study are consistent with these conclusions, suggesting that schools with better governance structures and greater community involvement are more likely to succeed in implementing inclusive education. Additionally, the study aligns with research by Setiawan et al., (2023), which highlights the challenges posed by teacher shortages and insufficient training in the effective integration of students with disabilities. This comparison underscores the necessity of addressing both structural and cultural barriers to ensure the successful implementation of inclusive education policies.

1. Strategies for Inclusive Education Implementation

School Leadership and Policy Implementation

Both schools have implemented policies in accordance with Permendikbud No. 70/2009 on Inclusive Education, demonstrating their commitment to fostering an inclusive learning environment. However, their approaches to leadership and governance significantly influence their effectiveness. At SDN 263 Mriyunan Gresik,

the principal adopts a transformational leadership style, actively engaging teachers, parents, and the local community to create a collaborative support system for students with special needs. This approach ensures that inclusion is not merely a policy requirement but a shared responsibility among all stakeholders (Subban et al., 2023).

In contrast, SDN 25 Banda Aceh relies on a more bureaucratic governance structure, where decision-making is largely influenced by government directives. While the school adheres to national policies, its top-down approach limits flexibility in addressing the unique needs of students with disabilities. The lack of proactive leadership and localized initiatives results in a slower adaptation to inclusive practices, making it challenging to foster a dynamic and responsive learning environment (Beijer et al., 2024).

The effectiveness of inclusive education in both schools is shaped by leadership style, stakeholder engagement, and the ability to adapt policies to local contexts. Schools that encourage collaboration and empower their communities tend to achieve better outcomes in inclusion. Conversely, a rigid bureaucratic structure can hinder innovation and responsiveness. Strengthening leadership capacity and fostering greater community involvement are essential steps in enhancing the quality and sustainability of inclusive education in both schools.

These findings align with Ainscow, (2020), who emphasizes the critical role of school leaders in shaping inclusive school culture. Similarly, Sharma et al., (2018) argue that transformational leadership significantly improves teacher readiness for inclusive classrooms. However, Makoelle, (2019) found that some schools in developing countries lack strong leadership, which limits inclusivity—contrasting with our findings in SDN 263 Mriyunan Gresik.

Teacher Training and Pedagogical Adaptation

Teachers at SDN 263 Mriyunan Gresik benefit from regular training on inclusive education strategies, supported by collaborations with universities and NGOs (Almén & Sundqvist, 2023). These partnerships provide continuous professional development, equipping teachers with the necessary skills to accommodate diverse student needs effectively (Almén & Sundqvist, 2023). Training sessions cover differentiated instruction, classroom management for students with disabilities, and the use of assistive technologies, ensuring that inclusive education is implemented with a strong pedagogical foundation.

In contrast, SDN 25 Banda Aceh faces significant challenges in teacher training, primarily relying on government-organized workshops that are infrequent and less comprehensive (Palosaari et al., 2024). The limited availability of specialized training hinders teachers' ability to adapt instructional methods to meet the needs of students with disabilities. Without ongoing professional development, teachers often struggle

to implement inclusive practices effectively, leading to gaps in student support and learning outcomes.

The disparity in teacher training between the two schools highlights the importance of sustained professional development in fostering inclusive education. Schools that invest in continuous training and external partnerships tend to be more effective in implementing inclusive practices. To bridge the gap, SDN 25 Banda Aceh must seek additional training opportunities through collaborations with universities, NGOs, and local education agencies. Strengthening teacher capacity is crucial to ensuring that inclusive education is not only a policy but a practical reality in both schools.

This aligns with Forlin et al., (2019), who found that frequent professional development enhances teachers' confidence in handling students with diverse needs. Similarly, Fasting & Breilid, (2024) highlight that collaborative training programs significantly improve inclusive teaching strategies. However, Florian & Spratt, (2013) argue that teacher attitudes, rather than training, are the main determinants of success in inclusive education.

2. Governance and Stakeholder Involvement

Community and Parental Engagement

Parental involvement plays a crucial role in the success of inclusive education, as seen in SDN 263 Mriyunan Gresik, where parent-teacher meetings and awareness programs on inclusive education are regularly conducted (Honu-Mensah et al., 2024; Then & Pohlmann, 2024). These initiatives help parents understand their roles in supporting their children's education, fostering stronger collaboration between families and educators. By actively engaging with the school, parents contribute to creating a more inclusive and supportive learning environment for students with special needs.

In contrast, SDN 25 Banda Aceh faces challenges in parental involvement due to cultural perceptions of disability that hinder active participation (Hamzah et al., 2020). Many parents view disability as a social stigma, resulting in a lack of engagement in school activities related to inclusive education. Without parental support, students with special needs may struggle with learning both at school and at home. Overcoming these cultural barriers requires targeted awareness campaigns and community-based initiatives to shift perceptions and encourage greater parental involvement.

Research highlights the importance of parental engagement in inclusive education. Scholars argue that strong parental support enhances learning outcomes and reinforces school-based interventions (Durisic & Bunijevac, 2017). However, other perspectives suggest that structural barriers such as poverty and limited access to

educational resources can be more significant than parental involvement in determining student success (Cashman et al., 2021; Easterbrook & Hadden, 2021; Huguley et al., 2021; Kolluri & Tichavakunda, 2023; Noltemeyer et al., 2021; Sosu et al., 2021). While both factors play a role, ensuring that parents are actively engaged and equipped with the necessary resources is essential for the effective implementation of inclusive education in both schools.

Resource Availability and Infrastructure

SDN 263 Mriyunan Gresik benefits from well-developed infrastructure that supports inclusive education. The school has designated special education rooms equipped with assistive technology, such as speech-to-text software, braille materials, and sensory learning tools (Subekti et al., 2021). These facilities provide students with special needs a conducive learning environment, allowing them to receive targeted interventions while also participating in general classroom activities. The availability of such resources enhances the effectiveness of inclusive education by addressing diverse learning requirements.

In contrast, SDN 25 Banda Aceh faces significant infrastructural challenges (Fadillah et al., 2022). The school lacks specialized classrooms and assistive technology, making it difficult to provide tailored support for students with special needs. Teachers are forced to integrate these students into general classrooms with minimal accommodations, often relying on traditional teaching methods that may not fully meet their learning needs. Limited access to appropriate learning spaces and resources affects both student engagement and academic progress, highlighting the urgent need for infrastructural improvements.

To bridge this gap, schools must prioritize infrastructure development as a fundamental aspect of inclusive education. Providing accessible learning spaces, adaptive learning materials, and assistive technology can significantly enhance the learning experience of students with special needs. Additionally, collaboration with government agencies, NGOs, and private sectors can help secure funding and technical support for inclusive education infrastructure. Without these efforts, students with disabilities will continue to face barriers to quality education, limiting their academic and social development.

Our findings support researchers, who state that schools with better physical and technological resources implement inclusive education more effectively (Woodcock et al., 2022). Additionally, it's emphasized that inadequate facilities often result in lower academic performance among students with special needs (Dyson et al., 2020). However, the pedagogical strategies play a larger role than infrastructure in determining the success of inclusion (Graham & Scott, 2016).

3. Comparative Analysis and Challenges

Common Challenges

The challenges facing inclusive education in Indonesia are multifaceted and vary across regions. This study examines the educational settings in two regions Gresik and Banda Aceh to understand the obstacles that hinder the effective implementation of inclusive education, particularly for students with disabilities. Three major challenges are identified: teacher shortage, limited policy enforcement, and cultural barriers. These challenges impact the ability of schools to provide equitable and effective education for all students, especially those with special needs.

One of the most pressing issues is the shortage of qualified teachers trained in inclusive education. At SDN 263 Mriyunan Gresik, teachers receive regular training through partnerships with universities and NGOs, equipping them with specialized teaching strategies for students with disabilities. However, at SDN 25 Banda Aceh, professional development opportunities are limited, with training primarily dependent on government-organized workshops that are infrequent and often lack depth. Without continuous training, teachers struggle to implement inclusive practices effectively, leading to gaps in support for students with special needs.

Another significant challenge is the inconsistent enforcement of inclusive education policies. Although Indonesia has established regulations, such as Permendikbud No. 70/2009 on Inclusive Education, the level of implementation varies between regions. SDN 263 Mriyunan Gresik benefits from strong leadership that actively promotes inclusive policies, ensuring that guidelines are followed at the school level. In contrast, SDN 25 Banda Aceh adheres to a more bureaucratic governance model, relying on top-down directives that are not always translated into effective classroom practices. The lack of systematic monitoring and accountability further weakens policy enforcement, making it difficult to achieve meaningful inclusion.

Cultural perceptions of disability also play a crucial role in shaping the success of inclusive education. At SDN 263 Mriyunan Gresik, a culture of collaboration among teachers, parents, and the community fosters a supportive learning environment for students with disabilities. Parent-teacher meetings and awareness programs help increase understanding and acceptance of inclusive education. Conversely, at SDN 25 Banda Aceh, traditional beliefs and misconceptions about disability create barriers to parental involvement. Many parents view disabilities as a family burden rather than a condition that can be supported through education, limiting their engagement in school activities.

Addressing these challenges requires a comprehensive approach that includes continuous teacher training, stronger policy enforcement, and cultural awareness programs. Schools must work closely with local governments, NGOs, and community

leaders to create sustainable support systems for inclusive education. By ensuring that all students, regardless of their abilities, have access to quality education, Indonesia can move closer to achieving equitable and inclusive learning environments nationwide.

Teacher Shortage in Inclusive Education

A significant issue faced by both SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh is the shortage of specialized teachers for students with disabilities. This shortage severely limits the ability of schools to provide the individualized support that students with special needs require. According to Setiawan et al., (2023), the lack of trained special education teachers contributes to the difficulties in delivering inclusive education. Teachers in these schools often lack the specific skills and knowledge required to address the diverse needs of students with disabilities, such as those with intellectual, sensory, or physical impairments. As a result, students with special needs may not receive the attention or specialized instruction necessary for their academic and personal development.

At SDN 263 Mriyunan Gresik, efforts have been made to mitigate this issue through regular teacher training programs in collaboration with universities and NGOs. These programs equip teachers with strategies to accommodate students with disabilities, improving the overall implementation of inclusive education. In contrast, SDN 25 Banda Aceh faces challenges due to its reliance on government-organized workshops, which are infrequent and often lack depth. Without ongoing professional development, teachers struggle to implement inclusive teaching methods effectively, leaving students with disabilities at a disadvantage.

Another challenge is the lack of adequate infrastructure to support inclusive education. SDN 263 Mriyunan Gresik has designated special education rooms and assistive technology to aid students with disabilities, creating a more supportive learning environment. However, SDN 25 Banda Aceh lacks specialized classrooms, forcing teachers to integrate students with special needs into general classrooms with minimal accommodations. This situation makes it difficult for teachers to provide tailored instruction, ultimately affecting the quality of education that students receive.

Cultural perceptions of disability also influence the effectiveness of inclusive education. At SDN 263 Mriyunan Gresik, a strong culture of collaboration between teachers, parents, and the community fosters greater acceptance of inclusive education. Parent-teacher meetings and awareness programs play a crucial role in shaping positive attitudes. Conversely, at SDN 25 Banda Aceh, traditional beliefs and misconceptions about disability limit parental involvement. Many parents view disabilities as a personal or family burden rather than a condition that can be supported through education, reducing their engagement in school activities.

To address these challenges, schools must implement sustainable strategies such as continuous teacher training, improved infrastructure, and community engagement programs. Strengthening collaboration between educational institutions, government agencies, and NGOs can help ensure that inclusive education is effectively implemented. By fostering a more supportive and well-equipped learning environment, students with disabilities can receive the quality education they deserve, promoting equal opportunities for all learners.

Implications of Teacher Shortage

The teacher shortage problem is compounded by the broader challenges of teacher professional development. Even in regions where the demand for inclusive education is high, teachers may not have access to sufficient training or ongoing support in special education methods. The absence of professional development opportunities exacerbates the lack of specialized skills among teachers, further hindering efforts to provide an inclusive educational environment (Putri & Wahyudi, 2023). Inadequate teacher training leads to a mismatch between the needs of students with disabilities and the skills of the educators. This situation calls for urgent measures to improve teacher training programs and recruitment policies to address the shortage of specialized teachers in these regions.

Limited Policy Enforcement

Although the Indonesian government has established policies to promote inclusive education, the enforcement of these policies is often inconsistent, particularly at the local level. Putri and Wahyudi (2023) highlight that while national policies are in place to support inclusive education, the implementation of these policies can be uneven across different provinces and districts. Local governments may lack the capacity or the political will to enforce these policies effectively, which results in significant disparities in the quality of inclusive education. In Gresik, for example, while there is some support for inclusive practices, the policy enforcement is often fragmented, leading to varying levels of implementation across schools. Banda Aceh faces similar challenges, where local policy enforcement does not always align with the central government's inclusive education goals.

Impact of Inconsistent Policy Enforcement

Inconsistent policy enforcement undermines the broader goals of inclusive education by creating inequities in the access to resources and opportunities for students with special needs. As Setiawan et al. (2023) explain, policy implementation is often hindered by administrative inefficiencies, a lack of coordination between different government agencies, and insufficient funding. In both Gresik and Banda Aceh, the lack of robust policy enforcement means that many schools struggle to implement inclusive education practices effectively, leaving students with disabilities at a

disadvantage. This inconsistency in policy application not only affects the quality of education but also perpetuates inequalities in access to education for all students, particularly those with special needs.

Cultural Barriers in Banda Aceh

In addition to structural challenges, cultural factors also play a significant role in the implementation of inclusive education, particularly in Banda Aceh. Traditional beliefs and cultural norms continue to shape perceptions of students with disabilities, often leading to exclusion or marginalization. According to Samsudin (2021), many communities in Banda Aceh hold stigmatizing views towards students with special needs, which influences how these students are treated both within and outside the classroom. These cultural barriers often result in families being hesitant to send their children with disabilities to school or advocating for their inclusion in regular classrooms. This cultural resistance to inclusive education creates additional challenges for teachers and schools that are striving to foster an inclusive environment.

Overcoming Cultural Barriers

Addressing cultural barriers requires comprehensive awareness campaigns and community engagement. Samsudin (2021) suggests that raising awareness about the value of inclusive education and challenging misconceptions about disabilities can help reduce stigma and promote greater acceptance. Schools must work closely with communities to educate parents and local leaders about the benefits of inclusive education, not just for students with disabilities but for society as a whole. In regions like Banda Aceh, where traditional beliefs may be deeply entrenched, building a supportive community environment for inclusive education is essential to ensure that all students, regardless of their abilities, have access to quality education.

In conclusion, the challenges faced by schools in Gresik and Banda Aceh in implementing inclusive education highlight the need for targeted interventions at both the local and national levels. The teacher shortage, limited policy enforcement, and cultural barriers each contribute to the difficulties of providing equitable education for students with disabilities. To address these challenges, there is a need for better teacher training programs, consistent enforcement of inclusive education policies, and efforts to overcome cultural stigma surrounding disabilities. By addressing these issues, schools can create more inclusive, supportive environments where all students, regardless of their abilities, can thrive.

4. Context-Specific Differences

Education systems in Indonesia are diverse, shaped by the unique challenges and strengths of each region. In this comparative study, the educational landscapes of

Gresik and Banda Aceh serve as examples of how local conditions, governance, leadership, and cultural factors influence the implementation of inclusive education. This paper examines the key factors impacting the education systems of these two regions, focusing on Gresik's better infrastructure, stronger leadership, and higher parental involvement, in contrast with Banda Aceh's bureaucratic governance, cultural barriers, and lack of inclusive education training.

Gresik: Stronger Infrastructure for Inclusive Education

Gresik has long been recognized for its relatively well-developed infrastructure in education. The availability of better facilities, such as accessible classrooms, proper sanitation, and technology resources, plays a significant role in the successful implementation of inclusive education. Schools in Gresik are often better equipped to accommodate students with disabilities, providing necessary tools such as ramps, specialized learning materials, and assistive technologies. Research by Yuen and Tofield (2019) underscores that the physical environment of a school greatly influences the inclusivity of educational practices, as students with diverse needs require an accessible and supportive environment to thrive.

Leadership in Gresik: A Key to Success

Leadership within educational institutions in Gresik is another crucial factor contributing to the success of inclusive education. Principals and school administrators in this region tend to demonstrate strong leadership, fostering an inclusive school culture and ensuring that inclusive education policies are effectively implemented. According to a study by Ainscow (2021), effective leadership in schools is instrumental in fostering a collaborative environment, encouraging teachers to embrace inclusive practices. In Gresik, school leaders play an active role in advocating for inclusion, ensuring that teachers receive professional development opportunities and that the necessary resources are allocated to support students with disabilities.

Parental Involvement in Gresik's Schools

One of the standout features of Gresik's education system is the high level of parental involvement in school activities. Research by Hornby (2018) highlights the positive correlation between parental engagement and student success, particularly in inclusive settings. In Gresik, parents are not only involved in their children's academic progress but also in extracurricular activities and school governance. This high level of engagement helps build a supportive network for students with special needs, ensuring that they receive consistent care and encouragement both at home and at school. Parental involvement also helps raise awareness about the importance of inclusive education, thus reducing stigmas and fostering a more inclusive community.

Banda Aceh: Bureaucratic Governance in Education

In contrast to Gresik, Banda Aceh faces significant challenges related to bureaucratic governance. The complexity and inefficiency of the bureaucratic system often hinder the smooth implementation of inclusive education policies. As observed by Simpson (2020), rigid governance structures can limit the flexibility needed for schools to respond quickly and effectively to the needs of students with disabilities. In Banda Aceh, decision-making processes are often slow, and there is a lack of coordination between the various levels of government and educational institutions, leading to delays in the implementation of inclusive education initiatives.

Cultural Barriers in Banda Aceh

Cultural factors also pose a significant challenge to the expansion of inclusive education in Banda Aceh. The region's deeply ingrained cultural beliefs and practices often result in resistance to inclusive education, particularly for children with disabilities. Ainscow (2021) notes that societal attitudes towards disability can significantly influence the success of inclusive education programs. In Banda Aceh, some families may prefer to keep children with disabilities at home rather than enrolling them in mainstream schools due to cultural stigma. This cultural resistance creates additional barriers to achieving widespread acceptance of inclusive education practices, further complicating the region's efforts to adopt a fully inclusive educational model.

Lack of Inclusive Education Training in Banda Aceh

Another critical issue in Banda Aceh is the lack of training for teachers in inclusive education. Many educators in this region have not received the specialized training necessary to address the diverse needs of students with disabilities. According to a study by Hornby (2018), teachers' lack of knowledge and skills in inclusive teaching methods is one of the primary barriers to implementing effective inclusive education programs. In Banda Aceh, there is a pressing need for professional development programs that focus on inclusive pedagogy and classroom management strategies to accommodate students with disabilities. Without proper training, teachers are often ill-equipped to address the academic and social needs of these students.

Teacher Training and Development in Gresik

In contrast to Banda Aceh, Gresik has made significant strides in teacher training and development, especially in the context of inclusive education. The region's schools have partnered with local universities and professional development organizations to offer specialized training for teachers on inclusive education practices. Research by Yuen and Tofield (2019) highlights the importance of continuous teacher development to ensure that educators remain up to date with the latest inclusive teaching strategies.

In Gresik, teachers are better equipped to handle diverse classrooms, thanks to a commitment to ongoing professional development, which includes training on differentiated instruction, behavior management, and the use of assistive technologies.

Community Engagement in Gresik vs. Banda Aceh

The level of community engagement in education varies significantly between Gresik and Banda Aceh. In Gresik, the community is highly supportive of inclusive education, and there are many local initiatives aimed at fostering greater inclusion in schools. These initiatives include awareness campaigns, community outreach programs, and partnerships with local organizations. In Banda Aceh, however, community engagement in inclusive education is limited. Cultural barriers and a lack of awareness about the benefits of inclusive education contribute to a less active role for the community in supporting inclusive initiatives. The absence of community-led efforts further complicates the efforts to create a truly inclusive educational system in the region.

Resource Allocation in Gresik

Gresik's better infrastructure can also be attributed to more effective resource allocation. Local governments in Gresik have prioritized funding for schools, ensuring that adequate resources are available to support inclusive education. This includes providing accessible school facilities, specialized equipment, and educational materials designed for students with disabilities. As Yuen and Tofield (2019) explain, equitable resource distribution is key to achieving inclusive education, and Gresik has made significant investments in this area. The availability of resources in Gresik allows teachers to implement inclusive practices more effectively, ensuring that students with disabilities are not left behind in the learning process.

Resource Allocation in Banda Aceh

In contrast, Banda Aceh struggles with resource allocation for inclusive education. The lack of government funding and the uneven distribution of resources across schools create significant disparities in the availability of support for students with disabilities. Many schools in Banda Aceh do not have the necessary infrastructure, materials, or assistive technologies to accommodate students with special needs. According to Simpson (2020), without adequate resources, even the most well-intentioned inclusive education policies are unlikely to succeed. The government must prioritize equitable funding and resource distribution to ensure that all schools, regardless of their location, have the tools they need to implement inclusive education effectively.

In conclusion, the educational systems in Gresik and Banda Aceh provide valuable

insights into the challenges and opportunities of implementing inclusive education in Indonesia. Gresik's success can be attributed to its stronger infrastructure, better leadership, and higher levels of parental and community involvement. In contrast, Banda Aceh faces significant obstacles due to bureaucratic governance, cultural barriers, and a lack of training for educators in inclusive education. The study highlights the importance of tailored strategies that address the unique challenges of each region. By strengthening leadership, increasing teacher training, improving resource allocation, and fostering greater community involvement, both regions can make strides toward a more inclusive education system that benefits all students.

Implications for Policy and Practice

Effective teacher training is the cornerstone of successful inclusive education. Schools should collaborate with universities and professional development organizations to provide continuous and comprehensive training for educators. Teacher preparation programs must focus not only on pedagogical skills but also on creating an understanding of diverse learners' needs. Research suggests that ongoing professional development fosters greater teacher efficacy in inclusive settings (Ainscow, 2021). Continuous training ensures that teachers remain equipped to handle a range of challenges in inclusive classrooms, including differentiated instruction and adapting to new educational technologies. This collaboration should also extend to local governments and educational authorities to ensure that training aligns with national educational standards and inclusive policies (Simpson, 2020).

Parental involvement and community support are essential for the success of inclusive education initiatives. Schools must develop strong partnerships with parents and community organizations to create an inclusive environment that extends beyond the classroom. Awareness campaigns aimed at educating parents on the importance of inclusive education can help reduce stigma and encourage more active participation in school activities. A study by Hornby (2018) found that when parents are actively involved in their children's education, there is a significant increase in students' academic and social outcomes. Moreover, schools should also engage with local communities to build support systems for students with special needs, ensuring they have access to additional resources and services. Community engagement fosters a supportive environment where inclusive education can thrive and expand its impact.

Governments play a crucial role in ensuring the success of inclusive education by providing adequate resources. Resource allocation must be context-sensitive, considering the unique needs of each school and region. A one-size-fits-all approach to funding and infrastructure may not be effective, particularly in diverse settings. Research by Yuen and Tofield (2019) emphasizes that equitable distribution of resources is key to supporting inclusive education, especially in marginalized or underserved communities. Governments should prioritize funding for teacher training, classroom accommodations, assistive technologies, and accessible school

facilities. By ensuring that all schools, regardless of their location, receive the resources they need, governments can help create an equitable educational system where all students have the opportunity to succeed.

Then, strengthening teacher training, enhancing parental and community engagement, and improving resource allocation are vital components of a comprehensive strategy to support inclusive education (Kivirand et al., 2022). Schools, governments, and communities must work together to overcome the challenges of inclusion. By fostering collaboration between stakeholders and ensuring equitable access to resources, the educational system can better meet the needs of all students, particularly those with disabilities or other special needs. The continued emphasis on professional development, community involvement, and targeted resource distribution will help build a more inclusive, equitable, and effective education system for future generations.

D. Conclusion

This study examined the strategic management and governance of inclusive education at SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh, focusing on their implementation strategies and key influencing factors. SDN 263 Mriyunan Gresik employs a transformational leadership approach, promoting collaboration among teachers, parents, and stakeholders through training, engagement programs, and infrastructure improvements. Strong leadership commitment and parental involvement contribute to its success. In contrast, SDN 25 Banda Aceh follows a bureaucratic model, relying on government policies and centralized training, yet struggles with limited teacher training, insufficient resources, and cultural barriers. The effectiveness of inclusive education in both schools depends on leadership style, teacher preparedness, parental support, resource availability, and cultural perceptions. Schools with proactive leadership, continuous training, and strong partnerships achieve better outcomes, while rigid structures and resource limitations create challenges. Strengthening teacher training, fostering community involvement, and ensuring fair resource distribution are essential for improving inclusive education. A localized approach that considers specific needs and challenges is crucial for long-term success. While both schools show a commitment to inclusion, their effectiveness varies based on strategic leadership, resource management, and stakeholder collaboration. Future efforts should address policy gaps and create supportive learning environments for all students.

E. Acknowledgement

This research was made possible through the generous funding and support of Universitas Negeri Surabaya. The authors extend our sincere gratitude to the university for providing the necessary resources and opportunities to conduct this study. We would also like to express our deepest appreciation to the school principals,

teachers, and staff of SDN 263 Mriyunan Gresik and SDN 25 Banda Aceh for their invaluable participation, insights, and cooperation throughout the research process. Their dedication to inclusive education has been a source of inspiration for this study. Furthermore, we are grateful to our colleagues and academic mentors who provided constructive feedback and guidance, which significantly contributed to the refinement of our research.

References

- Ainscow, M. (2005). Developing inclusive education systems: What are the levers for change? *Journal of Educational Change*, 6(2), 109-.
- Ainscow, M. (2020). *Promoting equity in education: Lessons from international experiences*. Routledge.
- Ainscow, M. (2021). *Promoting inclusive education: A guide for practitioners*. Routledge.
- Almén, O., & Sundqvist, G. (2023). Local governance diversity in the unitary authoritarian state: NGO-state relations in Guangzhou and Hangzhou. *Journal of Contemporary China*, 32(142), 669–685. <https://doi.org/10.1080/10670564.2022.2109843>
- Beijer, S. E., Knappert, L., & Stephenson, K. A. (2024). “It doesn’t make sense to stick with old patterns”: How leaders adapt their behavior to foster inclusion in a disruptive context. *Journal of Organizational Behavior*, May 2022, 1315–1343. <https://doi.org/10.1002/job.2766>
- Booth, T., & Ainscow, M. (2002). The Index for Inclusion: Developing learning and participation in schools. *Centre for Studies on Inclusive Education*.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–4.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–1.
- Cashman, L., Sabates, R., & Alcott, B. (2021). Parental involvement in low-achieving children’s learning: The role of household wealth in rural India. *International Journal of Educational Research*, 105(January). <https://doi.org/10.1016/j.ijer.2020.101701>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Durisic, M., & Bunijevac, M. (2017). Parental Involvement as a Important Factor for. *Revista del Centro de Estudios sobre Políticas Educativas*, 7(3), 7, 1.17.
- Dyson, A., Howes, A., & Roberts, B. (2020). A systematic review of inclusive education studies. *Educational Reviewal review*, 72(3), 245.
- Easterbrook, M. J., & Hadden, I. R. (2021). Tackling educational inequalities with social psychology: Identities, contexts, and interventions. *Social Issues and Policy Review* 1, 15(1), 180–236. <https://doi.org/10.1111/sipr.12070>
- Fadillah, R., Wibowo, S., & Putri, H. (2022). Infrastructure and resource allocation in inclusive education settings. *Journal of Educational Research*, 5(1), 112-.

- Fasting, R. B., & Breilid, N. (2024). Cross-professional collaboration to improve inclusive education. *Scandinavian Journal of Educational Research*, 68(4), 661–676. <https://doi.org/10.1080/00313831.2023.2175248>
- Florian, L. (2011). Exploring inclusive pedagogy. *Cambridge Journal of Education*, 72(3), 267.
- Florian, L., & Spratt, J. (2013). Enacting inclusion: A framework for research and practice. *European Journal of Special Needs Education*, 28(2), 119.
- Forlin, C., Sharma, U., & Loreman, T. (2019). Teacher preparedness for inclusive education. *International Journal of Inclusive Education*, 23(2), 95–.
- Graham, L., & Scott, W. (2016). Inclusive education beyond infrastructure: The role of pedagogy. *Educational Policy Review*, 10(2), 41–.
- Hamzah, R., Wulandari, A., & Syarif, M. (2020). Cultural barriers in implementing inclusive education in Indonesia. *Indonesian Journal of Educational Policy*, 6(3), 78–9.
- Honu-Mensah, C. M., Fobi, D., & Quansah, B. (2024). Developing an understanding of parent–teacher partnerships in schools for the deaf in Ghana. *International Journal of Disability, Development and Education*, 71(2), 208–221. <https://doi.org/10.1080/1034912X.2022.2092601>
- Hornby, G. (2018). Parental involvement in inclusive education: A practical guide for educators. *Routledge*.
- Huguley, J. P., Delale-O'Connor, L., Wang, M.-T., & Parr, A. K. (2021). African American parents' educational involvement in urban schools: Contextualized strategies for student success in adolescence. *Educational Researcher*, 50(1), 6–16. <https://doi.org/https://doi.org/10.3102/0013189X20943199>
- Kivirand, T., Leijen, Ä., & Lepp, L. (2022). Enhancing schools' development activities on inclusive education through in-service training course for school teams: A case study. *Frontiers in Psychology*, 13(May), 1–16. <https://doi.org/10.3389/fpsyg.2022.824620>
- Kolluri, S., & Tichavakunda, A. A. (2023). The counter-deficit lens in educational research: Interrogating conceptions of structural oppression. *Review of Educational Research*, 93(5), 641–678.
- Kozleski, E. B., Yu, T., Sattar, S., & Haines, S. (2020). Inclusive education: A systematic perspective. *Educational Review*, 72(3), 267.
- Makoelle, T. M. (2019). Teacher Empathy: A Prerequisite for an Inclusive Classroom. *Encyclopedia of Teacher Education*.
- Mertens, D. M. (2020). Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods. *SAGE Publications*.
- Miller, G. J., Roberts, M. K., & Trivers, S. R. (2012). Ethical guidelines for research in educational settings: An overview. *Journal of Educational Research Ethics*, 7(3), 45–5.
- Miller, T., Birch, M., Mauthner, M., & Jessop, J. (2012).). Ethics in qualitative research. *SAGE Publications*.
- Mitchell, D. (2020). What really works in special and inclusive education. *Routledge*.

- Noltemeyer, A., James, A. G., Bush, K., Bergen, D., Barrios, V., & Patton, J. (2021). The relationship between deficiency needs and growth needs: The continuing investigation of Maslow's theory. *Child & Youth Services*, 42(1), 24-42. <https://doi.org/https://doi.org/10.1080/0145935X.2020.1818558>
- Palosaari, M., Autio, A., Mbinga, E., Pellikka, P., & Johansson, T. (2024). The biased narrative of vulnerable women: Gender analysis of smallholder farmers' contextual vulnerability to climate. *Mitigation and Adaptation Strategies for Global Change*, 29(6), 1-29. <https://doi.org/10.1007/s11027-024-10147-z>
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). SAGE Publications.
- Putri, D. A., & Wahyudi, S. (2023). The impact of policy enforcement on inclusive education in Indonesia. *Journal of Education and Policy Studies*, 12(4), 45-.
- Rahmawati, Y., & Syamsudin, A. (2022). Inclusion policies in Indonesian primary education: A review. *International Journal of Inclusive Education*, 26(5), 543.
- Sailor, W. (2022). Advancing inclusive education through technology: Global perspectives. *Journal of Special Education Technology*, 37(2), 85-.
- Samsudin, M. (2021). Cultural perceptions of disability in Banda Aceh: Barriers to inclusive education. *Journal of Social and Cultural Education*, 15(2), 123.
- Schuelka, M. J., Johnstone, C. J., Thomas, G., & Artiles, A. J. (2019). *The SAGE Handbook of Inclusion and Diversity in Education*. SAGE Publications.
- Setiawan, R., Utami, D., & Hasanah, S. (2023). Teacher shortages and challenges in inclusive education in Indonesia: A case study of Gresik and Banda Aceh. *Indonesian Journal of Educational Research*, 20(3), 89-.
- Sharma, U., Forlin, C., & Loreman, T. (2018). Teacher training and student outcomes in inclusive settings. *Teaching and Teacher Education*, 69(2), 46-.
- Simpson, L. (2020). *Inclusive education and teacher professional development: Global perspectives*. Springer.
- Sosu, E. M., Dare, S., Goodfellow, C., & Klein, M. (2021). Socioeconomic status and school absenteeism: A systematic review and narrative synthesis. *Review of Education*, 9(3), 1-28. <https://doi.org/10.1002/rev3.3291>
- Subban, P., Bradford, B., Sharma, U., Loreman, T., Kullmann, H., Lozano, C. S., Romano, A., Subban, P., Bradford, B., Sharma, U., Loreman, T., Kullmann, H., Lozano, C. S., Romano, A., & Woodcock, S. (2023). Does it really take a village to raise a child? Reflections on the need for collective responsibility in inclusive education. *European Journal of Special Needs Education*, 38(2), 291-302. <https://doi.org/10.1080/08856257.2022.2059632>
- Subekti, R., Aditya, S., & Lestari, P. (2021). The role of school infrastructure in inclusive education. *Journal of Inclusive Education Studies*, 4(1), 32-4.
- Then, D., & Pohlmann, S. (2024). Parent-teacher meetings in the context of inclusion: Preschool teachers and parents of children with disabilities in counseling situations. *Early Childhood Education Journal*, 52(8), 1815-1826. <https://doi.org/10.1007/s10643-023-01521-8>
- UNESCO. (2021). *Global monitoring report on inclusion and education*. Paris: UNESCO.

- Wahyudi. (2023). *Kemerdekaan Rupiah di Batas Negara.pdf*. detik news.
- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and Teacher Education*, 117, 103802. <https://doi.org/10.1016/j.tate.2022.103802>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). SAGE Publications.
- Yuen, M., & Tofield, L. (2019). Equitable resource allocation in education: Challenges and solutions. *Journal of Educational Administration*, 57(6), 1-1.

The Effect of Soft Skills and Self Efficacy on Fresh Graduate Job Readiness: Mediation of Work Motivation

Anissa Fitriyani¹, Wahyudi¹, Dedeh Kurniasih¹

¹Universitas Primagraha, Banten, Indonesia

Corresponding author e-mail: 210658@primagraha.ac.id

Article History: Received on 4 January 2025, Revised on 20 February 2025,
Published on 6 March 2025

Abstract: In times of increasing job competition, the level of job readiness of fresh graduates determines their success in the world of work. Through work motivation, this study aims to examine how self-efficacy and soft skills affect fresh graduate job readiness. This study uses quantitative techniques, causality theory, and questionnaires for data collection using a sample of 160 people and random sampling techniques. As a result, three of the seven hypotheses tested in this study showed a substantial direct effect, while the remaining four were rejected. The novelty of this study lies in analyzing the role of work motivation as a mediating variable on fresh graduate job readiness that has not been widely studied before, and its contribution to helping educational institutions create strategies to develop soft skills and increase self-efficacy so that prospective workers are ready to compete in the labor market.

Keywords: Job Readiness, Self-Efficacy, Soft Skills, Work Motivation

A. Introduction

The current era of growing globalization presents a big challenge for economic growth that affects competitiveness, the level of absorption of the workforce, and the compatibility of workforce criteria with the needs and goals of the company. The role of labor resources is very important in facing global changes (Damayantie & Kustini, 2022). Human resources are important assets needed by companies and are the key to success in achieving goals in economic activity (Pamudji & Septianti, 2022; Setiarini et al., 2022). HR is a critical factor in a company's success because their energy, expertise, and innovative ideas drive progress and creativity (Wau, 2022).

In the rapidly evolving era of globalization, human resources face new challenges, requiring them to adapt to advancements in technology, scientific knowledge, and telecommunications. Generation Z (Gen Z) is a generation that developed amid technological advances. Gen Z is entering the workforce, showcasing remarkable adaptability in a time of fast-paced globalization and technological advancements. The earliest study on Gen Z was first carried out in the United States (Benítez-Márquez et al., 2022). Gen Z is a generation born in 1995-2010 with an approximate age of 14-29 years old that carries different characteristics and values than previous generations

(Mahapatra et al., 2022). Gen Z is expected to make up nearly a quarter or 25% of total workers worldwide by 2025 (Benítez-Márquez et al., 2022).

Gen Z is widely recognized for its digital savvy, strong multitasking abilities, and preference for flexible professional environments (Ershova, 2019). However, despite having a lot of potential, this does not rule out the possibility that Gen Z will not face various difficulties in the world of work. In fact, Gen Z also faces difficulties in adapting to more traditional and stressful work rules (Septiani & Saputra, 2022). One striking phenomenon is the high dismissal and resignation rates among these young workers (Satudata kemnaker, 2024). Especially in large companies that have stricter and more structured work regulations. Some of the factors that cause Gen Z to be dismissed at work include a lack of motivation and initiative, lack of professionalism, weak communication skills, difficulty accepting feedback, poor problem-solving abilities, insufficient technical expertise, cultural misalignment, and challenges in teamwork.

The phenomenon of high dismissals and resignations is often attributed (Hasibuan, 2024). First, the lack of work motivation is one of the biggest challenges for most Gen Z. Many of them lack connection with the goals or regulations of the companies they work for, leading to low productivity in achieving company targets. Second, soft skills such as good communication skills with other people, teamwork, and flexibility are often considered weak in most individuals of this generation. Although they often excel in technical skills, they still need to enhance their interpersonal and intrapersonal abilities, which are crucial for workplace success (Deswarta et al., 2023). Third, low self-efficacy, which is the belief in the ability to execute tasks to reach desired results, is also a factor that affects Gen Z's job readiness (Magano et al., 2020). Although often technically skilled, it is not uncommon to experience a lack of confidence, especially when facing significant challenges or changes in their work. For recent graduates, shifting from academic to professional life often comes with numerous pressures and demands (Baluku et al., 2021). They not only have to complete their studies well but also have to prepare themselves to face increasingly complex and competitive professional challenges. Fresh graduates are students who have just graduated from college. Usually, fresh graduates have fresh knowledge from college. In this case, the majority of fresh graduate students who graduated in 2024 belong to Gen Z, which by 2025 is expected to make up almost a quarter or 25% of the total workforce worldwide (Benítez-Márquez et al., 2022).

As newcomers to the workforce, fresh graduates often face challenges such as underdeveloped soft skills, limited confidence, and low motivation. However, they also have many opportunities to learn and grow quickly as they prepare to enter the workforce. In this context, job readiness becomes very important to measure the extent to which they have prepared themselves to face the dynamic world of work (Pambajeng et al., 2024). Job readiness does not only include academic knowledge or technical skills that they have learned during the lecture period, but also mental,

emotional, and ability readiness to adapt to the rules in the professional world. Therefore, job readiness can be considered as a reflection of their ability to interact effectively with the professional world, face professional challenges, and contribute to achieving organizational goals (Dhea Novita et al., 2023).

Fresh graduates must prepare themselves to enter an increasingly tight and dynamic job market that requires more than just understanding course material. They need to work on soft skills like problem-solving, cooperation, communication, and emotion control because they are essential in the workplace (Fernández-Arias et al., 2021). To develop soft skills abilities, self-efficacy, or a person's view of how effectively they are able to act in certain circumstances is also needed (Nuraini & Usman, 2022). Moreover, strong work motivation is a key factor in determining job readiness, enabling individuals to tackle challenges in the workplace (Stoikov et al., 2022; Vo et al., 2022).

Job readiness is the ability of individuals to carry out tasks according to their capabilities when entering a professional environment, including knowledge, skills, and good attitudes and behavior (Siallagan et al., 2022). Someone who is able to expand their knowledge will be better prepared to start working and complete tasks as efficiently as possible. In the professional world, job readiness includes knowledge, skills, and information (Mamentu et al., 2023). Job readiness is the overall condition of the individual, which includes physical health, mental readiness, experience, and willingness and ability to work (Dhea Novita et al., 2023). Strong self-efficacy, job readiness, and mastery of soft skills are all crucial components in preparing someone for the working world (Adelia & Mardalis, 2024). Job readiness is essential to face competition in the workplace and achieve individual success, which is reinforced by soft skills that enhance interpersonal and intrapersonal abilities within the company (Succi & Canovi, 2020).

Soft skills, including communicating well with people, problem-solving, teamwork, and time management, are essential to prepare fresh graduates to meet the needs of the professional world (Azizah et al., 2021). Soft skills include natural abilities such as emotional and social intelligence, communication skills, and the capacity to interact effectively with others. These aspects are important for fostering strong interpersonal and intrapersonal relationships (Rosmiati & Hendriani, 2023). Soft skills are defined as skills related to interpersonal and intrapersonal (Darma et al., 2020; Siregar, 2022). The concept of soft skills developed from the term emotional intelligence, which covers various aspects, including personality traits, sociability, communication skills, language use, and friendly attitudes that affect interactions with others (Botke et al., 2018; Succi & Canovi, 2020).

In addition, soft skills are essential for increasing one's potential in the professional world, which is why many companies consider these skills to be highly valuable (Joie-La Marle et al., 2023). While fresh graduates often have adequate technical skills, a lack of soft skills can hinder their adaptation to complex and stressful professional

environments. Underdeveloped intrapersonal and interpersonal skills can lead to difficulties in interacting with coworkers, managing conflict, emotional instability, and working collaboratively, which ultimately impacts their performance and resilience in the workplace. This is also relevant to the phenomenon of high dismissal and resignation rates among Gen Z, which is often due to their inability to adapt to the demands of a more traditional and stressful workplace. To deal with this, Gen Z requires self-efficacy or the belief that they can overcome these goals or obstacles (Tanjung et al., 2020). When entering the workforce, fresh graduates with good soft skills like communication, flexibility, and problem-solving generally exhibit greater confidence (Rosmiati & Hendriani, 2023; Setiarini et al., 2022). Conversely, a lack of soft skills can lower self-efficacy, which can reduce their confidence in carrying out professional tasks. The inability to adapt and interact effectively in the workplace can undermine motivation and job readiness. The more confidence individuals have in their abilities, the higher their motivation to work hard and reach their goals (Fauzan et al., 2023). So that fresh graduates who believe in their abilities tend to be more motivated to face challenges and try to give the best results in the workplace (Rus et al., 2022).

Self-efficacy is a person's belief in their ability to face challenges or carry out tasks (Ratuela et al., 2023). Consequently, self-efficacy is an important element that greatly enhances job readiness (Siallagan et al., 2022). Additionally, confidence in one's abilities can boost strong work motivation to tackle challenges in the professional world. Work motivation is very important for fresh graduates to maintain their enthusiasm in completing activities, especially when going through the work process (Vasilyeva et al., 2020). Fresh graduates with strong, soft skills and high self-efficacy tend to be more motivated when facing challenges, capable of carrying out tasks, and adapting well in a diverse workplace. In contrast, those who lack soft skills and low self-efficacy tend to lose motivation, feel discouraged, and ultimately may not get a job. Thus, work motivation is an important factor that links soft skills and self-efficacy in improving fresh graduates' job readiness to adapt and succeed in the professional world, as well as reducing the risk of dismissal or resignation among Gen Z (Adelia & Mardalis, 2024). As of right now, very few research have looked at how soft skills and self-efficacy affect fresh graduates' job preparedness, with work motivation acting as a mediating. The findings provide an important contribution for educational institutions in designing strategies to develop soft skills and increase self-efficacy for prospective workers so that they are better prepared to compete in an increasingly competitive job market.

This study highlights the intermediary function of work motivation in the process, this is different from other research which concentrates on the direct impact of soft skills or self-efficacy on work preparation only. By understanding this relationship, it is hoped that Gen Z can improve the factors that help them adapt and develop in the professional world. So, the problems of this research are: (1) Do soft skills directly impact job readiness? (2) Does self-efficacy have a direct effect on job readiness? (3)

Do soft skills directly influence work motivation? (4) Does self-efficacy directly affect work motivation? (5) Does work motivation directly contribute to job readiness? (6) Do soft skills have an indirect impact on job readiness through work motivation? (7) Does self-efficacy have an indirect impact on job readiness through work motivation?

B. Methods

This study examines the relationship between variables using quantitative methods and a causality approach. The purpose of the causality approach is to explain the causal attachment of a number of concepts or variables that have been analyzed with strategies developed in management (Setiawan & Wahyudi, 2023). This approach utilizes numerical data obtained through the completion of questionnaires delivered face-to-face, and through Google Forms. includes a number of claims about the research variables that are scored on a 5-point Likert scale. Respondents were allowed to rank their responses on a scale from 1 (strongly disagree) to 5 (strongly agree) (Chyung et al., 2017). Using work motivation as a mediating variable, the study sought to determine how self-efficacy and soft skills affected the career preparation of recent Primagraha University graduates who were graduating in 2024. Because Gen Z is a generation that grew up in the era of digital technology (Berkup, 2014) and fresh graduates of 2024 are included in Gen Z. The fresh graduates in question are those who have not worked and are looking for work.

In this study, the population studied was fresh graduate students who graduated in 2024 at Primagraha University, with a total of 371 people. As many as 160 people were used as samples, the determination of this sample was based on the indicators used as many as 16 indicators. Based on the recommendations of (Kock, 2018) which states that researchers can set 10 times the total parameter variables or indicators being analyzed. Therefore, based on these recommendations, the researcher set a sample size of 160 people. In the soft skills variable referred (Darma et al., 2020; Siregar, 2022) there are 4 indicators, self-efficacy (Magano et al., 2020) as many as 4 indicators, work motivation (Cunha et al., 2023) as many as four indicators, and job readiness (Siallagan et al., 2022) as many as 4 indicators. In this study, the feasibility of the developed model is examined using the Partial Least Square (PLS) approach. The PLS method was chosen because it has been widely accepted in the field of management science by focusing on human resource management, as evidenced by several studies (Cepeda-Carrion et al., 2019; Wahyudi et al., 2022). Since projecting the dependent variable is the primary goal of the research. According to (Wahyudi et al., 2022), PLS is regarded as a suitable analysis technique. Furthermore, researchers can estimate complex models using PLS-SEM without the need for data with a normal distribution (Ringle et al., 2020). Discriminant validity is verified through evaluating Factor Loadings, Cronbach Alpha, Composite reliability, AVE, and R-Square. Then, using bootstrapping techniques, the direct and indirect impacts were examined. As demonstrated by earlier studies, this study employs data processing done with SmartPLS 4 software (Hair et al., 2017).

C. Results and Discussion

In this study, the majority of respondents who have not worked are women, totaling 93 people, and men, totaling 67 people. Based on age, the majority of respondents are 22 years old (50 individuals), followed by 23-year-olds (49 individuals), 24-year-olds (39 individuals), 25-year-olds (14 individuals), 21-year-olds (6 individuals), with the smallest group being 26-year-olds (2 individuals). Cross-loading reveals the measuring model used in this investigation. The structural model is evaluated using the coefficient of determination (R^2), average variance extracted (AVE), composite reliability (CR), and the square root of the AVE. The study's findings demonstrate that every indication satisfies the validity requirements since every indicator receives a value greater than 0.60, hence satisfying the data validity requirements. Nordin et al. (2023) state that an indicator is deemed accurate if its external loading value is higher than 0.60. Additionally, concepts must have a value of 0.50 or higher to be deemed to have acceptable convergent validity when analyzing convergent validity using AVE (Hair et al., 2019). Furthermore, referring to the reliability test, which includes the composite reliability value (CR) and Cronbach alpha (CA), shows that the value obtained meets the general rules of reliability testing, which needs to be higher than 0.70 (Hair et al., 2019). Every variable in this study satisfies the reliability criteria, with composite reliability values ranging from 0.845-0.888 and Cronbach alpha values between 0.755 and 0.831. Then, the R-square shows the contribution to the variables that influence the dependent, explaining from the R-square criteria where 0.75 is considered large, 0.50 is moderate, and 0.25 is weak (Hair et al., 2019) According to this study, work motivation is low, and the R-square value for the job ready variable is moderate.

Table 1. Outer Model and Inner Model

Variable	LF	CA	CR	AVE	R2
Self-Efficacy (SE)		0,831	0,888	0,666	
SE1	0.855				
SE2	0.748				
SE3	0.783				
SE4	0.871				
Job Readiness (JR)		0,762	0,848	0,585	0,668
JR1	0.838				
JR2	0.778				
JR3	0.794				
JR4	0.633				
Soft Skill (SS)		0,755	0,845	0,579	
SS1	0.812				
SS2	0.803				
SS3	0.768				
SS4	0.651				
Work Motivation (WM)		0,789	0,863	0,613	0,323
WM1	0.715				
WM2	0.784				
WM3	0.858				
WM4	0.769				

Notes: LF (Loading Factor); CA (Cronbach's Alpha); CR (Composite Reliability); AVE (Average Variance Extracted); R² (R Square)

The Fornell-Larcker criterion is used to compare the squared correlations between constructs and the Average Variance Extracted (AVE). According to Hair et al. (2019) the square root of the AVE for each construct must be greater than its highest correlation with any other construct in the model. Table 2 shows that the square root of the AVE for each variable is greater than its correlations with other components.

Table 2. Discriminant validation of Fornell-Lacker criterion

	SE	JR	WM	SS
Self Efficacy (SE)	0.816			
Job Readiness (JR)	0.805	0.765		
Work Motivation (WM)	0.568	0.521	0.783	
Soft Skill (SS)	0.749	0.684	0.439	0.761

Source: SmartPLS (2025)

The research model used in this study, illustrated in Figure 1, provides an overview of the relationship between each research variable. Furthermore, Table 3 displays the results of correlation calculations and the analysis of both direct and indirect effects.

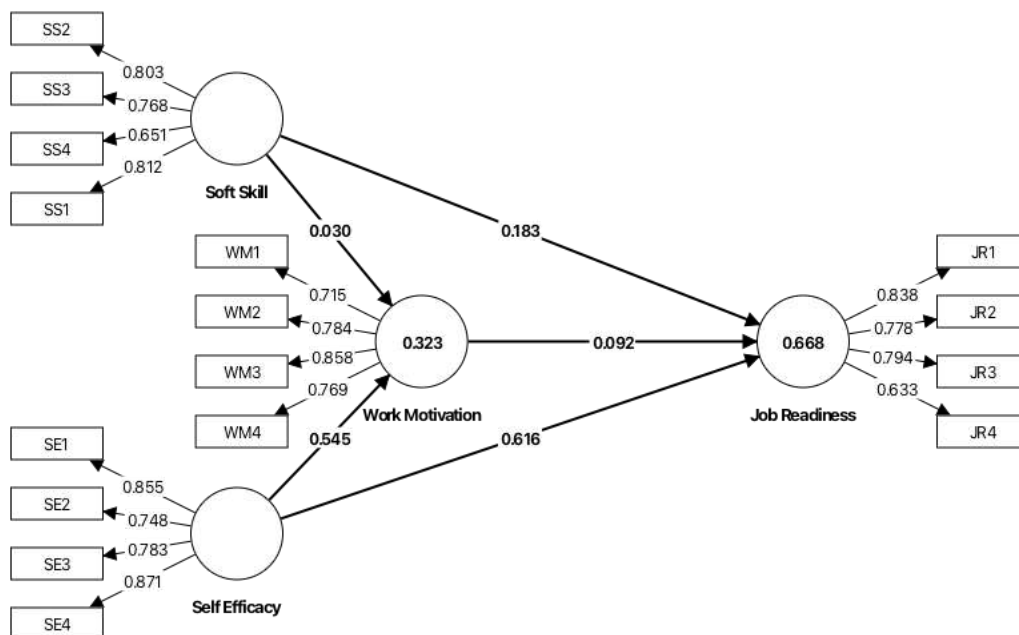


Figure 1. Research Model

Source: SmartPLS (2025)

The direct hypothesis test results in Table 3 indicate that two hypotheses do not meet the significance criteria, while the remaining three do. Meanwhile, the indirect hypothesis test shows that the two hypotheses do not mediate and have no significant impact. In hypothesis testing, the significance criteria require a value greater than 1.96 and a p-value of less than 0.05 (Hair et al., 2019).

Job readiness is positively and significantly impacted by soft skills ($\beta = 0.183$, $t = 2.561$, $p = < 0.05$). Additionally, soft skills do not have a positive and significant impact on work motivation ($\beta = 0.030$, $t = 0.274 < 1.96$, $p = > 0.05$), but self-efficacy has a positive and significant impact on job readiness ($\beta = 0.616$, $t = 8.545$, $p = < 0.05$). Work motivation is positively and significantly impacted by self-efficacy ($\beta = 0.545$, $t = 5.336$, $p = < 0.05$), while job readiness is not positively and significantly impacted by work motivation ($\beta = 0.092$, $t = 1.488 < 1.96$, $p = > 0.05$). The study's mediation test indicates that work motivation does not mediate the positive and significant relationship between job readiness and self-efficacy ($\beta = 0.050$, $t = 1.437 < 1.96$, $p = > 0.05$) or the impact of soft skills on job readiness ($\beta = 0.003$, $t = 0.228 < 1.96$, $p = > 0.05$).

Table 3. Hypothesis Test

Hypothesis	β	T Statistics	P Values
Direct effect			
SS $\rightarrow$ JR	0,183	2,561	0,010
SE $\rightarrow$ JR	0,616	8,545	0,000
SS $\rightarrow$ WM	0,030	0,274	0,784
SE $\rightarrow$ WM	0,545	5,336	0,000
WM $\rightarrow$ JR	0,092	1,488	0,137
Indirect effect			
SS $\rightarrow$ WM $\rightarrow$ JR	0,003	0,228	0,819
SE $\rightarrow$ WM $\rightarrow$ JR	0,050	1,437	0,151

Source: SmartPLS Output (2025)

The Effect of Soft Skill on Job Readiness

This research shows that soft skills have a significant impact on job readiness. So, the higher the soft skills fresh graduates possess, the more prepared they are to enter the workforce. Soft skills significantly impact the job readiness of fresh graduates. By mastering interpersonal and intrapersonal demonstrated skills such as effective communication, teamwork, and problem-solving, they become better equipped and more resilient in facing challenges in the professional world (Setiawati & Mayasari, 2021; Succi & Canovi, 2020). This ability makes it easier to adapt to the changing dynamics of work; for example, good communication skills allow a person to convey ideas effectively and establish strong professional relationships while in teamwork collaboration (Pambajeng et al., 2024).

This research confirms that soft skill development should be an important part of educational institutions. Need to include soft skill development in their curriculum to prepare graduates who not only have technical expertise but are also ready to face interpersonal and intrapersonal challenges when going into the world of work (Aly, 2017). As previous research (Cunha et al., 2023; Mamentu et al., 2023; Rahmadani & Mardalis, 2022) explains, soft skills positively and significantly impact job readiness.

The Effect of Self-Efficacy on Job Readiness

According to the research findings, self-efficacy influences job readiness because having confidence in one's ability to overcome obstacles and complete tasks is important when starting work (Chotimah & Suryani, 2020; Nuraini & Usman, 2022). A person with strong self-efficacy is usually better equipped to deal with demands at work, complete tasks quickly, and confidently face new situations. They are also more open to learning and self-development opportunities that support job readiness (Rusliyanto & Kusmuriyanto, 2019). From this, it seems that self-efficacy has influenced job readiness. Previous research also shows that self-efficacy has a positive and significant effect on job readiness (Dhea Novita et al., 2023; Pangaribuan et al., 2024; Pratiwi & Rini, 2023).

The Effect of Soft Skills on Work Motivation

Hypothesis test results show an insignificant link between fresh graduates' soft skills and motivation to work. Even while work ethics are important in the workplace, it is clear from the indicators of work motivation and soft skills that have the lowest ratings that possessing these qualities does not always translate into a greater desire to start working as soon as one graduates.

Even if soft skills like problem-solving, cooperation, effective communication, and emotional regulation are crucial in the workplace (Rosmiati & Hendriani, 2023), fresh graduates who master these skills are not necessarily more motivated to work immediately. Work motivation is more influenced by other factors. Fresh graduates can still feel hesitant or less encouraged to enter the workforce despite having good soft skills. The results of this study are consistent with previous research findings (Chamorro-Premuzic, 2016; Morgeson et al., 2006).

The Effect of Self-Efficacy on Work Motivation

Hypothesis testing findings show a strong correlation between self-efficacy and work motivation, indicating that people are more motivated when they feel they can complete tasks or achieve their goals. High self-efficacy makes individuals see challenges as opportunities for growth, not obstacles (Rus et al., 2022). Self-efficacy encourages work motivation because someone who is confident in their abilities is more likely to set higher targets, try hard, and persevere when facing difficulties (Tanjung et al., 2020). These beliefs influence the way a person makes decisions, maintains focus on goals, and encourages a person to work, thereby increasing work enthusiasm.

In the professional world, someone with strong self-confidence generally has a high inner drive. They are also more proactive in finding solutions, taking responsibility, and staying motivated despite the pressure (Nuraini & Usman, 2022). Consequently,

improving self-efficacy is an important first step in improving work motivation. In addition, prior studies have demonstrated that job motivation is significantly and favorably impacted by self-efficacy. According to (Ambarwati et al., 2020; Hadi, 2023; Ianaturodiah & Wahjudi, 2020).

Effect of Work Motivation on Job Readiness

The results of hypothesis testing show that there is an insignificant relationship between work motivation and job readiness in fresh graduates. This is evident from the lowest indicators of work motivation and job readiness, suggesting that despite having the intention and desire to work, they may not necessarily be prepared to enter the professional world in line with their passion. This shows that other factors are more influential on job readiness, such as internships and job interest (Firmansyah et al., 2024; Gohae, 2020). Work motivation by itself is insufficient to enhance job readiness without these supporting factors.

In addition, the main obstacles for fresh graduates are lack of internship experience and low interest in work. Without internship experience, they often feel anxious about entering the workforce, while a lack of interest in the job makes them unsure of their passion. Thus, without the support of internship experience and a strong interest in work, motivation alone is insufficient to enhance job readiness. Several studies have shown that work motivation can improve readiness (Pambajeng et al., 2024; Suratno & Fauzan, 2023). However, previous research supports this study, which shows that job readiness among fresh graduates is not significantly influenced by work motivation (Adelia & Mardalis, 2024; Chotimah & Suryani, 2020).

The Influence of Soft Skills on Job Readiness Mediated by Work Motivation

According to this study, soft skills significantly and favorably affect fresh graduates' preparation for the workforce. Therefore, the more proficient they are in soft skills, the better equipped they are to deal with the workplace. These results are supported by previous research (Dhea Novita et al., 2023; Succi & Canovi, 2020), which explains that soft skills help individuals to adapt, communicate well, and solve problems in the workplace.

However, work motivation does not act as a mediator in this relationship. This indicates that even if fresh graduates have high work motivation, it does not strengthen the impact of soft skills on job readiness. The effective application of soft skills in the workplace has a more significant influence on job readiness than motivation alone. These findings align with previous research (Chamorro-Premuzic, 2016; Morgeson et al., 2006).

The Effect of Self-Efficacy on Job Readiness Mediated by Work Motivation

According to this study, recent graduates' employment readiness is significantly and favorably impacted by their level of self-efficacy. Previous research has shown that people with high self-efficacy are generally better prepared to enter the workforce (Pratiwi & Rini, 2023; Ratuela et al., 2023). Furthermore, according to Tanjung et al. (2020), self-efficacy aids recent graduates in adjusting to and honing the abilities required in a working setting.

However, the link is not mediated by work incentives. This indicates that even though recent graduates are highly motivated to work, self-efficacy's impact on getting ready for the workforce is not strengthened. A person's confidence in their skills shapes their job readiness more so than their motivation to work. According to earlier studies, this outcome is consistent (Ambarwati et al., 2020; Nuraini & Usman, 2022; Rus et al., 2022).

D. Conclusions

The analytical findings obtained in this study show that not all hypotheses proposed get empirical support. Of the seven hypotheses tested, three of them proved to be supported by the data, while the other four hypotheses did not gain support. Specifically, the findings state that soft skills and self-efficacy directly increase job readiness. This shows how important these two elements are in preparing someone to enter the workforce. On the other hand, soft skills had no effect on work motivation, which suggests that soft skills do not have a direct impact on one's drive to work. However, it is evident that self-efficacy has a positive impact on work motivation, indicating that having confidence in one's abilities can increase one's drive to work. Job readiness is likely to be influenced by elements other than work motivation, given that the influence of work motivation on job readiness is relatively small. In addition, soft skills and self-efficacy directly affect job readiness without requiring work motivation as a mediator. This is because neither the relationship between soft skills with job readiness nor self-efficacy with job readiness is mediated by work motivation.

E. Acknowledgement

Thanks to all parties especially from Universitas Primagraha, Banten, Indonesia, who help us in this project.

References

- Adelia, T., & Mardalis, A. (2024). The Influence Of Work Motivation, Soft Skills, Self-Efficacy And Digital Literacy On Work Readiness. *Jurnal Ekonomika: Manajemen, Akuntansi, Dan Perbankan Syari'ah*, 13(1), 130-142.
<https://doi.org/10.24903/je.v13i1.2703>

- Aly, A. (2017). Development Of Soft Skills-Based Character Learning In Higher Education. *Ishraqi*, 1(1), 18–30. <https://doi.org/10.23917/ishraqi.v1i1.2926>
- Ambarwati, N., Pendidikan Ekonomi, J., & Ekonomi, F. (2020). The Effect of Industrial Work Practices (Prakerin), Work Motivation and Self-Efficacy on Student Job Readiness. *Economic Education Analysis Journal*, 9(3), 831–843. <https://doi.org/10.15294/eeaj.v9i3.42409>
- Azizah, D. N., Muslim, S., & Cholik, M. (2021). The correlation of industrial work experience and soft skills on work readiness of graduated of vocational high school. *International Journal for Educational and Vocational Studies*, 3(4), 248. <https://doi.org/10.29103/ijevs.v3i4.3018>
- Baluku, M. M., Mugabi, E. N., Nansamba, J., Matagi, L., Onderi, P., & Otto, K. (2021). Psychological Capital and Career Outcomes among Final Year University Students: the Mediating Role of Career Engagement and Perceived Employability. *International Journal of Applied Positive Psychology*, 6(1), 55–80. <https://doi.org/10.1007/s41042-020-00040-w>
- Benítez-Márquez, M. D. S. N.-R., Sánchez-Teba, E. M., & Bermúdez-González, G. (2022). Generation Z Within the Workforce and in the Workplace: A Bibliometric Analysis. *Frontiers in Psychology*, 12(February), 1–16. <https://doi.org/10.3389/fpsyg.2021.736820>
- Berkup, S. B. (2014). Working with generations X and Y In generation Z period: Management of different generations in business life. *Mediterranean Journal of Social Sciences*, 5(19), 218–229. <https://doi.org/10.5901/mjss.2014.v5n19p218>
- Botke, J. A., Jansen, P. G. W., Khapova, S. N., & Tims, M. (2018). Work factors influencing the transfer stages of soft skills training: A literature review. *Educational Research Review*, 24, 130–147. <https://doi.org/10.1016/j.edurev.2018.04.001>
- Cepeda-Carrion, G., Cegarra-Navarro, J.-G., & Cillo, V. (2019). Tips to use partial least squares structural equation modelling (PLS-SEM) in knowledge management. *Journal of Knowledge Management*, 23(1), 67–89. <https://doi.org/10.1108/JKM-05-2018-0322>
- Chamorro-Premuzic, T. (2016). *Personality and Individual Differences*. John Wiley & Sons.
- Chotimah, K., & Suryani, N. (2020). The Influence of Field Work Practice, Motivation to Enter the World of Work, and Efficacy Self Towards Work Readiness. *Economic Education Analysis Journal*, 9(2), 391–404. <https://doi.org/10.15294/eeaj.v9i2.32079>
- Chyung, S. Y. Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-Based Survey Design: The Use of a Midpoint on the Likert Scale. *Performance Improvement*, 56(10), 15–23. <https://doi.org/10.1002/pfi.21727>
- Cunha, A. B. da, Erom, K., & Talok, D. (2023). The Effect of Work Motivation, Internship Experience and Soft Skills on Student Work Readiness (Literature Review of Education Management). *Jurnal Ilmu Manajemen Terapan*, 4(6), 846–852. <https://doi.org/10.31933/jimt.v4i6.1635>
- Damayantie, A. A., & Kustini, K. (2022). Soft Skills and Self Efficacy as Factors Forming

- Work Readiness of Final Year Students of FEB UPNVJT. *Briliant: Jurnal Riset Dan Konseptual*, 7(3), 670. <https://doi.org/10.28926/briliant.v7i3.1028>
- Darma, Y., Firdaus, M., & Irvandi, W. (2020). Mathematical Soft Skills Of Mathematics Teacher Candidates. *Edukasi: Jurnal Pendidikan*, 18(2), 225. <https://doi.org/10.31571/edukasi.v18i2.1876>
- Deswarta, Mardianty, D., & Bowo. (2023). The Influence Of Soft Skills, Hard Skills And Work Motivation On Students' Work Readiness Faculty Of Economics And Business Universitas Islam Riau In The Endemic Time Of Covid 19. *Management Studies and Entrepreneurship Journal*, 4(1), 364–372. <https://doi.org/10.37385/msej.v4i1.1347>
- Dhea Novita, Qristin Violinda, & M. Fadjar Darmaputra. (2023). The Effect of Hard Skills, Soft Skills and Self-Efficacy on Job Readiness (Case Study of Final Year Students at PGRI Semarang University). *Journal Economic Excellence Ibnu Sina*, 1(4), 281–300. <https://doi.org/10.59841/excellence.v1i4.601>
- Ershova, R. V. (2019). Digital Generation: Between Myth and Reality. *Russian Journal of Philosophical Sciences*, 62(2), 96–108. <https://doi.org/10.30727/0235-1188-2019-62-2-96-108>
- Fauzan, A., Triyono, M. B., Hardiyanta, R. A. P., Daryono, R. W., & Arifah, S. (2023). The Effect of Internship and Work Motivation on Students' Work Readiness in Vocational Education: PLS-SEM Approach. *Journal of Innovation in Educational and Cultural Research*, 4(1), 26–34. <https://doi.org/10.46843/jiecr.v4i1.413>
- Fernández-Arias, P., Antón-Sancho, Á., Vergara, D., & Barrientos, A. (2021). Soft skills of American university teachers: Self-concept. *Sustainability (Switzerland)*, 13(22), 1–25. <https://doi.org/10.3390/su132212397>
- Firmansyah, E. B., Awliya, D., Auliya, S. L., Mukarromah, S. W., Aprilia, S. N., & Hartono, F. A. P. (2024). Analysis of Internship Experience and Job Interest on Student Job Readiness through self-efficacy as Intervening. *Journal of Economics and Business Research (JUEBIR)*, 3(2), 79–92. <https://doi.org/10.22515/juebir.v3i2.9115>
- Gohae, A. S. (2020). Internship Experience, Job Interest and Its Effect on Job Readiness of Accounting Students. *Jurnal Ilmiah MEA*, 4(3), 1954–1964. <https://doi.org/10.31955/mea.v4i3.748>
- Hadi, P. (2023). The influence of self-efficacy on employee performance mediated by work motivation and work engagement. *International Journal of Research in Business and Social Science (2147- 4478)*, 12(2), 653–661. <https://doi.org/10.20525/ijrbs.v12i2.2465>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). SAGE Publications.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hasibuan, L. (2024). *Companies are firing Gen Z workers, here are 10 reasons why*. CNBC Indonesia. <https://www.cnbcindonesia.com/lifestyle/20241018135928-33-580825/ramai-ramai-perusahaan-pecat-pekerja-gen-z-ini-10-alasannya>

- Ianaturodiah, I., & Wahjudi, E. (2020). The Effect of Self-Efficacy on Teacher Performance with Work Motivation as a Mediating Variable in State Vocational Accounting Teachers in Surabaya. *JPEKA: Jurnal Pendidikan Ekonomi, Manajemen Dan Keuangan*, 4(2), 113–126. <https://doi.org/10.26740/jpeka.v4n2.p113-126>
- Joie-La Marle, C., Parmentier, F., Weiss, P. L., Storme, M., Lubart, T., & Borteyrou, X. (2023). Effects of a New Soft Skills Metacognition Training Program on Self-Efficacy and Adaptive Performance. *Behavioral Sciences*, 13(3). <https://doi.org/10.3390/bs13030202>
- Kock, N. (2018). Minimum sample size estimation in PLS-SEM: An application in tourism and hospitality research. *Applying Partial Least Squares in Tourism and Hospitality Research*, 1–16. <https://doi.org/10.1108/978-1-78756-699-620181001>
- Magano, J., Silva, C., Figueiredo, C., Vitória, A., Nogueira, T., & Dinis, M. A. P. (2020). Generation Z: Fitting project management soft skills competencies – A mixed-method approach. *Education Sciences*, 10(7), 1–24. <https://doi.org/10.3390/educsci10070187>
- Mahapatra, G. P., Bhullar, N., & Gupta, P. (2022). Gen Z: An Emerging Phenomenon. *NHRD Network Journal*, 15(2), 246–256. <https://doi.org/10.1177/26314541221077137>
- Mamentu, J. J. R., Nelwan, O. S., & Sendow, G. M. (2023). The Effect of Self Efficacy, Soft Skills, Self Esteem and Work Motivation on Job Readiness of Fresh Graduate Feb University Sam Ratulangi Manado in the Era of the Industrial Revolution 4.0. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 11(3), 1487–1497. <https://doi.org/10.35794/emba.v11i3.50712>
- Morgeson, F. P., Johnson, M. D., Campion, M. A., Medsker, G. J., & Mumford, T. V. (2006). Understanding Reactions to Job Redesign: A Quasi-Experimental Investigation of The Moderating Effects of Organizational Context on Perceptions of Performance Behavior. *Personnel Psychology*, 59(2), 333–363. <https://doi.org/10.1111/j.1744-6570.2006.00941.x>
- Nordin, N., Nordin, N. N., Nordin, N. I. A., & Nordin, N. F. (2023). The Successful Factors of Online Learning for Malaysia Higher Education Students: Smart PLS-SEM Analysis. In B. Alareeni & A. Hamdan (Eds.), *Innovation of Businesses, and Digitalization during Covid-19 Pandemic* (pp. 803–815). Springer, Cham. https://doi.org/10.1007/978-3-031-08090-6_51
- Nuraini, D., & Usman, O. (2022). The Influence of Hard Skills, Soft Skills, and Self-Efficacy on Work Readiness of Office Administration Education Students, Jakarta State University, For The Year 2019. *SSRN Electronic Journal*, 10(1), 172–183. <https://doi.org/10.2139/ssrn.4130495>
- Pambajeng, A. P., Sumartik, S., & Kumala, H. M. (2024). The Influence Of Internship Experience, Work Motivation, And Soft Skills On College Student Work Readiness In Entering The World Of Work. *Journal of Economic, Bussines and Accounting (COSTING)*, 7(2), 2864–2875. <https://doi.org/10.31539/costing.v7i2.7338>
- Pamudji, M., & Septianti, D. (2022). Analisis Self Actualization, Soft Skill Dan Iklim Organisasi Terhadap Motivasi Kerja. *Strategi*, 12(01), 46–65.

- <https://doi.org/10.52333/strategi.v12i01.947>
- Pangaribuan, H. J., Fitri, K., & Tarigan, M. A. (2024). The Effect of Self-Efficacy and Internship Experience on Job Readiness with Job Interest as an Intervening Variable in MSIB Participants at Riau University. *MANTAP: Journal of Management Accounting, Tax and Production*, 2(2), 1007-1015. <https://doi.org/10.57235/mantap.v2i2.3478>
- Pratiwi, L. D., & Rini, H. P. (2023). The Influence of Self Efficacy, Competence, and Training on Work Readiness (Study on MSIB Management Study Program UPN "Veteran" East Java Students). *International Journal of Economics (IJECE)*, 2(2), 2961-712. <https://doi.org/10.55299/ijec.v2i2.535>
- Rahmadani, D., & Mardalis, A. (2022). Improving Student's Working Readiness by Increasing Soft Skills, Self-Efficacy, Motivation, and Organizational Activities. *Proceedings of the International Conference on Economics and Business Studies (ICOEBS 2022)*, 655(Icoebs), 273-279. <https://doi.org/10.2991/aebmr.k.220602.036>
- Ratuela, Y. R. G., Nelwan, O. S., & Lumintang, G. G. (2023). Improving Working Readiness through Mastering Soft Skills. *Revista de Métodos Cuantitativos Para La Economía y La Empresa*, 35(1), 268-279. <https://doi.org/10.46661/revmetodoscuanteconempresa.6426>
- Ringle, C. M., Sarstedt, M., Mitchell, R., & Gudergan, S. P. (2020). Partial least squares structural equation modeling in HRM research. *The International Journal of Human Resource Management*, 31(12), 1617-1643. <https://doi.org/10.1080/09585192.2017.1416655>
- Rosmiati, R., & Hendriani, S. (2023). Implementation of the Soft-Skills Learning Model in Shaping Student Morality at SMP N 11 Sijunjung. *Jurnal Kajian Dan Pengembangan Umat*, 6(1). <https://doi.org/10.31869/jkpu.v6i1.3966>
- Rus, M., Sandu, M. L., Cheval, C. G., & Ene, B. E. (2022). The relationship between self-esteem and the employees' s motivation in work of state organizations. *Technium Social Sciences Journal*, 32(December), 502-518. <https://doi.org/10.47577/tssj.v32i1.6749>
- Rusliyanto, I., & Kusmuriyanto. (2019). The Effect of Industrial Work Practices, Specialized Job Exchange, Accounting Productive Competencies, and Self-Efficacy on Student Job Readiness. *Economic Education Analysis Journal*, 8(1), 18-23. <https://doi.org/10.15294/eeaj.v8i1.29759>
- Satudata kemnaker. (2024). *Workers laid off, June 2024*.
- Septiani, S., & Saputra, M. R. D. (2022). Analysis Of Workplace Comfort For Generation Z In Working In The Era Of Globalization. *Jurnal Ilmiah Global Education*, 3(2), 187-192. <https://doi.org/10.55681/jige.v3i2.373>
- Setiarini, H., Prabowo, H., Sutrisno, S., & Gultom, H. C. (2022). The Influence Of Soft Skills And Work Internship Experience On Student Work Readiness Through Work Motivation As An Intervening Variable (Case Study On Feb Students Of Pgri University Semarang). *EKOBIS : Jurnal Ilmu Manajemen Dan Akuntansi*, 10(2), 195-204. <https://doi.org/10.36596/ekobis.v10i2.941>
- Setiawan, R., & Wahyudi, W. (2023). The Effect of Work Environment and Work

- Motivation on Employee Performance at The Acacia Anyer Hotel Serang-Banten. *Indonesian Multidiscipline Journal*, 1(2), 77-91. <https://doi.org/10.59605/atama.v1i2.558>
- Setiawati, D., & Mayasari. (2021). The Influence of Soft Skills and Hard Skills on the Job Readiness of Graduates of Sma Negeri 3 Jambi City during the Covid Pandemic 19. *SJEE (Scientific Journals of Economic Education)*, 5(1), 23. <https://doi.org/10.33087/sjee.v5i1.92>
- Siallagan, A., Sigalingging, V., & Rajagukguk, S. (2022). The Relationship Between Self-Efficacy And Work Readiness Of Nursing Professional Study Program Students. *JINTAN: Jurnal Ilmu Keperawatan*, 2(2), 168-176. <https://doi.org/10.51771/jintan.v2i2.339>
- Siregar, M. P. (2022). Implementation of Youth Leadership Character Building through Soft Skill Strengthening at PIBI Church, Air Kemuliaan Congregation, Medan. *HAGGADAH: Jurnal Teologi Dan Pendidikan Kristen*, 3(1), 36-51. <https://doi.org/10.57069/haggadah.v3i1.41>
- Stoikov, S., Maxwell, L., Butler, J., Shardlow, K., Gooding, M., & Kuys, S. (2022). The transition from physiotherapy student to new graduate: are they prepared? *Physiotherapy Theory and Practice*, 38(1), 101-111. <https://doi.org/10.1080/09593985.2020.1744206>
- Succi, C., & Canovi, M. (2020). Soft skills to enhance graduate employability: comparing students and employers' perceptions. *Studies in Higher Education*, 45(9), 1834-1847. <https://doi.org/10.1080/03075079.2019.1585420>
- Suratno, & Fauzan, M. (2023). The Effect of Work Motivation, Self-Efficacy, and Work Ethic on Organizational Commitment. *Management Studies and Entrepreneurship Journal*, 4(4), 3773-3784. <https://doi.org/10.37385/msej.v4i4.1630>
- Tanjung, R., Arifudin, O., Sofyan, Y., & Hendar. (2020). The Effect of Self-Assessment and Self-Efficacy on Job Satisfaction and Its Implications for Teacher Performance. *Jurnal Ilmiah Manajemen, Ekonomi Dan Akuntansi*, 4(1), 380-391. <https://doi.org/10.31955/mea.v4i1.554>
- Vasilyeva, O. A., Dovzhik, G. V., & Musatova, S. A. (2020). *Work Motivational Factors of Generation Z in the Digital Economy*. 138(Mtde), 1018-1024. <https://doi.org/10.2991/aebmr.k.200502.168>
- Vo, T. T. D., Tuliiao, K. V., & Chen, C. (2022). Work Motivation: The Roles of Individual Needs and Social Conditions. *Behavioral Sciences*, 12(2), 49. <https://doi.org/10.3390/bs12020049>
- Wahyudi, W., Rozi, A., & Putry, M. (2022). Competence and employee performance: The moderating role of organizational climate. *Jurnal Manajemen Maranatha*, 21(2), 165-176. <https://doi.org/10.28932/jmm.v21i2.4671>
- Wau, A. (2022). The Effect of Work Motivation and Work Effectiveness on Work Productivity with Work Quality as an Intervening Variable. *Jurnal Akuntansi, Manajemen Dan Ekonomi*, 1(1), 37-47. <https://doi.org/10.56248/jamane.v1i1.11>

The Effect of Machine Maintenance and Layout on the Production Process

Tarisa Alifah¹, Daman Sudarman¹

Universitas Muhammadiyah Jakarta, Jakarta, Indonesia

Corresponding author e-mail: Tarisaalifah256@gmail.com

Article History: Received on 9 January 2025, Revised on 6 February 2025,
Published on 10 March 2025

Abstract: This research aims to analyze the influence of machine maintenance and layout on the production process at PT. Indonesian Packaging Creations. The research method used is a quantitative approach with an associative research design. Data was collected through a questionnaire distributed to 50 respondents who were employees at the company. Data analysis was carried out using multiple linear regression to test the hypothesis that had been formulated. The research results show that machine maintenance has a positive, but not significant, influence on the production process, with a regression coefficient of 0.019 and a significance of 0.738. On the other hand, layout is proven to have a significant influence on the production process, with a regression coefficient of 0.883 and a significance value of 0.000. The simultaneous test shows that the two independent variables have a significant effect on the production process, with a calculated F value of 84.82. This research emphasizes the importance of optimal machine maintenance and efficient layout design to improve the smoothness of the production process. This research provides recommendations for management of PT. Kreasi Kemas Indonesia to implement a better maintenance system and redesign the factory layout to support operational efficiency.

Keywords: Efficiency, Machine Maintenance, Manufacturing Industry Production Process

A. Introduction

The manufacturing industry is one of the sectors that has experienced rapid development throughout the world, especially in the context of globalization and technological advancement (Palange & Dhatrak, 2021). One of the important sub-sectors is the packaging industry, which plays a vital role in supporting various other sectors (Effendy & Gopar, 2024), such as food, beverages, and consumer goods (Achouch et al., 2022). In the manufacturing industry, the effectiveness of the production process is a major factor in determining the competitiveness of a company (Foresti et al., 2020). An optimal production process can increase productivity, efficiency, and product quality (Ciano et al., 2021). One of the important factors that affect the smooth running of the production process is machine maintenance and the layout of production facilities (Ayvaz & Alpay, 2021). Good machine maintenance can

prevent unexpected damage, reduce production downtime, and extend the operational life of the machine (Dalzochio et al., 2020). Meanwhile, an efficient layout can improve work processes, reduce material travel time, and minimize waste of resources (Lango et al., 2024).

Machine maintenance in an industry involves a series of activities designed to ensure equipment is operating properly and prevent breakdowns that could hinder production (Paul & Chowdhury, 2020). Regular maintenance will reduce the risk of production disruptions, increase operational efficiency, and ensure consistent product quality (Salawu et al., 2023) (Ruiz-Sarmiento et al., 2020). Without adequate maintenance, production machines are vulnerable to disruptions that can lead to delays, high repair costs, and potentially even greater losses for the company (Li et al., 2021).

In addition to machine maintenance, another factor that greatly influences the production process is the factory layout (Liu et al., 2021). A well-designed layout can increase production efficiency by reducing material and labor movement time, and facilitating coordination between production units (Zheng et al., 2021). Conversely, an unorganized layout can cause various problems (Sastra et al., 2024), such as increased waiting time, increased worker fatigue, and difficulty in managing workflow (Dogan & Birant, 2021).

In an era of increasingly tight industrial competition, manufacturing companies must be able to optimize machine maintenance and production layout to increase competitiveness (Jamwal et al., 2021). Machine maintenance and production facility layout are two key factors that can affect the efficiency of the production process (Lee et al., 2020). Good machine maintenance can reduce downtime and improve machine performance, while an optimal layout can smooth workflow and reduce transportation time (Shahin et al., 2020). Previous studies have shown that planned maintenance and efficient layout contribute significantly to productivity in the manufacturing sector (Mutaufiq & Aisyyah, 2021), (Bousdekis et al., 2021). However, there is still a lack of research that examines the simultaneous relationship between these two variables and the production process in packaging companies (Siregar et al., 2024).

PT. Kreasi Kemas Indonesia, as a company engaged in the packaging industry, faces challenges in increasing the efficiency of its production process to meet increasing market demand. Dynamic market conditions and global competition require companies to not only focus on product quality but also pay attention to operational efficiency. The efficiency of the production process is very important in maintaining the stability of product supply and optimizing the use of company resources.

One of the important factors in achieving production efficiency is machine maintenance and the layout of production facilities. Good machine maintenance can

reduce downtime, extend machine life, and ensure smooth production processes. On the other hand, an effective production facility layout can minimize material travel time, reduce waste, and improve workflow. The combination of optimal machine maintenance and layout can have a positive impact on the company's operational efficiency.

However, there are still limitations in research that discusses the simultaneous influence of machine maintenance and production facility layout on the production process, especially in the context of a packaging company such as PT. Kreasi Kemas Indonesia. Therefore, this study is important to examine how these two variables interact and affect the production process as a whole. The results of this study are expected to not only provide academic contributions but also become a practical reference for company management in developing more effective operational strategies.

Based on the problems explained, therefore, this study aims to (1) Analyze the effect of machine maintenance on the production process at PT. Kreasi Kemas Indonesia. (2) Analyze the effect of layout on the production process at PT. Kreasi Kemas Indonesia. (3) Analyze the simultaneous effect of machine maintenance and layout on the production process at PT. Kreasi Kemas Indonesia. This study is expected to contribute to improving operational efficiency at PT. Kreasi Kemas Indonesia and become a reference for further research in the field of operational management. This study is also expected to provide practical recommendations for company management in optimizing machine maintenance and layout design to achieve better production results.

B. Methods

Research Approach and Design

This research method uses a quantitative approach with an associative research design. The quantitative approach was chosen because this study aims to analyze the relationship between variables objectively and measurably. An associative research design is used to explore the relationship between machine maintenance and layout variables to the production process at PT. Kreasi Kemas Indonesia. In this study, there are two independent variables, namely machine maintenance and layout, and one dependent variable, namely the production process. This design allows simultaneous analysis of the influence of both independent variables on the dependent variable, so that it can be seen how much each variable contributes to the production process.

Population and Sample

The population in this study were all employees of PT. Kreasi Kemas Indonesia, totaling 50 people. Because the population is relatively small, this study used a

saturated sampling technique, where all members of the population were used as samples. This technique was chosen to ensure that the data obtained were more representative and accurate, and were able to provide a comprehensive picture of the influence of machine maintenance and layout on the production process.

Data collection technique

The data in this study were collected through a questionnaire specifically designed to measure the variables of machine maintenance, layout, and production process. The questionnaire consisted of several statement items using a five-point Likert scale, namely: Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree. Before being distributed to respondents, the questionnaire was tested for validity and reliability to ensure that the instrument used can measure what is intended well. Validity testing was carried out using the Pearson correlation technique, while reliability testing was carried out using the Cronbach's Alpha method.

Data Analysis Techniques

Descriptive Analysis

This analysis is used to describe the characteristics of respondents based on demographic data such as age, gender, education level, and length of service. In addition, descriptive analysis is also used to describe the distribution of respondents' answers to each item in the questionnaire.

Validity and Reliability Test

Validity Test is conducted to ensure that the research instrument actually measures the intended concept. Validity test is conducted by looking at the correlation value between each question item and the total score of its variables. If the correlation value is greater than 0.30, then the item is considered valid. Meanwhile, Reliability Test is conducted to test the internal consistency of the research instrument. Reliability test is conducted using the Cronbach's Alpha method. If the Cronbach's Alpha value is more than 0.60, then the instrument is considered reliable.

Classical Assumption Test

To ensure that the regression model used meets the requirements, several classical assumption tests are carried out, namely: Normality test to ensure that the residual data is normally distributed, using the Kolmogorov-Smirnov test. Multicollinearity test to ensure that there is no strong linear relationship between the independent variables. Heteroscedasticity test to ensure that the residual variance is constant.

C. Results and Discussion

Respondent Characteristics Based on Education

In a research study, understanding respondent characteristics based on education is crucial as it provides insights into the educational background of the participants. Education level can significantly influence perceptions, attitudes, and behaviors, which may affect research outcomes. Table 1 presents the educational characteristics of the respondents, illustrating the distribution of educational attainment within the sample. Analyzing this data helps to contextualize the findings and assess whether the educational composition of the respondents aligns with the study's objectives and target population. Furthermore, it allows for a deeper understanding of how educational background may correlate with other variables under investigation.

Table 1. Respondent Characteristics Based on Education

No	Education	Number of Respondents	Presentation
1	High School/Vocational School	26	52%
2	Diploma	3	6%
3	Bachelor	21	42%
Total		50	100%

Table 1 above shows that the majority of respondents are high school/vocational high school graduates, which is 26 people or 52% of the total respondents. This result shows that more than half of the respondents have a high school education background, either from general high school (SMA) or vocational high school (SMK). This dominant number may indicate that most of the workforce in the study population comes from high school graduates, who may be more available in sectors or fields of work relevant to this study.

Respondents with a Diploma level of education, which amounted to 3 people or around 6% of the total respondents. This percentage shows that only a small portion of the population has a diploma educational background. Diploma is a level of education that is between secondary education and undergraduate education, which is usually more focused on certain expertise or skills that are applied in the world of work. The low number of diploma graduates in this sample could be caused by several factors, such as the availability of workers with this level of education in the field being studied, or recruitment preferences that are more inclined towards high school or undergraduate graduates.

The last category is Bachelor (S1), with the number of respondents as many as 21 people or around 42% of the total research population. This proportion shows that almost half of the respondents have higher education at the undergraduate level. The presence of a large number of bachelor's graduates in the research population may indicate that the job or position being studied requires higher skills or understanding, thus attracting workers with higher educational qualifications.

Based on the data in table 1, it can be concluded that the majority of respondents have a high school/vocational high school education level, which reflects that the jobs or industries that are the focus of the study are mostly filled by workers with secondary education backgrounds. This can have implications for work patterns, skills needed, and the level of complexity of tasks given to employees. In addition, the presence of 42% of respondents with a bachelor's degree shows that jobs in the study population also involve workers with higher academic backgrounds. This could be because certain positions in the organization require deeper skills and competencies, such as in administration, management, or strategic planning. Conversely, the relatively small number of respondents with a diploma (6%) may indicate that diploma graduates have a more limited role in this population. It could be that diploma graduates are not found in many of the fields of work studied, or it could also be because job requirements tend to recruit high school/vocational high school or bachelor's degree graduates rather than diploma graduates.

Based on the results of the study, it was found that respondents had a high school/vocational high school education level (52%), followed by bachelor's degree graduates (42%), and diploma (6%). This study is in line with several previous studies that examined the characteristics of workforce education in various sectors. Research (ref) on the Manpower in the Manufacturing Sector The results of the study showed that 60% of the workforce in the manufacturing sector were high school/vocational high school graduates, while 30% were diploma graduates, and only 10% had a bachelor's degree. The difference with this study lies in the higher percentage of diploma graduates in the manufacturing sector compared to the current study. This shows that in the manufacturing sector, workers with diploma education are more needed. Research (Haviland & Robbins, 2021) on the Public Sector This study found that the workforce in the public sector mostly consisted of bachelor's degree graduates (55%), with 30% high school/vocational high school graduates, and 15% diploma graduates. Research (Portella & França, 2024) on the Manpower in Private Companies The results of this study showed that 50% of the workforce were high school/vocational high school graduates, 20% diploma graduates, and 30% bachelor's degrees. This comparison shows that high school/vocational high school graduates still dominate, but there is a larger portion of Diploma graduates compared to this study. This could indicate that private companies have a more flexible recruitment policy for Diploma education levels.

Respondent Characteristics Based on Length of Service

Length of service is one of the important aspects in analyzing the characteristics of respondents in a study. Length of service not only reflects the level of experience and skills of a person in carrying it out but is also closely related to the loyalty and commitment of employees to the organization. The longer the length of service, generally the higher the employee's understanding of the work culture, operational procedures, and the vision and mission of the organization. In this study, the

distribution of respondents' length of service was collected into three categories: less than 2 years, 1-2 years, and more than 5 years. This classification aims to see how differences in length of service can affect respondents' perceptions, attitudes, and behaviors towards the variables studied. Length of service analysis also helps identify certain patterns, such as the tendency of job satisfaction levels, productivity, or employee engagement levels based on how long they have worked in the organization. Thus, data on respondents' length of service provides an important contribution in understanding respondents' profiles in more depth and in interpreting research results more accurately.

Table 2. Respondent Characteristics Based on Length of Service

No	Years of service	Number of Respondents	Presentation
1	<2 Years	18	36%
2	1-2 Years	25	50%
3	>5 Years	7	14%
Total		50	100%

From the table, it can be seen that the majority of respondents are in the 1-2 years of service category (50%), followed by the group with less than 2 years of service (36%), and the group with more than 5 years of service has the smallest number (14%). The <2 Years of Service Group (36%) means that almost one-third of the total respondents have relatively short work experience, which is less than two years. The data shows that a large number in this category indicates an active recruitment process in the organization, perhaps as a result of business expansion or replacement of employees who leave. The 1-2 Years of Service Group (50%) is the largest group with 25 respondents or 50% of the total respondents. So it can be seen that employees in this group have passed the initial adaptation phase and are beginning to understand their work patterns and responsibilities. If the company's policy supports career development and employee welfare, then this group has the opportunity to stay longer in the organization. Employees with 1-2 years of service tend to be in the evaluation stage of their work environment. If the organization provides good incentives, this group can develop into long-term employees.

Based on the distribution of tenure, there are several important things that companies can pay attention to, including: employees with less than 2 years of service need to ensure that there is an effective orientation and training program. This is important to help new employees adapt to the work culture and improve their skills. Consider policies that support career development, such as advanced training, job rotation opportunities, and performance-based incentives to keep them motivated to stay in the long term. The group with more than 5 years of service is relatively small, so it is important for organizations to ensure that senior employees continue to feel valued. This can be done through recognition for their contributions, providing leadership roles, and a good work-life balance.

Respondent Characteristics by Gender

Table 3. Respondent Characteristics by Gender

No	Gender	Number of Respondents	Presentation
1	Man	33	66%
2	Woman	17	34%
Total		50	100%

Table 3 shows that of the total 50 respondents who participated in the study, the majority were male, namely 33 people (66%), while women numbered 17 people (34%). This data provides an overview of gender distribution at PT. Kreasi Kemas Indonesia, which shows the dominance of male workers in the company. In the context of the manufacturing industry, male dominance in the number of workers often occurs because of the nature of the work that requires greater physical strength, machine operation, and work demands that can be heavier than other sectors. Meanwhile, female participation reaching 34% shows that there is female involvement in various aspects of the company's operations, although the number is still lower than men. In general, the manufacturing industry is often filled with more male workers due to historical factors and job demands. Jobs in this sector often involve heavy tasks such as lifting materials, operating heavy machinery, and long work schedules or challenging shifts. Therefore, the male dominance at PT. Kreasi Kemas Indonesia is in line with the general trend in this sector. However, with increasing automation and technological innovation, the role of women in manufacturing is growing. Modern technology allows more women to be involved in technical and managerial roles, not just administrative tasks.

Multiple Linear Regression Analysis

Multiple linear regression analysis to determine the effect of several independent variables on the dependent variable. In this study, the independent variables tested were machine maintenance and layout, while the dependent variable was the production process. Based on the results of the regression analysis presented in Table 4, it was found that layout had a significant effect on the production process, while machine maintenance did not have a significant effect.

Table 4. Regression Coefficient Results

No	Significant variables	Regression Coefficient	
1	Machine Maintenance	0.019	0.738
2	Layout	0.883	0,000

From the table above, it can be seen that machine maintenance has a regression coefficient of 0.019 with a significance value of 0.738, indicating that its influence on the production process is not significant. On the other hand, layout has a regression coefficient of 0.883 with a significance value of 0.000, indicating a significant influence on the production process. From this analysis it can be explained that (1) If

maintenance is not carried out routinely or is only carried out when damage occurs (corrective maintenance), then its impact on production will not be felt directly. (2) If the machine used is still in good condition or uses sophisticated technology, maintenance may not be the main factor affecting production.

Layout has a regression coefficient of 0.883 with a significance value of 0.000, which means that its influence on the production process is very significant. These results are in line with previous research (Muthia et al., 2023) which states that a good layout can increase operational efficiency. Some of the reasons why layout has a significant influence on the production process are (1) A well-designed layout allows for smoother work flow, reduces waiting time, and increases labor productivity (Iyer et al., 2023). (2) With an optimal layout, companies can reduce waste in the form of time, energy, and work space (Zaidi et al., 2022). (3) A good layout can increase worker comfort, reduce the risk of accidents, and increase work efficiency (Aswad, 2024).

This study provides several important suggestions for companies in improving production processes (1) Considering that layout has a very significant influence, companies need to re-evaluate their layout design to improve operational efficiency. (2) Although machine maintenance does not show a significant influence in this study, it does not mean that this aspect can be ignored. Companies may need to improve their maintenance strategy by implementing predictive maintenance or preventive maintenance. (3) In addition to machine layout and maintenance, other factors such as workforce skills, supply chain management, and production technology also need to be considered to improve overall productivity.

Simultaneous Test

This study aims to analyze the simultaneous influence of machine maintenance and layout on the production process. In the industrial world, production efficiency is greatly influenced by various factors, including the condition of the machine used and the layout of the production facility. Therefore, a deeper understanding of how these two variables affect the production process can help industrial managers improve the company's operational performance. The F test was conducted to determine whether machine maintenance and layout together have a significant influence on the production process. The test results show that the calculated F value is 84.82 with a significance level of 0.000. Because the significance value is less than 0.05, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. These results indicate that machine maintenance and layout simultaneously have a significant influence on the production process. In other words, improvements in both of these aspects can increase overall production efficiency and effectiveness.

Although both variables have a significant influence, this study found that layout has a more dominant influence compared to machine maintenance. This finding is in line with previous research (Mutaufiq & Aisyiah, 2021) which states that an optimal

layout can increase operational efficiency and reduce waiting time in the production process. A good production layout allows for more efficient materials and labor, reducing obstacles that can slow down production. Conversely, although machine maintenance is important, its effect on production efficiency is not as strong as the influence of layout, especially if the maintenance system was previously in good condition.

Based on the results of this study, there are several suggestions that can be taken to improve the production process in the industry (1) Because layout has a greater influence on production efficiency, companies should focus on redesigning a more efficient layout to improve work flow and reduce waiting time. (2) Although its influence is smaller compared to layout, machine maintenance is still crucial to prevent downtime and damage that can hinder production. (3) Future studies can include other variables such as production technology, workforce skills, or external factors that can affect the results of the study.

D. Conclusion

The results of this study show interesting dynamics between machine maintenance and layout in influencing the production process at PT. Kreasi Kemas Indonesia. Because the analysis of machine maintenance results does not have a significant influence on the production process caused by several factors such as machine maintenance that has been carried out so far is still reactive maintenance rather than predictive maintenance. Maintenance that is only carried out when the machine is damaged will have an impact on high downtime and decreased production efficiency. In addition, the results of the study found that the layout was proven to have a significant influence on the production process, indicating that an optimal facility layout can improve workflow, reduce material transfer time, and maximize production space efficiency. A good layout can also improve work safety and comfort, thus having a positive impact on employee productivity. Meanwhile, the results of simultaneous testing showed that machine maintenance and layout together had a significant influence on the production process. These results indicate that machine maintenance still has an important contribution if integrated with an efficient layout arrangement. In this study, a good layout is able to compensate for deficiencies in machine maintenance. This study provides recommendations for implementing predictive maintenance through highly relevant analytical data to solve problems. Predictive maintenance allows companies to detect potential breakdowns early and plan maintenance in a timely manner, thereby reducing the risk of production disruption. In addition, the gradual placement of old machine parts is also a strategic step to maintain the continuity of the production process. Recommendations for further research can be made so that other companies can provide better generalizations. Comparing results across manufacturing industries will provide new insights into how machine maintenance and layout affect production in different contexts, as well as help identify best practices that can be applied.

E. Acknowledgements

We would like to thank the Universitas Muhammadiyah Jakarta for the support of the effect of machine maintenance and layout on the production process.

References

- Achouch, M., Dimitrova, M., Ziane, K., Sattarpanah Karganroudi, S., Dhouib, R., Ibrahim, H., & Adda, M. (2022). On Predictive Maintenance in Industry 4.0: Overview, Models, and Challenges. *Applied Sciences*, 12(16). <https://doi.org/10.3390/app12168081>
- Aswad, M. (2024). Redesigning the Layout of Plastic Waste Processing Production Facilities at PT KIMA Using the Computerized Relationship Layout Planning (Corelap) Method. *Journal of Agrocomplex and Engineering*, 1(1).
- Ayvaz, S., & Alpaz, K. (2021). Predictive maintenance system for production lines in manufacturing: A machine learning approach using IoT data in real-time. *Expert Systems with Applications*, 173, 114598. <https://doi.org/10.1016/j.eswa.2021.114598>
- Bousdekis, A., Lepenioti, K., Apostolou, D., & Mentzas, G. (2021). A Review of Data-Driven Decision-Making Methods for Industry 4.0 Maintenance Applications. *Electronics*, 10(7), Article 7. <https://doi.org/10.3390/electronics10070828>
- Ciano, M. P., Dallasega, P., Orzes, G., & Rossi, T. (2021). One-to-one relationships between Industry 4.0 technologies and Lean Production techniques: A multiple case study. *International Journal of Production Research*, 59(5), 1386–1410. <https://doi.org/10.1080/00207543.2020.1821119>
- Dalzochio, J., Kunst, R., Pignaton, E., Binotto, A., Sanyal, S., Favilla, J., & Barbosa, J. (2020). Machine learning and reasoning for predictive maintenance in Industry 4.0: Current status and challenges. *Computers in Industry*, 123, 103298. <https://doi.org/10.1016/j.compind.2020.103298>
- Dogan, A., & Birant, D. (2021). Machine learning and data mining in manufacturing. *Expert Systems with Applications*, 166, 114060. <https://doi.org/10.1016/j.eswa.2020.114060>
- Effendy, E. E., & Gopar, I. A. (2024). The Influence of Career Development, Work Environment and Work Discipline on Employpess Performance of PT. Sintertech. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(2). <https://doi.org/10.31851/jmksp.v9i2.15284>
- Foresti, R., Rossi, S., Magnani, M., Guarino Lo Bianco, C., & Delmonte, N. (2020). Smart Society and Artificial Intelligence: Big Data Scheduling and the Global Standard Method Applied to Smart Maintenance. *Engineering*, 6(7), 835–846. <https://doi.org/10.1016/j.eng.2019.11.014>
- Haviland, S., & Robbins, S. (2021). Career and Technical Education as a Conduit for Skilled Technical Careers: A Targeted Research Review and Framework for Future Research. *ETS Research Report Series*, 2021(1), 1–42. <https://doi.org/10.1002/ets2.12318>

- Iyer, K. J., Narula, N., Binu, M., & Duffy, V. G. (2023). Improving Facility Layout Using an Ergonomics and Simulation-Based Approach. In V. G. Duffy (Ed.), *Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management* (pp. 102–119). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-35741-1_9
- Jamwal, A., Agrawal, R., Sharma, M., & Giallanza, A. (2021). Industry 4.0 Technologies for Manufacturing Sustainability: A Systematic Review and Future Research Directions. *Applied Sciences*, 11(12). <https://doi.org/10.3390/app11125725>
- Lango, R. K., Sopiah, S., & Syihabudhin, S. (2024). The Influence of Transformational Leadership Style on Employee Performance Through Work Motivation and Organizational Culture as Mediating Variables. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(2). <https://doi.org/10.31851/jmksp.v9i2.15893>
- Lee, J., Azamfar, M., Singh, J., & Siahpour, S. (2020). Integration of digital twin and deep learning in cyber-physical systems: Towards smart manufacturing. *IET Collaborative Intelligent Manufacturing*, 2(1), 34–36. <https://doi.org/10.1049/iet-cim.2020.0009>
- Li, L., Wang, Y., & Lin, K.-Y. (2021). Preventive maintenance scheduling optimization based on opportunistic production-maintenance synchronization. *Journal of Intelligent Manufacturing*, 32(2), 545–558. <https://doi.org/10.1007/s10845-020-01588-9>
- Liu, M., Fang, S., Dong, H., & Xu, C. (2021). Review of digital twin about concepts, technologies, and industrial applications. *Journal of Manufacturing Systems*, 58, 346–361. <https://doi.org/10.1016/j.jmsy.2020.06.017>
- Mutaufiq, A., & Aisyyah, I. (2021). The Influence of Raw Material Planning and Machine Maintenance on the Effectiveness of the Production Process. *Jurnal Ekonomi dan Bisnis*, 1(1). <https://doi.org/10.56145/ekonomibisnis.v1i1.31>
- Muthia, C., Asnawi, M., & Firah, A. F. A. (2023). The Effect of Production Process Efficiency on PT. Charoen Pokphand Indonesia Medan Branch. *Journal Economic Management and Business*, 2(2). <https://doi.org/10.46576/jfeb.v2i2.4174>
- Palange, A., & Dhatrak, P. (2021). Lean manufacturing a vital tool to enhance productivity in manufacturing. *Materials Today: Proceedings*, 46, 729–736. <https://doi.org/10.1016/j.matpr.2020.12.193>
- Paul, S. K., & Chowdhury, P. (2020). A production recovery plan in manufacturing supply chains for a high-demand item during COVID-19. *International Journal of Physical Distribution & Logistics Management*, 51(2), 104–125. <https://doi.org/10.1108/IJPDLM-04-2020-0127>
- Portella, A., & França, M. (2024). *Racial Wage Gaps: The Role of Private Schooling, Technical Education and Graduate Degrees* (SSRN Scholarly Paper 4839428). Social Science Research Network. <https://doi.org/10.2139/ssrn.4839428>
- Ruiz-Sarmiento, J.-R., Monroy, J., Moreno, F.-A., Galindo, C., Bonelo, J.-M., & Gonzalez-Jimenez, J. (2020). A predictive model for the maintenance of industrial machinery in the context of industry 4.0. *Engineering Applications of Artificial Intelligence*, 87, 103289. <https://doi.org/10.1016/j.engappai.2019.103289>

- Salawu, E. Y., Awoyemi, O. O., Akerekan, O. E., Afolalu, S. A., Kayode, J. F., Ongbali, S. O., Airewa, I., & Edun, B. M. (2023). Impact of Maintenance on Machine Reliability: A Review. *E3S Web of Conferences*, 430, 01226. <https://doi.org/10.1051/e3sconf/202343001226>
- Sastra, A. A., Anif, S., & Haryanto, S. (2024). Motoric Learning Management in Kindergarten in Pekalongan, Indonesia. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(2),. <https://doi.org/10.31851/jmksp.v9i2.16193>
- Shahin, M., Chen, F. F., Bouzary, H., & Krishnaiyer, K. (2020). Integration of Lean practices and Industry 4.0 technologies: Smart manufacturing for next-generation enterprises. *The International Journal of Advanced Manufacturing Technology*, 107(5), 2927–2936. <https://doi.org/10.1007/s00170-020-05124-0>
- Siregar, S. A. S., Lubis, F. A., & Harahap, M. I. (2024). Marketing Communication Strategy in Increasing the Number of Advertisements: A Case Study of RRI Medan. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 9(2), Article 2. <https://doi.org/10.31851/jmksp.v9i2.16307>
- Zaidi, M. S., Mahmood, S., Jiran, N. S., & Hassan, M. F. (2022). Layout Improvement on Ergonomically Working Conditions at Jabatan Akauntan Negara Malaysia Negeri Sabah. *Journal of Design for Sustainable and Environment*, 4(2),.
- Zheng, T., Ardolino, M., Bacchetti, A., & Perona, M. (2021). The applications of Industry 4.0 technologies in manufacturing context: A systematic literature review. *International Journal of Production Research*, 59(6), 1922–1954. <https://doi.org/10.1080/00207543.2020.1824085>

The Influence of the Principal's Role on the Pedagogic Competence of State Junior High School Teachers

Hendang Zeta Lestari¹, Nurkolis¹, Ngurah Ayu Nyoman Murniati¹

¹Universitas PGRI Semarang, Central Java, Indonesia

Corresponding author e-mail: hendzeta@gmail.com

Article History: Received on 8 January 2025, Revised on 20 February 2025,
Published on 10 March 2025

Abstract: This study aims to determine the extent of the influence of the principal's role on the pedagogical competence of junior high school teachers in Rembang District, Rembang Regency. The population in this study was 209 junior high school teachers in Rembang District, Rembang Regency. The research sample was 137 teachers using a proportional random sampling technique. The data collection technique used was a questionnaire. The data processing technique used a simple regression test. The results of the study showed that there was a positive and significant influence of the principal's role on teacher pedagogical competence, which was stated by the regression equation $Y = 44.549 + 0.646X$ and a contribution of 64.0%. It is recommended for teachers to create a safe and comfortable learning environment for students by creating an atmosphere that supports learning activities. Principals are advised to improve their ability to manage school administration.

Keywords: Competence, Pedagogy, Role of the Principal

A. Introduction

Education is one of the important aspects in the development of a nation. In this context, the quality of education is greatly influenced by various factors, one of which is the quality of educators or teachers (Baier et al., 2019; Fomba et al., 2023). Teacher pedagogical competence, which includes the ability to design and implement learning, plays a very important role in improving educational outcomes in schools (Montilla et al., 2023; Surtini & Muhtar, 2024). Therefore, the development of teacher pedagogical competence must be a priority in the education system (Garzón Artacho et al., 2020). Professional teachers are required to meet minimum academic qualifications and be certified as educators. In Government Regulation of the Republic of Indonesia Number 57 of 2021 concerning National Education Standards, Article 20 paragraph 2, the minimum criteria for educator competency as referred to in paragraph (1) include pedagogical competency, personality competency, social competency, and professional competency. Mulyasa (2017) states that pedagogical competency is the ability to manage student learning, which

includes understanding students, designing and implementing learning, evaluating learning outcomes, and developing students to actualize their various potentials.

Pedagogical competency is the ability to understand students in depth and organize educational learning (Surtini & Muhtar, 2024; Zainuddin & Perera, 2017). A teacher's pedagogical competency is characterized by his/her ability to organize a quality learning process, actualize the various potentials possessed by each student through various methods such as enrichment or remedial, and attitudes and actions that can be used as examples (Ilmiani et al., 2023; Nainggolan et al., 2023). Furthermore, Ramayulis (2018) stated that teacher pedagogical competence is the teacher's ability to manage student learning, which at least includes (1) understanding students; (2) the ability to manage and implement learning; (3) the ability to utilize learning technology; (4) the ability to carry out evaluations of learning outcomes; and (5) developing students to actualize their various potentials.

In the Regulation of the Director General of Teachers and Education Staff of the Ministry of Education, Culture, Research, and Technology Number 2626/B/HK.04.01/2023 concerning the Teacher Competency Model, it is explained that pedagogical competence is the ability to manage student learning. The ability to manage learning to achieve student-centered learning goals. It is further explained that pedagogical competence is indicated by the following indicators: (a) a safe and comfortable learning environment for students; (b) effective student-centered learning; and (c) student-centered assessment, feedback, and reporting. According to Sagala (2018), there are four things about mastery of pedagogical competence that teachers must have, including (1) understanding educational insight and philosophy; (2) understanding the potential and diversity of students; (3) being able to develop a curriculum/syllabus; and (4) being able to prepare learning plans and strategies. Mulyasa (2018) mentions the dimensions and indicators of teacher pedagogical competence, namely: (a) understanding students, (b) planning and implementing learning, (c) evaluating learning outcomes, and (d) developing students to actualize their various potentials.

At the junior high school level, teacher pedagogical competence affects the quality of the learning process and the results achieved by students (Lauermann & ten Hagen, 2021). One of the factors that plays a role in improving teacher pedagogical competence is the role of the principal (Park et al., 2019). The principal has a great responsibility not only in managing school administration but also in providing direction and support to teachers in developing their professional abilities, including pedagogical competence (Karim et al., 2021). A principal who has good leadership and is able to motivate and support teacher self-development can have a positive impact on their pedagogical competence (Siswanto et al., 2020). On the other hand, a principal who pays less attention to improving teacher pedagogical competence can have a negative impact on the quality of learning in schools.

The pedagogical competence of junior high school teachers in Rembang District, Rembang Regency, still has many weaknesses. The pedagogical competence value in teacher performance assessments over the past three years has tended to decline. This is because teachers do not try to improve the learning carried out in their classes. Most teachers have not been able to create a safe and comfortable learning environment. Teachers have not mastered learning theories and educational learning principles. In carrying out learning, teachers still dominate learning with lecture and assignment methods. The results of the principal's supervision show that teachers who implement learning using learning media are still very limited. Teachers have also not applied innovative learning methods and models. Most use the lecture method so that learning feels boring. Information technology as a tool that should be used by teachers to make learning more interesting for students' learning interests has not been widely utilized by teachers of State Junior High Schools in Rembang District, Rembang Regency. Various up-to-date information related to education should be accessible to teachers through ICT and used as a learning resource. In communicating with students, teachers are still unable to communicate effectively, empathetically, and politely.

Teachers become figures feared by students. In carrying out assessments, teachers should carry out 3 types of assessments, namely diagnostic assessments, formative assessments, and summative assessments. Most of the teachers of State Junior High Schools in Rembang District ignore diagnostic assessments. By not carrying out diagnostic assessments, the learning plans made by teachers do not match the characteristics and abilities of students. Teachers' pedagogical competence is greatly influenced by two aspects, namely internal factors and external factors. External factors that provide support from outside, related to the school environment, facilities and infrastructure, the role and managerial abilities of the principal, development programs, and the role of the community. Amrul et al. (2023), in their research, stated that the role of the principal influences the pedagogical competence of teachers in Cluster III, Panakkukang District, Makassar City. The higher the value of the principal's policy, the higher the teacher's pedagogical competence.

Mulyasa (2014) stated that the role of the principal is an important and most determining part in the success or failure of education carried out by teachers and education personnel. Navaridas-Nalda et al. (2020) stated that the role of the principal is a force to move and influence people. The principal acts as a tool, means, or process to persuade people to be willing to do something voluntarily. Ganon-Shilon & Schechter (2019) explains that the principal, in the sense of a leader in a school, is someone who is the driving force in every activity of the school community. The principal is required to be able to make decisions or policies in order to achieve school goals. This will be achieved if managed by a good leader. The principal, as a leader in a school organization, has several roles as an educator, manager, administrator, leader, and supervisor (Thessin & Louis, 2019).

Decree of the Minister of National Education Number 162/U/2003, concerning Guidelines for Assigning Teachers as Principals, is in accordance with the acronym EMASLEC, namely: Educator, Manager, Administrator, Supervisor, Leader, Entrepreneur, Climate creator. Many problems were found related to the role of principals from 6 public junior high schools in Rembang District. As educators, principals have not been able to provide guidance related to teacher performance, from planning and implementation to evaluation of learning. As a manager, most of the principals of public junior high schools in Rembang District have also not prepared school programs that empower school resources to make the established school programs a success. The school programs created by the principal have never changed. From year to year, the school programs created by the principal are always the same, not taking into account existing resources. In managing administration, be it the administration of teaching and learning activities, the administration of facilities and infrastructure, or financial administration, some principals leave it to teachers. This is very disruptive to teachers in carrying out their duties. The socialization of financial administration carried out by the relevant agency is only understood by teachers who serve as school treasurers, while the principal only receives clean reports made by the school treasurer. Supervision carried out by the principal as an implementation of the principal's role as a supervisor is still far from what is expected.

In preparing supervision plans, most principals prepare them themselves, without involving teachers in preparing the plans. The purpose of supervision is also not oriented towards improving teacher competence and the quality of learning in the classroom. The implementation of supervision only aims to fulfill obligations as a principal. The implementation of supervision is still largely not in accordance with the provisions. The principal who carries out supervision has not really hit the mark and is not able to help teachers improve their competence. The principal also does not use the results of the supervision evaluation to carry out follow-up actions. From the findings of the various problems above, the author is interested in conducting research to explore teacher perceptions about teacher pedagogical competence and the role of the principal so that it is found how much relationship and influence the role of the principal has on the pedagogical competence of junior high school teachers in Rembang District, Rembang Regency. So specifically, the purpose of this research is to determine the influence of the role of the principal on the pedagogical competence of junior high school teachers in Rembang District, Rembang Regency.

B. Methods

This study uses a quantitative approach. This approach aims to test certain theories by looking at the influence between variables. According to Sugiyono (2019), the quantitative approach is a research method based on the philosophy of positivism, used to research a certain population or sample, data collection using research

instruments, and quantitative/statistical data analysis, with the aim of testing the established hypothesis. Firdaus et al. (2021) states that there are several methods that can be used to test the hypothesis, including survey methods, ex post facto, experiments, evaluations, action research, and policy research. This research is a study with the ex post facto method. According to Sharma (2019), ex post facto research examines events that have occurred, which are then traced back to find out the factors that can cause the incident.

The research instrument used in data collection is a questionnaire. A questionnaire is a data collection technique by giving a set of questions or written statements to respondents to answer. The questionnaire was chosen to be used because the respondents were large in number, could read well, and could reveal things that were confidential. To produce quantitative data, the questionnaire was equipped with a measurement scale. In this study, a Likert scale was used, namely to measure teachers' opinions or perceptions about the problems that were the research variables. In this study, inferential (quantitative) analysis was used to process data from the research results. The steps that must be taken in the analysis method are to conduct an analysis requirement test to determine data normality, linearity between variables, and homogeneity between variables. After the analysis requirement test was carried out, it continued with a regression test with the stages of the ANOVA test, regression coefficient test, correlation test, and determination coefficient test.

C. Results and Discussion

One of the requirements tests carried out is the normality test. The data normality test aims to determine whether the distribution of research data is normal or not. The data normality test is carried out using the Kolmogorov-Smirnov test analysis. The basis for decision-making in the normality test is if the significance value is $>$ from the α -level (0.005), then the data of the variables studied are normally distributed.

**Table 1. Normality Test of Teacher Pedagogical Competence
One-Sample Kolmogorov-Smirnov Test**

		Teacher Pedagogical Competence
N		137
Normal Parameters ^{a,b}	Mean	149.64
	Std. Deviation	23.588
Most Extreme Differences	Absolute	.065
	Positive	.065
	Negative	-.048
Test Statistic		.065
Asymp. Sig. (2-tailed)		.200 ^{c,d}

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on the results of the data normality test in the table above, the Asymp. Sig value of teacher performance is 0.200. So, the Asymp. Sig-value $> \alpha$ is $0.200 > 0.05$. So, it can be concluded that the data on the teacher's pedagogical competence variable is normally distributed and meets the requirements of the regression test.

**Table 2. Normality Test of the Principal's Role
 One-Sample Kolmogorov-Smirnov Test**

The Role of the Principal		
N		137
Normal Parameters ^{a,b}	Mean	162.62
	Std. Deviation	29.210
Most Extreme Differences	Absolute	.073
	Positive	.070
	Negative	-.073
Test Statistic		.073
Asymp. Sig. (2-tailed)		.071 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

Based on the results of the data normality test in the table above, the Asymp. Sig value of teacher performance is 0.071. So, the Asymp. Sig-value $> \alpha$ is $0.071 > 0.05$. So, it can be concluded that the data on the principal's role variable is normally distributed and meets the requirements of the regression test. The linearity test aims to determine whether two variables have a linear relationship or not significantly. The basis for making decisions on the linearity test is if the Sig. Deviation from Linearity value > 0.05 , then there is a linear relationship between variable X and variable Y.

**Table 3. Linearity Test of the Principal's Role on
 Teacher Pedagogical Competence
 ANOVA Table**

			Sum of Squares	df	Mean Square	F	Sig.
Teacher Pedagogical Competence * Principal's Role	Between Groups	(Combined)	61402.999	54	1137.093	6.535	.000
		Linearity	48463.897	1	48463.897	278.519	.000
		Deviation from Linearity	12939.102	53	244.134	1.403	.083
	Within Groups		14268.475	82	174.006		
	Total		75671.474	136			

The results of the linearity test of the principal's role on teacher pedagogical competence obtained a Deviation from Linearity value of 0.083. This value indicates that the deviation from linearity is greater than the significance level, namely $0.083 > 0.05$. Based on the basis of decision-making in the linearity test, it can be concluded that the relationship between the principal's role variable and the teacher's

pedagogical competence variable is linear. The homogeneity test is used to determine whether the data from the samples obtained are homogeneous or not by comparing the two variances. The requirement for homogeneity testing to be carried out is if both data have been proven to be normally distributed. In this study, the data homogeneity test used the Bartlett-Levene test method, with the criterion for accepting homogeneity being if the significance value of the calculation result is greater than α (0.05), then it is said to be homogeneous and vice versa.

Table 4. Homogeneity Test of Teachers' Pedagogical Competence on the Role of the Principal
Test of Homogeneity of Variances

Teacher Pedagogical Competence on the Role of the Principal				
Levene Statistic	df1	df2	Sig.	
2.214	1	272	.123	

The results of the homogeneity test of teacher pedagogical competence on the role of the principal obtained a significance value (sig) of 0.123. So the significance value is > 0.05 , so it can be concluded that the data on the teacher pedagogical competence variable and the principal role variable have the same variance or are homogeneous. The hypothesis proposed in this study is that there is an influence of the principal's role on the pedagogical competence of junior high school teachers in Rembang District, Rembang Regency. For hypothesis testing, the ANOVA test was used. The basis for decision-making in the ANOVA test is if the Sig. value < 0.05 , then there is an influence of the independent variable on the dependent variable.

Table 5. ANOVA Test of the Principal's Role on Teachers' Pedagogical Competence
ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48463.897	1	48463.897	240.471	.000b
	Residual	27207.577	135	201.538		
	Total	75671.474	136			

a. Dependent Variable: Teacher Pedagogical Competence

b. Predictors: (Constant), The Role of the Principal

Based on the table of the results of the ANOVA test of the role of the principal on the teacher's pedagogical competence above, the significance value is 0.000. This significance value is smaller than the significance level of 0.05 or $0.000 < 0.05$. From these results, it can be concluded that the hypothesis is accepted or there is an influence of the role of the principal on the teacher's pedagogical competence. To determine the regression equation using the regression coefficient test. The results of the regression coefficient test are also used to determine the level of significance of the influence of the independent variable on the dependent variable. The basis for making the decision is if the t-table value $< t$ -count, then the influence of the

independent variable on the dependent variable is significant. The t-table value of 137 data is 1.97796.

Table 6. Regression Coefficient Test of the Principal's Role on Teacher Pedagogical Competence Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	44.549	6.885		6.471	.000
The Role of the Principal	.646	.042	.800	15.507	.000

a. Dependent Variable: Teacher Pedagogical Competence

The results of the regression coefficient test obtained a table of coefficients of the principal's role on teacher pedagogical competence, which showed a constant value of 44.549 and a coefficient value of 0.646. From these results, a simple regression equation can be made, namely $Y = 44.549 + 0.646X$. The Sig. value in the coefficients table of the principal's role on teacher pedagogical competence is 0.000, and the calculated t value is 6.471. Sig. value < significance level 0.05 and the calculated t-value > t-table (1.97796). These results indicate that there is a significant influence of the principal's role on teacher pedagogical competence. Structural testing in research is a test carried out to test the relationship between latent constructs in a structural model. Several things that can be done in structural testing are correlation testing and determination coefficient testing. The results of the correlation test are expressed in the form of a correlation coefficient. The basis for decision-making in the correlation test is: If the Sig. value (2-tailed) > 0.05, then there is a relationship between the independent variable and the dependent variable. Determination of criteria between variables uses the following provisions: 0.000–0.199 fragile category; 0.200–0.399 weak category; 0.400–0.599 moderate category; 0.600–0.799 strong category; and 0.800–1.000 forceful category.

Table 7. Correlation Test of the Principal's Role on Teacher Pedagogical Competence Correlations

		Teacher Pedagogical Competence	The Role of the Principal
Teacher Pedagogical Competence	Pearson Correlation	1	.800**
	Sig. (2-tailed)		.000
	N	137	137
The Role of the Principal	Pearson Correlation	.800**	1
	Sig. (2-tailed)	.000	
	N	137	137

** . Correlation is significant at the 0.01 level (2-tailed).

From the Correlations table, the Sig. (2-tailed) value is 0.000. The Sig. (2-tailed) value is smaller than the significance level of $0.000 < 0.05$. So, it can be concluded that there is a relationship between the role of the principal and the teacher's pedagogical competence. The correlation coefficient of the principal's role and the teacher's pedagogical competence is 0.800. So, the relationship between the principal's role and the teacher's pedagogical competence is included in the "very strong" category. To find out the amount of contribution given by the independent variable to the dependent variable, namely by conducting a determination coefficient test. From the determination coefficient test, the determination coefficient (R^2) is obtained, which is called the determining coefficient because the variance that occurs in the dependent variable can be explained through the variance that occurs in the independent variable.

Table 8. Test of the Determination Coefficient of the Principal's Role on Teachers' Pedagogical Competence
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.800 ^a	.640	.638	14.196

a. Predictors: (Constant), Role of Principal

Based on the test table of the determination coefficient of the principal's role on teacher pedagogical competence, the R square value obtained was 0.640, meaning that the magnitude of the influence of the principal's role on teacher pedagogical competence is 64.0%. The results of the hypothesis test obtained the results of H_0 rejected and H_a accepted. The calculated t-value is greater than the t-table. So it can be concluded that there is a significant influence of the principal's role on teacher pedagogical competence. The simple regression equation formed is $Y = 44.549 + 0.646X$. The correlation coefficient of the principal's role on teacher pedagogical competence is 0.800, so the relationship between the principal's role and teacher pedagogical competence is included in the very strong category. The magnitude of the influence of the principal's role on teacher pedagogical competence is 64.0%. The remaining 36.0% is influenced by other factors. Factors other than the principal's role that influence teacher pedagogical competence are the school environment, facilities and infrastructure, principal managerial abilities, development programs, community roles, teacher work discipline, principal leadership style, principal academic supervision, school organizational culture, job satisfaction, work motivation, and school organizational climate. The results of this study are in accordance with the results of the study by Amrul et al. (2023), which stated that the role of the principal influences the pedagogical competence of teachers in Cluster III, Panakkukang District, Makassar City. The higher the value of the principal's policy, the higher the teacher's pedagogical competence. Khaleel et al. (2021) stated that the role of the principal is an important and most determining part in the success or failure of education carried out by teachers and education personnel.

The role of the principal of junior high schools in Rembang District, Rembang Regency, needs to be improved because the role of the principal has a positive influence on the pedagogical competence of teachers. Some things that can be done in an effort to improve the role of the principal are to improve the lowest dimension of the principal's role, namely the role of the principal as an administrator. The principal must improve his/her ability to manage the administration of human resources, be it students, teachers, or employees at the school. In addition to human resource administration, the principal must also improve his/her ability to manage the administration of facilities and infrastructure, finance, and archiving.

D. Conclusion

Based on the results of the hypothesis test and discussion, it can be concluded that the results of the research conducted are that there is a positive and significant influence of the principal's role on the pedagogical competence of junior high school teachers in Rembang District, Rembang Regency, which is stated by the simple regression equation $Y = 44.549 + 0.646X$. The correlation coefficient of the principal's role on the teacher's pedagogical competence is 0.800. The magnitude of the influence of the principal's role on the teacher's pedagogical competence is 64.0%. It is recommended that teachers create a safe and comfortable learning environment for students by creating an atmosphere that supports learning activities in the classroom and providing appropriate attention to students. It is recommended that principals improve their ability to manage school administration starting from human resource administration, student affairs, finance, facilities and infrastructure, to archival administration.

E. Acknowledgement

We thank to our colleagues who helped us with this article.

References

- Amrul, A., Sida, S., & Muhajir, M. (2023). The Influence of Principal's Leadership Style and Policy on Teachers' Pedagogical Competence. *Briliant: Jurnal Riset Dan Konseptual*, 8(1), 48. <https://doi.org/10.28926/briliant.v8i1.1087>
- Baier, F., Decker, A., Voss, T., Kleickmann, T., Klusmann, U., & Kunter, M. (2019). What Makes a Good Teacher? The Relative Importance of Mathematics Teachers' Cognitive Ability, Personality, Knowledge, Beliefs, and Motivation for Instructional Quality. *British Journal of Educational Psychology*, 89(4), 767-786. <https://doi.org/10.1111/bjep.12256>
- Firdaus, F., Zulfadilla, Z., & Caniago, F. (2021). Research Methodology : Types in the New Perspective. *Manazhim*, 3(1), 1-16. <https://doi.org/10.36088/manazhim.v3i1.903>

- Fomba, B. K., Talla, D. N. D. F., & Ningaye, P. (2023). Institutional Quality and Education Quality in Developing Countries: Effects and Transmission Channels. *Journal of the Knowledge Economy*, 14(1), 86–115. <https://doi.org/10.1007/s13132-021-00869-9>
- Ganon-Shilon, S., & Schechter, C. (2019). School Principals' Sense-Making of Their Leadership Role during Reform Implementation. *International Journal of Leadership in Education*, 22(3), 279–300. <https://doi.org/10.1080/13603124.2018.1450996>
- Garzón Artacho, E., Martínez, T. S., Ortega Martín, J. L., Marín Marín, J. A., & Gómez García, G. (2020). Teacher Training in Lifelong Learning—The Importance of Digital Competence in the Encouragement of Teaching Innovation. *Sustainability*, 12(7), 2852. <https://doi.org/10.3390/su12072852>
- Ilmiani, A. M., Marsiah, M., Nuryaman, A. D., & Salim, O. (2023). Arabic Teachers: Professional Competence and Reflective Teaching. *Jurnal Al-Maqayis*, 10(2), 1–20. <https://doi.org/10.18592/jams.v10i2.8820>
- Karim, A., Kartiko, A., Daulay, D. E., & Kumalasari, I. D. (2021). The Effect of The Supervision of The Principal and The Professional Competency of Teachers on Teacher Performance in Private MI in Pacet District. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 6(3), 497–512. <https://doi.org/10.31538/ndh.v6i3.1686>
- Khaleel, N., Alhosani, M., & Duyar, I. (2021). The Role of School Principals in Promoting Inclusive Schools: A Teachers' Perspective. *Frontiers in Education*, 6. <https://doi.org/10.3389/feduc.2021.603241>
- Lauermann, F., & ten Hagen, I. (2021). Do Teachers' Perceived Teaching Competence and Self-Efficacy Affect Students' Academic Outcomes? A Closer Look at Student-Reported Classroom Processes and Outcomes. *Educational Psychologist*, 56(4), 265–282. <https://doi.org/10.1080/00461520.2021.1991355>
- Montilla, V. R., Rodriguez, R., C. Alianzas, J. V., & Gimpaya, R. (2023). Teachers' Pedagogical Digital Competence as Relevant Factors on Academic Motivation and Performance in Physical Education. *International Journal of Scientific and Management Research*, 06(06), 45–58. <https://doi.org/10.37502/IJSMR.2023.6604>
- Mulyasa. (2018). *Development and Implementation of the 2013 Curriculum*. PT Remaja Rosdakarya.
- Mulyasa, E. (2017). *Teacher Competency Test and Performance Assessment*. Remaja Rosdakarya.
- Mulyasa E. (2014). *Principal Leadership Management*. Bumi Aksara.
- Nainggolan, V., Situmorang, M. H., Anggreni, K., Supiani, D. A., & Sitompul, H. S. (2023). Analyzing Teachers' Pedagogical Competence in Mathematics Learning at SD IT Cendekia Pematangsiantar. *Edu Cendikia: Jurnal Ilmiah Kependidikan*, 3(02), 268–275. <https://doi.org/10.47709/educendikia.v3i02.2539>
- Navaridas-Nalda, F., Clavel-San Emeterio, M., Fernández-Ortiz, R., & Arias-Oliva, M. (2020). The Strategic Influence of School Principal Leadership in the Digital Transformation of Schools. *Computers in Human Behavior*, 112, 106481.

- <https://doi.org/10.1016/j.chb.2020.106481>
- Park, J.-H., Lee, I. H., & Cooc, N. (2019). The Role of School-Level Mechanisms: How Principal Support, Professional Learning Communities, Collective Responsibility, and Group-Level Teacher Expectations Affect Student Achievement. *Educational Administration Quarterly*, 55(5), 742–780. <https://doi.org/10.1177/0013161X18821355>
- Ramayulis. (2018). *Teaching Profession and Ethics*. Jakarta: Kalam Mulia.
- Sagala, S. (2018). *Professional Competencies of Teachers and Education Personnel*. Bandung: Alfabeta.
- Sharma, R. R. (2019). Evolving a Model of Sustainable Leadership: An Ex-post Facto Research. *Vision: The Journal of Business Perspective*, 23(2), 152–169. <https://doi.org/10.1177/0972262919840216>
- Siswanto, H., Hariri, H., Sowiyah, S., & Ridwan, R. (2020). The Influence of Principal Performance on Teachers' Pedagogical Competence. *Journal of Social, Humanity, and Education*, 1(1), 13–26. <https://doi.org/10.35912/jshe.v1i1.259>
- Sugiyono. (2019). *Quantitative, Qualitative and R&D Research Methods*. Alfabeta.
- Surtini, S., & Muhtar, T. (2024). Teachers' Pedagogic Competence in Strengthening Character Education of Students in Elementary Schools: Exploring Effective Strategies. *Jurnal Paedagogy*, 11(3), 568. <https://doi.org/10.33394/jp.v11i3.11904>
- Thessin, R. A., & Louis, K. S. (2019). Supervising School Leaders in a Rapidly Changing World. *Journal of Educational Administration*, 57(5), 434–444. <https://doi.org/10.1108/JEA-09-2019-228>
- Zainuddin, Z., & Perera, C. J. (2017). Exploring Students' Competence, Autonomy and Relatedness in the Flipped Classroom Pedagogical Model. *Journal of Further and Higher Education*, 1–12. <https://doi.org/10.1080/0309877X.2017.1356916>

Intergenerational Social Tensions in the Workplace: Perspectives on the Role of Lecturers in Collaboration

Denny Nabawi¹, Zunaidah¹, Hamira¹, Ahmad Khoirun Najib¹, Rifda Alda Ufaira¹

¹Universitas Sriwijaya, Indralaya, Indonesia

Corresponding author e-mail: dennynabawi@fe.unsri.ac.id

Article History: Received on 30 April 2025, Revised on 16 May 2025,
Published on 04 June 2025

Abstract: This study investigates intergenerational social tensions in the workplace, with a particular focus on how lecturers perceive and navigate these tensions to facilitate collaboration. It examines the influence of perceived control, intentionality, and external attributions in shaping internal attribution processes within an academic environment. A quantitative research approach was adopted utilizing an exploratory model. Data were collected from 118 lecturers in Palembang, Indonesia, through structured questionnaires. Structural Equation Modeling-Partial Least Squares (SEM-PLS) was employed to examine the relationships between variables, with a particular emphasis on attribution theory. External attribution plays a significant mediating role, suggesting that lecturers primarily interpret intergenerational tensions through external factors such as organizational policies and workplace culture before forming personal attributions. This study enhances the understanding of workplace dynamics by applying attribution theory to the context of intergenerational tensions in academia, which underscores the critical role of external attribution in shaping perceptions that influence internal attribution and also offers practical insights for developing inclusive management strategies in fostering effective collaboration across generations.

Keywords: Intergenerational Tensions, Attribution Theory, Lecturers

A. Introduction

Indonesia is the fourth most populous country in the world, with a recorded population of 281.6 million people in 2024 (Badan Pusat Statistik, 2024). Based on data (Badan Pusat Statistik, 2024), the largest contributor to the workforce is the millennial generation (1980-1994) at 35.05%, followed by Generation X (1965-1979) at 28.22%, Generation Z (1995-2010) at 24.42%, and the baby boomer generation (born before 1965) at 12.32% of the total workforce (McCrindle & Wolfinger, 2010).

The number of lecturers in Indonesia in 2022 is 326,554 consisting of 1,165 people aged ≤25 years, 94,819 people aged 26-35 years, 93,529 people aged 36-45 years, 76,007 people aged 46-55 years, 52,078 people aged 56-65 years and 8,956 people aged >65 years (Kemendikbudristek, 2022). The age diversity of lecturers in Indonesia is

significant, with the majority belonging to the millennial, Generation X, and Generation Z groups, while the remaining portion consists of the baby boomer generation. This diversity can lead to social tensions within organizations due to differences in perspectives and backgrounds shaped by various factors, including political, economic, social, and technological influences (M. D. Schmitt, 2017; M. Schmitt & Schmitt, 2024).

Social tension occurs in interactions because there is a mismatch between the expected goals and the means provided to achieve them (Merton, 1938; Sztompka, 1986). This mismatch is indirectly connected to deviations that occur in the workplace through negative emotions. Each individual must be able to manage their emotions to reduce the risk of negative emotional responses, thus to reduce social tension (Jang, 2007; Kabiri et al., 2024).

The interactions that occur in the workplace can be a source of support and a source of stress depending on how the relationships are formed with superiors, colleagues, and subordinates (Sparks & Cooper, 1999). It is explained (Buck, 1972) that supportive leaders in the workplace will experience less stress than those who are critical. This happens because tension between individuals is related to feelings of discomfort that arise due to imbalances in individual psychology (Consiglio, 2014).

Based on the findings of previous research, it is explained that there is social tension across generations that increases the dynamics of the organization and makes it increasingly complex in an organization that is inevitable, including in the world of education (Ariyanto et al., 2023; Makola & Mulaudzi, 2024). Most of the research was conducted in companies with results that support the idea that age differences pose a serious challenge to the sustainability of the organization (Lee, 2022; Mario Kent, 2022; Rudolph & Zacher, 2020). However, the results of the study (Fauzuddin et al., 2022) did not find any cross-generational issues because the company was able to create an inclusive organizational culture in the form of togetherness. In line with that, changing organizational culture in multigenerational is a challenge in itself, but with the right approach, it can be an opportunity to create an inclusive and productive environment by recognizing existing culture as a key factor (Cahyadi et al., 2024; Wicaksono, 2023). Therefore, managing a team with diverse ages is a significant challenge to achieve optimal performance results and create a positive atmosphere in the work environment (Czapran, 2023).

High levels of age diversity can be a double-edged sword in a company, it can be positive or negative (Vraňáková et al., 2021). Therefore, it is necessary to encourage collaboration between lecturers across generations, for example, through training and development and flexible policies to support an inclusive atmosphere (Bhagyalakshmi & Varghese, 2023; Susi Adiaawaty, 2019) due to conflicts between groups. (Gusfield, 1957).

Attribution theory is used to investigate social behavior that occurs in an organization. This theory focuses on how a person's cognitive process is formed to determine the cause of behavior or an event caused by internal factors (disposition) or external factors (situation) (Heider, 1958). This theory supports the study of the reasons behind differences in behavior across generations, and history shows that each generation has a different period with certain specificities that shape their character (Rood, 2011). The cognitive process stages in attribution theory (Heider, 1958) begin with an individual observing activities or behavior, followed by forming a belief that the actions were intentional. Finally, the individual determines whether the behavior was performed deliberately or influenced by external factors. Consequently, each person interprets events uniquely, shaped by their experiences and personal background (Rood, 2011), making it essential to investigate how different generations perceive and assess behaviors in various contexts.

The explanation of the attribution theory based on its causes is put forward by Luthans (2011), the developer of this theory, that internal causes include attitudes, traits, personality, or character and external causes such as certain conditions, environmental conditions, luck, and social pressure. In practice, a person will perceive forming an idea or thought about the activities of other people and conditions in surroundings which cause the person to behave and act following the results of their assumptions through cognitive processes as a result of a person's activities or behavior. This process is described by (Borkowski, 2005) that a person's behavior begins with the emergence of individual personality in workplace as the relevance of the results of interactions which then cause a person to think through their cognitive process whether an incident they are facing comes from internal or external sources, thus producing a reaction in the form of a response to the incident in the form of certain emotions and actions in the form of individual or group responsibility.

Attribution theory (Heider, 1958) became a basic robust concept that is valuable in understanding how a behavior emerges. This theory continues to be developed by researchers who support and refine the attribution theory that a person, both as an actor and observer, behaves based on dispositional (internal) and situational (external) factors with observations that continue to be developed by researchers to refine the previous theory to be more structured, systematic and practical (Fiske & Taylor, 1991; Harvey & Weary, 1985; Jones & Davis, 1965; Jones & Nisbett, 1971; Kelley, 1967; Malle, 2011; Ross, 1977; Weiner, 1985). Strengthened by the results of the latest research that attribution is closely related to motivation, commitment, and job satisfaction as a drive for desire and the surrounding conditions associated with the company's goals. Thus, this (Nabawi et al., 2021). Attribution theory is expected to be able to see the perspective of each cross-generation to understand how they think and act, how the older generation assesses the behavior of the younger generation and vice versa can be observed through cognitive processes of certain assessments in the workplace according to the experiences that shape individuals in each generation to create an inclusive and supportive work environment.

A study by (Sahrah & Abstrak, 2011) explains that individuals with a high perception of control tend to act with greater certainty in achieving success because they believe they have control over their efforts and skills. A strong perception of control also contributes to the formation of beliefs regarding internal factors such as ability, competence, and motivation, which ultimately influence work quality (Sihombing, 2023). Additionally, self-control plays a crucial role in an individual's ability to manage internal factors based on situational conditions, supporting the development of a high perception of control. This, in turn, affects how individuals construct their internal attributions (Saputri et al., 2024). Based on this, the first hypothesis of the study (H1) states that **Perceived control (X1) has a direct positive influence on Internal Attribution (Y).**

Intentionality (deliberateness) can influence the intensity of connections between reference ideas, social anxiety, and paranoia, highlighting its role in shaping internal attribution through perceived control (Morrison, 2012). The perception of intentionality and controllability plays a crucial role in attribution; however, there is still insufficient understanding of how emotional reactions contribute to social violations. Research findings indicate that when individuals have a high perception of intentionality, they tend to perceive inadequate responses with greater intensity, ultimately influencing their perceived control over a given situation (Yao & Siegel, 2021). Therefore, perceived control, shaped by intentionality, contributes to the development of individuals' internal attributions. Based on this, the second hypothesis of the study (H2) states that **Intentionality (X2) has a direct positive influence on Internal Attribution (Y).**

Social experiences and cultural background influence an individual's attribution patterns, both external and internal, ultimately shaping how individuals interpret the outcomes they experience. Strong external attribution can reduce an individual's perception of control over a situation, thereby impacting the formation of internal attributions in response to life events. Conversely, when external attribution weakens, individuals tend to develop stronger internal attributions, perceiving a greater sense of personal control (Shirazi & Biel, 2005). Based on this, the third hypothesis of the study (H3) states that **External Attribution (M) has a direct positive influence on Internal Attribution (Y).**

When an individual receives feedback on their behavior, their perception of control over the given task can change depending on how they associate the outcome with external factors (Sockbeson & DeNisi, 2023). This finding aligns with a previous study by (Docalovich, 1988), which demonstrates that external attribution can reduce an individual's perceived control in certain situations. However, the effectiveness of internal control also plays a crucial role in shaping the connections between influencing factors, motivational drivers, and individuals' tendencies toward unethical behavior, such as cheating. Reinforcing perceived control can help

individuals regulate their behavior and adhere to applicable rules (Aswad et al., 2018). Moreover, strong internal control enhances perceived control, which, in turn, influences how individuals construct external attributions before ultimately forming their internal attribution regarding a situation (Dwi Andayani & Kadek Yuni Candra Dewi, 2024). Therefore, perceived control affects internal attribution indirectly through external attribution, serving as a mediating factor in this process. So, the fourth hypothesis is **(H4) Perceived control (X1) has influence positive through External Attribution (M) to Internal Attribution (Y).**

Individual attributes act as a negative company on a factor external intentional, intentionality in perception they can influence how far they are feel lost control to situation, which ultimately push behavior sigh (Neira & Iglesias, 2014). Besides that, research previously also showed that intentionality plays an important role in the attribution process, where perception of intention or action influences how individuals develop external attribution before finally forming their internal attribution (Zafari & Koeszegi, 2021). Thus, intentionality not only influences internal attribution directly but also through external attribution as a factor mediation in the process of perceiving an individual in a situation. So, the fifth hypothesis in the study is **(H5) Intentionality (X2) has influence positive through External Attribution (M) to Internal Attribution (Y).**

The conceptual research model can be described from these hypotheses as follows :

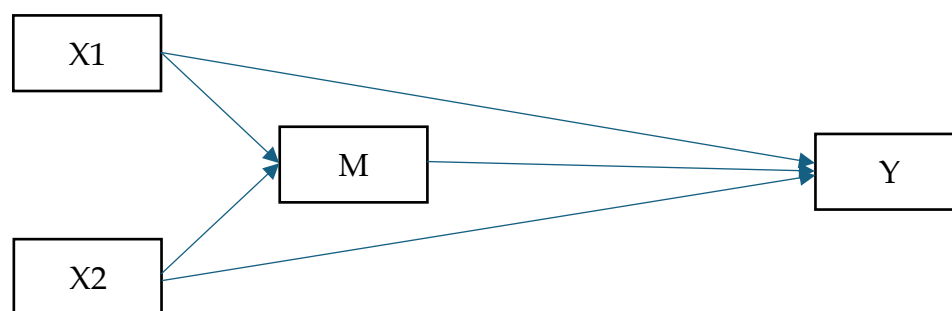


Figure 1. Conceptual Model

Information:

- X1: Perceived Control
- X2: Intentionality
- M : External attribution
- Y : Internal Attribution

The research model is developed based on five hypotheses formulated from previous studies, providing a scientifically accountable foundation. These hypotheses include four key variables: **Perceived Control (X1), Intentionality (X2), External Attribution (M), and Internal Attribution (Y).** These variables extend attribution theory, making it measurable and observable in the context of cross-generational social tensions in the workplace. The study examines these dynamics from the perspective of lecturers, who play a crucial role in fostering collaboration and enhancing human resource quality in Indonesia's education sector.

B. Methods

This study used a quantitative method with an exploratory model approach. This approach is carried out to determine the tension of cross-generational social relations in the workplace through hypotheses that have been developed by experts based on attribution theory (Heider, 1958). The research participants were lecturers under the Ministry of Education, Culture, Research, and Technology of Indonesia in the Province of South Sumatra. The population of lecturers under the auspices of the Ministry of Education, Culture, Research, and Technology is 326,554, 0.3% of whom are under 25 years old, 29% are 26-35 years old, 29% are 36-45 years old, 23% are 46-55 years old, 16% are 56-65 years old and 2.7% are over 65 years old (Kemendikbudristek, 2022).

In South Sumatra Province, there were 6,577 people, consisting of 1,982 state universities and 4,595 private universities (Badan Pusat Statistik Sumsel, 2023). The sample determination method used the minimum sample size of the SEM-PLS model by calculating ten times the number of independent variables (*ten times rule*) (Hair et al., 2019). The use of minimum samples is not an absolute but a basis for determining the minimum research sample. Based on the number of independent variables in the study, consist of two variables, the minimum research sample is 20 people with a sample locus of lecturers under the Ministry of Education, Culture, Research, and Technology of Indonesia in Palembang City, South Sumatra.

Data collection in this study was conducted using a questionnaire, which was distributed to respondents via google forms. Respondents were required to answer a series of structured questions designed to gather relevant information for the study (Sugiyono, 2016). The questionnaire consists of several structured questions representing each research variable that was adopted and adapted through previous research for use in this study. The answer choices for each question will be divided through a likert scale from 1 (Strongly Disagree/STS) to 5 (Strongly Agree/SS).

This study employs latent variables that require specific indicators for measurement, derived from previous research and adapted accordingly. The **Perceived Control (X1)** variable assesses an individual's ability to manage cross-generational tensions in the workplace, including their perceived influence, preventive actions, and capacity to alter workplace dynamics (Weiner, 1985), (Malle, 2011), (Fiske & Taylor, 1991), (Kelley, 1967). **Intentionality (X2)** evaluates whether employees perceive generational tensions as deliberate actions by colleagues, considering intentional interaction choices and their impact on workplace stress (Malle, 2011). **External Attribution (M)** measures the role of workplace factors, such as policies, organizational culture, technological changes, and industry pressures, in shaping intergenerational tensions (Kelley, 1967), (Weiner, 1985). Lastly, **Internal Attribution (Y)** examines whether individuals attribute tensions primarily to personality differences, thought patterns, or personal intentions rather than generational

disparities (Malle, 2011), (Fiske & Taylor, 1991). These indicators collectively provide a comprehensive framework for understanding cross-generational tensions and their attribution within the workplace.

This study develops an exploratory model with several hypotheses to answer research problems through data analysis techniques to measure each variable indicator using SEM-PLS version 4, which can analyze the entire model and its indicators. SEM-PLS statistical analysis aims to predict and does not require the assumption of normal distribution with a relatively small number of samples (Hair et al., 2019).

C. Results and Discussion

The results of this study are calculations of latent variables used as constructs to measure hypotheses that have been made through each indicator in the latent variable. The process and analysis of statistical data through *Structural Equation Modeling* (SEM) with *Partial Least Squares* (PLS) version 4 to confirm all hypotheses through *measurement model* (outer model) and *structure model* (inner model).

The results of the questionnaire received in the study as many as 118 respondents, the lecturers who work under the Ministry of Education, Culture, Research, and Technology of Indonesia in Palembang City. Here are the profile of respondents obtained through the results questionnaire in the study:

Table 1. Profile Respondents

Criteria	Description	Frequency	%age
Age	15-30 Years (Gen Z)	43	36%
	31-45 Years (Millennials)	53	45%
	46-59 Years (Gen X)	14	12%
	≥60 Years (Baby Boomer)	85	7%
Type Sex	Man	59	50%
	Woman	59	50%
Education	S2	95	81%
	S3	23	19%
Years of service	0-2 Years	55	47%
	3-5 Years	23	19%
	>5 Years	40	34%
Total		118	100%

Source: Processed Data

Table 1 shows the variation in respondent demographics. The distribution consists of **36% Generation Z, 45% Millennials, 12% Generation X, and 7% Baby Boomers**. The gender distribution is **50% male and 50% female**. In terms of education, **81% hold a Master's degree, while 19% have a Doctoral degree**. Regarding work experience, **47% have worked for 0-2 years, 19% for 3-5 years, and 34% for more**

than 5 years. The respondent profile indicates a **good diversity** in the sample, allowing for a comprehensive analysis. For further data examination, the study employs **Structural Equation Modeling-Partial Least Squares (SEM-PLS)** as the primary data analysis tool. The first stage of the analysis involves testing the **measurement model (outer model)** through **convergent and discriminant validity analysis**. Convergent analysis begins with a test construct with *Composite Reliability* and Cronbach α must alpha above 0.7 (Chin, 1998).

Table 2. Composite Reliability and Cronbach α

Variable	Cronbach's alpha	Composite reliability (rho_c)
M	0.776	0.848
X1	0.820	0.876
X2	0.723	0.790
Y	0.742	0.825

Source: Processed Data

Composite Reliability and Cronbach's Values are all above 0.7, so the construct used in Table 2 is already good. Then, the mark *Average Variance Extracted (AVE)* must be above 0.5 (Hair et al., 2019), and the minimum value of *outer loading* for every indicator must be above 0.5 (Ghozali, 2008).

Table 3. Average Variance Extracted (AVE)

Variable	Average variance extracted (AVE)
M	0.528
X1	0.588
X2	0.533
Y	0.586

Source: Processed Data

For the **Average Variance Extracted (AVE) values in Table 3**, all variables have scores above 0.5, indicating that the **latent variables adequately explain their respective indicators**. This confirms that the measurement model has sufficient **convergent validity**, ensuring that the constructs capture a significant portion of the variance from their indicators.

Table 4. Outer Loading

Variables	M	X1	X2	Y
M1	0.655			
M2	0.757			
M3	0.760			
M4	0.714			
M5	0.741			
X11		0.759		
X12		0.763		
X13		0.846		
X14		0.851		
X15		0.586		
X21			0.599	
X22			0.516	

X23	0.746
X24	0.740
X25	0.662
Y1	0.704
Y2	0.681
Y3	0.730
Y4	0.689
Y5	0.679

Source: Processed Data

The outer loading results indicate that the connection between indicators (measured variables) and latent variables (constructs that cannot be directly measured) demonstrates good validity and model fit. This suggests that the indicators effectively represent their respective latent variables, supporting the reliability of the measurement model.

After the Convergent Analysis, the next discriminant validity analysis can be seen through *Fornell-Larcker* as follows:

Table 5. Fornell Larcker

Variable	M	X1	X2	Y
M	0.727			
X1	0.377	0.767		
X2	0.436	0.227	0.658	
Y	0.472	0.304	0.367	0.697

Source: Processed Data

The Fornell-Larcker value is represented by the top number in each column for a given variable. This top value must be the highest compared to the numbers below it in the same column, ensuring that each construct shares more variance with its indicators than with other constructs. Based on the outer model test, the analysis of convergent and discriminant validity confirms that the indicators used for each construct have good validity. The measurement model aligns well with the proposed theoretical framework, fulfilling all necessary validity conditions.

The next stage is the test *Structure Model (Inner Model)* with stages beginning with the analysis of coefficient Determination (*R square*), then *Effect Size (F square)*, and *Path Coefficients (Hair et al., 2019)*, as follows:

Table 6. Coefficient Determination (R square)

Variable	R-square	R-square adjusted
M	0.672	0.659
Y	0.770	0.751

Source: Processed Data

Based on the coefficient of determination (*R square*), Table 6 indicates that its influence ranges from moderate (>0.50) to strong (>0.75). This suggests that a substantial

proportion of the variation in the dependent variables can be explained by the independent variables, demonstrating a strong predictive capability of the model.

Table 7. Effect Size (F square)

Variable	M	X1	X2	Y
M				0.715
X1	1.112			0.921
X2	0.678			0.539
Y				

Source: Processed Data

The Effect Size (F square) value shows the impact relatively from a variable that influence to influenced variables with value >0.35 (good). Based on Table 7, the effect size values exceed the standard threshold, indicating that the predictor variables have a substantial influence on the dependent variable. This suggests that the model's explanatory power is strong, with the independent variables making a significant contribution to explaining the variance in the dependent variable.

The final stage of the analysis involves path analysis to test the hypotheses by calculating the t-statistic value with a significance level of 0.05 (5%). This analysis examines the direct influence of the independent variables X1 (Perceived Control) and X2 (Intentionality) on Y (Internal Attribution), as well as the direct effect of M (External Attribution) on Y. Additionally, it evaluates the indirect influence of X1 and X2 on Y through M as a mediating variable. The results of this analysis can be visualized through the path analysis chart presented in the following figure:

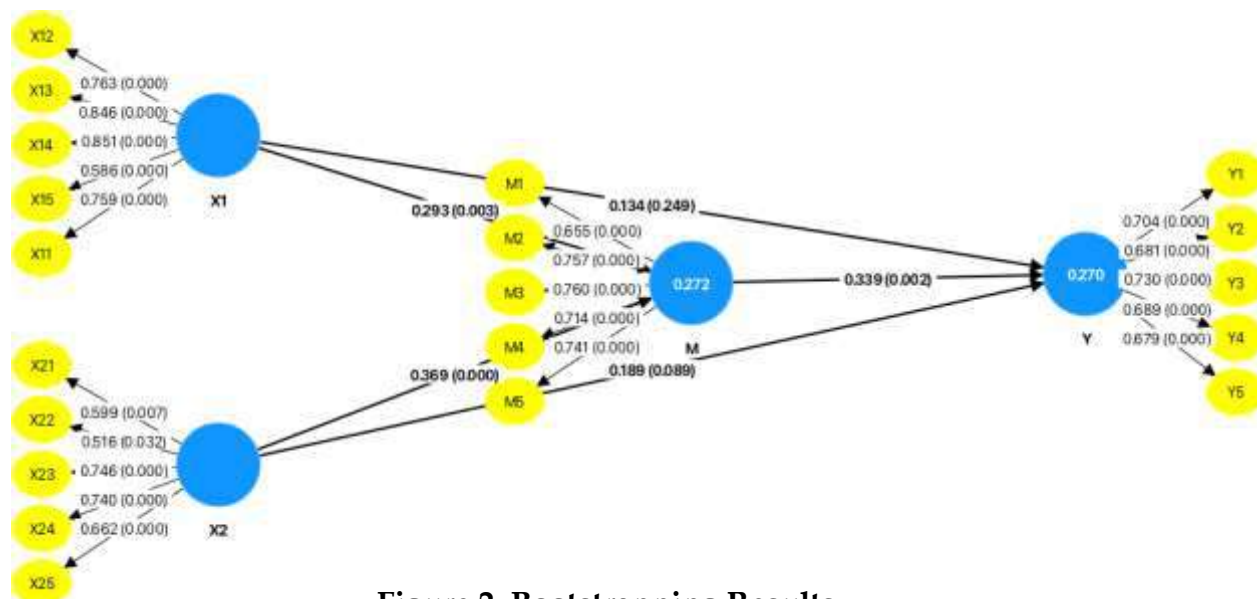


Figure 2. Bootstrapping Results

Based on the results of the path analysis using bootstrapping, variable X1 (Perceived Control) has a non-significant relationship with a path coefficient of 0.134 and a p-value of 0.249. Variable X2 (Intentionality) also has a non-significant relationship, with

a path coefficient of 0.189 and a p-value of 0.089, indicating that the connection between these variables is not statistically significant. In contrast, variable M (External Attribution) has a path coefficient of 0.33 and a p-value of 0.002, indicating a significant relationship.

Furthermore, the indirect influence of variable X1 (Perceived Control) through variable M (External Attribution) on Y (Internal Attribution) has a path coefficient of 0.293 and a p-value of 0.003, confirming that external attribution mediates the relationship between perceived control and internal attribution. Similarly, the indirect effect of variable X2 (Intentionality) through variable M (External Attribution) on Y (Internal Attribution) has a path coefficient of 0.369 and a p-value of 0.000, indicating that external attribution significantly mediates the relationship between intentionality and internal attribution. These findings are summarized in Table 8. Path Coefficients, and Table 9 below:

Table 8. Hypothesis Testing

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
M -> Y	0.339	0.337	0.110	3,084	0.002
X1 -> M	0.293	0.293	0.098	2,999	0.003
X1 -> Y	0.134	0.142	0.116	1.153	0.249
X2 -> M	0.369	0.395	0.085	4.366	0.000
X2 -> Y	0.189	0.204	0.111	1,702	0.089

Source: Processed Data

Table 9. Total Indirect Effect

Variable	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
X1 -> M -> Y	0.099	0.099	0.048	2,055	0.040
X2 -> M -> Y	0.125	0.135	0.058	2.172	0.030

Source: Processed Data

Based on the **Variety test result value in Table 8, Variable X1 (Perceived Control)** does not have a direct influence on **Variable Y (Internal Attribution)**. Similarly, **Variable X2 (Intentionality)** also does not have a direct effect on **Variable Y (Internal Attribution)**. However, **Variable M (External Attribution)** has a significant direct effect on **Variable Y (Internal Attribution)**. Furthermore, as shown in **Table 9, Variables X1 (Perceived Control) and X2 (Intentionality)**, when mediated by **Variable M (External Attribution)**, have a significant influence on **Variable Y (Internal Attribution)**. This indicates that although **X1 and X2** do not directly influence **Y**, their effect becomes significant when mediated by **M**. Therefore, since **X1 and X2** do not directly impact **Y**, but their indirect influence through **M** is significant, **Variable M (External Attribution)** serves as a **perfect mediator** in this relationship.

Table 10. Hypothesis Testing

Hypothesis	Original Sample (O)	T statistics (O/STDEV)	P values	Conclusion
H1: $X1 \rightarrow Y$	0.134	1.153	0.249	H1 Rejected
H3: $X2 \rightarrow Y$	0.189	1,702	0.089	H2 Rejected
H3: $M \rightarrow Y$	0.339	3,084	0.002	H3 Accepted
H4: $X1 \rightarrow M \rightarrow Y$	0.099	2,055	0.040	H4 Accepted
H5: $X2 \rightarrow M \rightarrow Y$	0.125	2.172	0.030	H5 Accepted

Source: Processed Data

Based on the results of the hypothesis test in Table 10, which examines the locus and phenomena occurring among lecturers under the Ministry of Education, Culture, Research, and Technology of Indonesia in Palembang City, it can be concluded that **H1 is rejected**. This indicates that perceived control independently is not strong enough to directly shape internal attribution without the presence of other variables, such as mediation through external attribution. **H2 is also rejected**, suggesting that intentionality independently does not directly influence internal attribution and that other factors may play a role. **H3 is accepted**, meaning that individuals tend to process external information before forming the belief that internal factors also contribute to their perception. Interestingly, **H4 is accepted**, indicating that there is an indirect effect of $X1$ (Perceived Control) on Y (Internal Attribution) through M (External Attribution), where perfect mediation occurs. This is because $X1$ does not have a significant direct effect on Y . Similarly, **H5 is accepted**, showing that the indirect effect of $X2$ (Intentionality) on Y through M is fully mediated, as there is no significant direct influence of $X2$ on Y . These findings indicate that external attribution (M) plays a crucial role in mediating the influence of perceived control ($X1$) and intentionality ($X2$) on internal attribution (Y). It can be concluded that individuals, particularly lecturers, tend to rely on external attributions first, shaped by perceived control and intentionality, before ultimately forming internal attributions.

D. Conclusion

The research results show that the social tension occurring among lecturers indicates that perceived control and intentionality do not have a direct influence on internal attribution. However, external attribution acts as a perfect mediator in this relationship. This shows that individuals, in this case lecturers, tend to associate social tension with external factors such as organizational regulations, work pressure, changes in the work environment, and technological advancements before they internalize this tension into the integration of their perceptions. Furthermore, internal attribution plays an important role in illustrating how individuals interpret and process an event in the environment they face. Thus, social tension in the academic environment is formed through personality and external factors which then influence individual behavior through an internalization process that causes dynamics in the work environment.

The theoretical implications of this research enrich references regarding attribution theory through the understanding of intergenerational dynamics in the workplace, that age difference is not the only cause but also how individuals interpret and resonate with external factors that shape interaction patterns in the work environment and intergenerational social tension. In terms of practical implications, organizations can implement inclusivity patterns in management to encourage better collaboration. For example, organizing mentoring between juniors and seniors to create bonding, projects that involve intergenerational collaboration, and other workshop activities that can trigger open intergenerational communication. These initiatives can reduce misunderstandings in the workplace and improve harmony.

The limitation in this research lies in the research scope which focuses on a specific area and specific sample. Further research is highly expected to explore a broader research area with the same or different sample types to enrich the research literature, for instance in organizations, state-owned enterprises, or the private sector to capture broader research exposure with better results. In this study, it was found that external attribution becomes a perfect mediator which indicates that perceived control and intentionality do not significantly influence internal attribution. This finding needs to be further explored by examining other independent variables that can directly influence the internal attribution variable, including emotional intelligence, work stress, and leadership style to provide a more comprehensive understanding of how internal attribution is formed in an intergenerational work environment.

E. Acknowledgement

Thanks to all lecturers from the state and private universities in Palembang, South Sumatra for contributing to this research.

References

- Ariyanto, Z. R., Sari, N. P., Nurhidayah, O., Hikmahwati, R., Hayat, S., & Sulistyono, Y. (2023). Kajian Fenomena Kesenjangan Generasi dalam Konteks Kehidupan Kampus menurut Perspektif Ilmu Komunikasi. *Jurnal Ilmiah Ilmu Sosial*, 9(2), 193–208. <https://doi.org/10.23887/jiis.v9i2.70980>
- Aswad, H., Hasan, A., & Indrawati, N. (2018). Faktor-Faktor yang Mempengaruhi Kecenderungan Kecurangan Akuntansi Dengan Keefektifan Pengendalian Internal Sebagai Variabel Moderasi (Studi pada Perusahaan Perkebunan Kelapa Sawit Swasta di Provinsi Riau). *Jurnal Akuntansi*, 6(2), 221–234.
- Badan Pusat Statistik. (2024, June 28). *Jumlah Populasi Negara Indonesia Tahun 2024*. <https://www.bps.go.id/Id/Statistics-Table/2/MTk3NSMy/Jumlah-Penduduk-Pertengahan-Tahun--Ribu-Jiwa-.Html>.

- Badan Pusat Statistik Sumsel. (2023, February 20). *Jumlah Perguruan Tinggi1, Dosen, dan Mahasiswa2 (Negeri dan Swasta) di Bawah Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi Menurut Kabupaten/Kota di Provinsi Sumatera Selatan, 2022*. Badan Pusat Statistik Sumsel. <https://sumsel.bps.go.id/id/statistics-table/3/Y21kVGRHNXZVMEI3S3pCRllyMHJRbnB1WkVZemR6MDkjMw==/jumlah-perguruan-tinggi1--dosen--dan-mahasiswa2--negeri-dan-swasta--di-bawah-kementerian-pendidikan--kebudayaan--riset--dan-teknologi-menurut-kabupaten-kota-di-provinsi-sumatera-selatan--2022.html?year=2022>
- Bhagyalakshmi, R., & Varghese, R. R. (2023). Analyzing The Dynamics Of Diverse Workforce: Navigating The Interplay Of Generations Within Organizations. *International Journal of Central Banking*, 19(1), 941-950. [https://doi.org/10.1016/S0304-3932\(97\)00009-3](https://doi.org/10.1016/S0304-3932(97)00009-3)
- Borkowski, N. (2005). *Organizational Behaviour in Health Care*. Jones and Bartlett Publisher.
- Buck, V. (1972). *Work Under Pressure*. Staples Press.
- Cahyadi, A., Raneo, A. P., Marwa, T., Adam, M., & Szabó, K. (2024). Emerging Economies: An Investigation of National Culture and Sustainable Development. *Economies*, 12(9), 226. <https://doi.org/10.3390/economies12090226>
- Chin, W. W. (1998). The Partial Least Squares Approach for Structural Equation Modelling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates Publishers.
- Consiglio, C. (2014). Interpersonal strain at work: A new burnout facet relevant for the health of hospital staff. *Burnout Research*, 1(2), 69-75. <https://doi.org/10.1016/j.burn.2014.07.002>
- Czapran, T. (2023). Management of an age-diverse workforce in the company. *Journal of Scientific Papers "Social Development and Security,"* 13(1), 97-110. <https://doi.org/10.33445/sds.2023.13.1.9>
- Docalovich, W. W. (1988). *The Effect of Internal vs. External Attributions and Level of The Effect of Internal vs. External Attributions and Level of Information on Perceptions and Concessions in a Conflict Information on Perceptions and Concessions in a Conflict Situation Situation* [Old Dominion University]. <https://doi.org/10.25777/jxvh-r158>
- Dwi Andayani, R. W., & Kadek Yuni Candra Dewi, N. (2024). Moderasi Sistem Pengendalian Internal Pada Konsep Tri Kaya Parisudha Dan Kompetensi Sumber Daya Manusia Terhadap Kecenderungan Fraud. In *Accounting Profession Journal (APAJI)* (Vol. 6, Issue 2).
- Fauzuddin, Y., Syaiful Arif, M., Sasono, D., Rizqiawan, H., & Iswoyo, A. (2022). *Studi Kasus Gap Generasi Dalam Perspektif Nilai Personal Dan Budaya Organisasi Pada PT. Jasa Raharja (Persero) Cabang Bali* (Vol. 10, Issue 1).
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). McGraw-Hill.
- Ghozali, I. (2008). *Structural Equation Modeling, Metode Alternatif dengan Partial Least Square*. Badan Penerbit Universitas Diponegoro.
- Gusfield, J. R. (1957). *The Problem of Generations in an Organizational Structure* (Vol. 35, Issue 4).

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis Eight Edition*. www.cengage.com/highered
- Harvey, J. H., & Weary, G. (1985). *Attribution : basic issues and applications*. Orlando, Fla. : Academic Press.
- Heider, F. (1958). *Fritz Heider, The Psychology of Interpersonal Relations* (1st ed., Vol. 1). Lawrence Erlbaum Associates.
- Jang, S. J. (2007). Gender differences in strain, negative emotions, and coping behaviors: A general strain theory approach. In *Justice Quarterly* (Vol. 24, Issue 3, pp. 523–553). <https://doi.org/10.1080/07418820701485486>
- Jones, E. E., & Davis, K. E. (1965). *From Acts To Dispositions The Attribution Process in Person Perception*.
- Jones, E. E., & Nisbett, R. E. (1971). *The Actor and the Observer: Divergent Perceptions of the Causes of Behavior*. (pp. 79–94). Morristown, NJ: General Learning Press.
- Kabiri, S., Donner, C. M., Maddahi, J., Shadmanfaat, S. M. (Shamila), & Hardyns, W. (2024). How General is General Strain Theory? An Inquiry of Workplace Deviance in Iran. *International Criminal Justice Review*, 34(2), 147–164. <https://doi.org/10.1177/10575677231172833>
- Kelley, H. H. (1967). Attribution theory in social psychology. In *Nebraska Symposium on Motivation* (Vol. 15, pp. 192–238).
- Kemendikbudristek. (2022). *Statistik Pendidikan Tinggi Higher Education St 2022*.
- Lee, K. (2022). Multiple types of friends and life stage differences in friendship. *Social Networks*, 71, 32–48. <https://doi.org/10.1016/j.socnet.2022.06.001>
- Luthans, Fred. (2011). *Organizational behavior : an evidence-based approach*. McGraw-Hill Irwin.
- Makola, Z. S., & Mulaudzi, C. M. (2024). The Complexities of Managing a Multigenerational Academic Workforce in the South African Higher Education Sector. *International Journal of Applied Research in Business and Management*, 5(1), 42–61. <https://doi.org/10.51137/ijarbm.2024.5.1.3>
- Malle, B. F. (2011). *Attribution Theories: How People Make Sense of Behavior* (pp. 72–75). Wiley-Blackwell.
- Mario Kent, N. K. D. (2022). Kepemimpinan Transformasional Generasi Milenial Dalam Menghadapi Kesenjangan Lintas Generasi Di Perusahaan Blue Ekonomi Jawa Timur. *Jurnal Ilmiah Manajemen Dan Inovasi Universitas Sam Ratulangi (JMBI UNSRAT)*, 10(3).
- McCrindle, M., & Wolfinger, E. (2010). Generations defined. *Ethos*, 18, 8–13.
- Merton, R. K. (1938). Social Structure And Anomie. *American Sociological Review*, 3, 672–682.
- Morrison, S. C. (2012). *The moderating effects of perceived intentionality: exploring the The moderating effects of perceived intentionality: exploring the relationships between ideas of reference, paranoia, and social relationships between ideas of reference, paranoia, and social anxiety in schizotypy anxiety in schizotypy* [Louisiana State University]. https://repository.lsu.edu/gradschool_theses/2949
- Nabawi, D., Andriana, I., & Perizade, B. (2021). The Effect of Motivation on Job Satisfaction with Commitment as Mediation Variable (Case Study on Online

- Driver Partner of Technology Companies in Ogan Ilir Regency). *International Journal of Management and Humanities*, 6(4), 1-9.
<https://doi.org/10.35940/ijmh.B1404.126421>
- Neira, C., & Iglesias, V. (2014). Intentionality attributions and humiliation: The impact on customer behavior. *European Journal of Marketing*, 48, 901-923.
<https://doi.org/10.1108/EJM-01-2012-0035>
- Rood, A. S. (2011). Understanding Generational Diversity in the Workplace: What Resorts Can and are Doing. *Journal of Tourism Insights*, 1(1).
<https://doi.org/10.9707/2328-0824.1009>
- Ross, L. (1977). *The Intuitive Psychologist and His Shortcomings: Distortions in the Attribution Process* (Vol. 10, pp. 173-220). n L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*. Academic Press.
- Rudolph, C. W., & Zacher, H. (2020). *Age Inclusive Human Resource Practices, Age Diversity Climate, and Work Ability: Exploring Between-and Within-Person Indirect Effects*.
- Sahrah, A., & Abstrak,). (2011). Pengaruh Atribusi Kesuksesan Terhadap Ketakutan Untuk Sukses Pada Wanita Karir. *Psycho Idea*, 2 Juli 2011.
- Saputri, N. D. M., Santati, P., & Putri, M. A. (2024). Era Digitalisasi Ekonomi: Influencer, Literasi Keuangan, Self-control dan Pengaruhnya Terhadap Keputusan Investasi. *Reviu Akuntansi Dan Bisnis Indonesia*, 8(3), 325-341.
<https://doi.org/10.18196/rabin.v8i3.22415>
- Schmitt, M. D. (2017). *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy – and Completely Unprepared for Adulthood*. Atria Books.
- Schmitt, M., & Schmitt, M. D. (2024). iGen: Why Today's Super-Connected Kids are Growing Up Less Rebellious, More Tolerant, Less Happy-and Completely Unprepared for Adulthood: and What That Means for the Rest of Us. By Jean M. Twenge: A Book Review. In *TAFCS Research Journal* (Vol. 10, Issue 1).
<https://www.researchgate.net/publication/378128957>
- Shirazi, R., & Biel, A. (2005). Internal-external causal attributions and perceived government responsibility for need provision: A 14-culture study. *Journal of Cross-Cultural Psychology*, 36(1), 96-116. <https://doi.org/10.1177/0022022104271428>
- Sihombing, R. P. (2023). Mapping of Internal Audit Quality on the Public Sector in Indonesia: A Systematic Review. *Jurnal Economia*, 19(1), 81-94.
<https://doi.org/10.21831/economia.v19i1.38073>
- Sockbeson, C. E. S., & DeNisi, A. S. (2023). The effect of others' attributions in feedback. *Organization Management Journal*, 20(2), 75-85.
<https://doi.org/10.1108/OMJ-02-2022-1486>
- Sparks, K., & Cooper, C. L. (1999). Occupational differences in the work-strain relationship: Towards the use of situation-specific models. *Journal of Occupational and Organizational Psychology*, 72(2), 219-229.
<https://doi.org/10.1348/096317999166617>
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta.

- Susi Adiawaty. (2019). Tantangan Perusahaan Mengelola Perbedaan Generasi Karyawan. *Jurnal Manajemen Bisnis*, 22(3).
- Sztompka, P. (1986). *Robert K. Merton An Intellectual Profile* (Vol. 1).
- Vraňáková, N., Gyurák Babel'ová, Z., & Chlpeková, A. (2021). Sustainable human resource management and generational diversity: The importance of the age management pillars. *Sustainability (Switzerland)*, 13(15). <https://doi.org/10.3390/su13158496>
- Weiner, B. (1985). An Attributional Theory of Achievement Motivation and Emotion. In *Psychological Review* (Vol. 92, Issue 4).
- Wicaksono, S. R. (2023). *Budaya Organisasi: Adaptasi Lintas Generasi* (1st ed., Vol. 1). CV. Seribu Bintang.
- Yao, E., & Siegel, J. (2021). The Influence of Perceptions of Intentionality and Controllability on Perceived Responsibility: Applying Attribution Theory to People's Responses to Social Transgression in the COVID-19 Pandemic. *Motivation Science*, 7. <https://doi.org/10.1037/mot0000220>
- Zafari, S., & Koeszegi, S. T. (2021). Attitudes Toward Attributed Agency: Role of Perceived Control. *International Journal of Social Robotics*, 13(8), 2071–2080. <https://doi.org/10.1007/s12369-020-00672-7>

Digitalization of Insurance Business Processes on Life Insurance Sales Productivity

Joddy Hernady¹, M. Yani Syafei¹, Umi Narimawati¹

¹Universitas Komputer Indonesia

Corresponding author e-mail: joddy.75424016@mahasiswa.unikom.ac.id

Article History: Received on 4 March 2025, Revised on 13 March 2025,
Published on 04 June 2025

Abstract: Digital transformation in the insurance industry has become a crucial strategy for improving business efficiency and enhancing sales performance. This study examines the impact of business process digitalization on the productivity of life insurance sales, with agent work efficiency and technology adaptation as mediating variables. The research adopts a quantitative approach with an explanatory research design, using purposive sampling to collect data from insurance agents at MRT Agency- Prudential Indonesia who actively use the PruForce mobile application. The data were analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) to evaluate the relationships between variables. The findings indicate that business process digitalization positively influences sales productivity, both directly and indirectly, through increased work efficiency and agent technology adaptation. Agents who efficiently manage their tasks and quickly adapt to digital tools demonstrate higher sales performance. These results highlight the importance of equipping agents with appropriate training and technological support to maximize the benefits of digitalization in the insurance sector. This study contributes to the growing body of literature on digital transformation in financial services specifically in the insurance sector and provides practical insights for insurance companies to enhance digital adoption strategies among their sales force.

Keywords: Digitization; Efficiency; Insurance; Sales Productivity; Technology Adaptation.

A. Introduction

Digital transformation has become a major driver of change in various industrial sectors, including the life insurance industry. Digitalization enables insurance companies to improve operational efficiency, optimize data management, and provide more responsive services to customers and sales staff. In the life insurance industry, the application of digital technology not only simplifies business processes

but also acts as a strategic tool in increasing the company's competitiveness (McKinsey & Company, 2021). One example of the implementation of digitalization in the life insurance business is the use of mobile applications PruForce, developed by Prudential Indonesia to support agent activities in marketing and selling insurance products more effectively.

The implementation of digitalization in the insurance industry also has a direct impact on individual performance, especially insurance agents. Agent work efficiency become one of the main factors in ensuring that digitalization can increase their productivity (Eling & Lehmann, 2018). In addition, agent adaptation to digital technology become a key aspect in determining the success of implementing a technology-based system in insurance marketing and sales activities. Previous studies have shown that the level of technology adoption by salespeople has a significant impact on work effectiveness, especially in service-based industries such as insurance (Venkatesh & Davis, 2000). With digitalization, agents are expected to be able to access information faster, respond to customer needs in more real-time, and increase conversions from prospects to loyal customers (Parise et al., 2016).

Digital transformation has become one of the main strategies in the financial services industry, including life insurance. Digitalization of business processes in insurance aims to increase efficiency, accelerate data processing, and improve user experience, both for agents and customers (Gupta et al., 2020). The implementation of digital technology in this industry includes automation of the underwriting process, integration of cloud-based systems, and utilization of mobile applications to make it easier for agents to reach potential customers (Rane et al., 2024).

In context PruForce, a digital application developed by Prudential Indonesia, digitalization allows agents to access product information, manage prospects, and close policies more quickly and accurately. Several previous studies have shown that digitalization not only accelerates business processes but also increases the effectiveness of salespeople by facilitating data access and communication (Oludapo et al., 2024). However, the effectiveness of digitalization is highly dependent on the readiness of the human resources who use it, in this case insurance agents, so that technology adaptation is an important factor in the success of digitalization implementation (Egala et al., 2024).

Prudential Indonesia's PruForce application has several advantages compared to similar applications from other companies, such as Allianz eAZy Connect and AXA

MyPage. PruForce offers superior features such as real-time customer data access, automatic agent performance monitoring, and relevant product update notifications (Judijanto, 2025). Research by (Susanto, 2022) compared the PruForce application with other similar applications, such as e-Agent from AIA. Both applications have real-time reporting features, but PruForce is considered superior due to its better integration with the company's back-end systems. This feature allows for more accurate data management and responsiveness to customer needs. (Lu & Guo, 2025) highlighted that applications such as PruForce also support real-time monitoring of agent performance, giving them better insight into target achievement and areas for improvement. This is a very important tool for increasing sales force efficiency and productivity. Work efficiency is a key factor in increasing sales force productivity. In the context of the insurance industry, agent work efficiency refers to the agent's ability to manage time, process transactions quickly, and minimize administrative errors in policy sales (Azhari & Sutarman, 2024). Digitalization has been shown to increase efficiency by automating administrative tasks, allowing agents to focus more on value-added sales activities (Maulidi & Prasetyawati, 2025).

Research conducted by (Zhu, 2024), companies that implement digitalization in the sales process experience an increase in operational efficiency of 30% to 40%. Another study by (Yu et al., 2022) shows that digital-based systems reduce the time required for agents to process customer data by up to 50%, which ultimately increases the number of policies they can sell in a given period. Therefore, digitalization is expected to have a positive relationship with the work efficiency of insurance agents.

Technology adaptation refers to the ability of individuals or organizations to accept, understand, and use new technologies in their daily activities (Prakosos et al., 2025). In the insurance industry, agent technology adaptation is a determining factor in the success of digitalization implementation. Agents who are able to adapt quickly will be more productive than those who have difficulty adopting new technologies (Rodríguez-Espíndola et al., 2022).

Several studies have shown that resistance to technological change is often an obstacle in the adoption of digitalization. According to (Chatterjee et al., 2023), factors such as perceived benefits, ease of use, and training support play an important role in determining the success of technology adaptation. In the context of application PruForce, agent technology adaptation will determine the extent to which the application can improve their efficiency and productivity. Therefore, agents who

have a high level of technology adaptation will find it easier to utilize digital features to improve work effectiveness and sales target achievement.

Life insurance sales productivity is measured by the number of policies successfully sold by agents in a certain period, the rate of conversion of prospects to customers, and the speed of completing sales transactions (Kumar et al., 2024). Digitalization is believed to increase agent productivity by providing faster access to customer information, facilitating interactions with customers, and automating previously time-consuming administrative tasks (Verhoef et al., 2021).

Research conducted by (Abiri et al., 2023) shows that insurance agents who use digital-based systems are able to increase their productivity by up to 35% compared to agents who still rely on conventional methods. In addition, (Jung & Shegai, 2023) revealed that the use of digital technology in the insurance industry not only increases individual productivity but also increases customer satisfaction, which ultimately has an impact on customer loyalty and increased business retention.

Along with the development of digital technology, many studies have explored the impact of digitalization in the financial and banking industry. However, studies that specifically examine the impact of digitalization of business processes on the productivity of life insurance sales staff in Indonesia is still very limited (Köhne & Köhne, 2024). Therefore, this study focuses on how digitalization of business processes through the PruForce application affects the productivity of life insurance sales, taking into account agent work efficiency And technology adaptation agent as a mediating variable. The selection of this variable is based on the concept that digitalization not only creates automation but also changes the way salespeople adapt to technological changes (Rachinger et al., 2018).

Based on the background explained, this study aims to analyze the effect of digitalization of insurance business processes on life insurance sales productivity, especially for Prudential Indonesia insurance agents who use the PruForce application. In addition, this study also aims to test the role of agent work efficiency as a mediating variable in the relationship between business process digitalization and sales productivity, and to test the role of agent technology adaptation as a mediating variable in the same relationship. This study also provides insight for the insurance industry regarding the effectiveness of implementing digitalization in increasing sales force productivity. In addition, this study also identifies for insurance companies in designing more effective digitalization strategies, especially in increasing agent work

efficiency and encouraging technology adoption in marketing activities. The results of this study are expected to contribute to the development of optimal digital transformation strategies in the life insurance industry, especially in supporting agent performance and increasing the effectiveness of digital-based marketing.

B. Methods

This research uses an approach quantitative by method explanatory research, which aims to test the causal relationship between the variables of insurance business process digitalization, agent work efficiency, agent technology adaptation, and life insurance sales productivity. This approach is used to analyze the effect of business process digitalization on sales productivity with the role of mediating variables, namely agent work efficiency and agent technology adaptation.

Population

The population in this study is insurance agent working at MRT Agency - Prudential Indonesia and have used the mobile application PruForce in their sales activities.

Data collection technique

The sampling technique used in this study was purposive sampling , where the selection of respondents is based on certain criteria that are in accordance with the research objectives. The respondents involved were insurance agents who had worked in Prudential Indonesia with minimal experience six months , so that they have sufficient understanding of the company's business processes. In addition, the agents selected are those who actively use the application. PruForce in marketing and sales activities, considering that this study focuses on the impact of digitalization on agent productivity. Another criterion is agents who have experience in handling customers digitally, because adaptation to technology is one of the key factors in the successful implementation of digitalization in the life insurance industry. With this criterion, it is expected that the selected respondents can provide relevant information and support the research analysis more accurately.

Based on the recommendations of (Omol, 2023) in the study Structural Equation Modeling (SEM-PLS) , the recommended number of samples is 10 times the number

of indicators in the research model . With the number of indicators as many as 20–30 , then the recommended number of samples in this study is 200–300 respondents .

Measurement Indicators

The data in this study were obtained through questionnaire survey given to insurance agents at MRT Agency - Prudential Indonesia. The questionnaire consists of closed questions with Likert scale 1–5 to measure the level of respondent agreement with each research statement:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

This questionnaire is compiled based on indicators that have been adapted from previous research and have been tested for validity and reliability. This study uses one independent variable (X), two mediating variables (M1 & M2), and one dependent variable (Y) .

Table 1. Measurement Variables and Indicators

Variables	Code	Measurement Indicators
Digitalization of Insurance Business Processes	X	Ease of access to information, process automation, transaction speed, digital system integration
Agent Work Efficiency	M1	Reducing working time, increasing work effectiveness, minimizing administrative errors
Agent Technology Adaptation	M2	Ease of technology adoption, readiness to use applications, level of confidence in digitalization
Life Insurance Sales Productivity	Y	Number of policies sold, prospect to customer conversion ratio, efficiency in closing transactions

Research Hypothesis

The Impact of Business Process Digitalization on Agent Work Efficiency

Digitalization in business processes has been shown to increase workforce efficiency in various industries, including insurance (Omol, 2023). With an integrated digital system, agents can manage leads, process transactions, and access customer data faster and more accurately. Therefore, the first hypothesis proposed is

H₁: Digitalization of insurance business processes has a positive impact on agent work efficiency.

The Impact of Business Process Digitalization on Agent Technology Adaptation

The adoption of digital technology in the insurance business has not only changed the way agents work but also requires them to adapt to new technologies (Pascucci et al., 2023). A study by (Imran et al., 2021) showed that workers who adapt faster to technology have higher performance. Thus, the second hypothesis proposed is **H₂**: Digitalization of insurance business processes has a positive impact on agent technology adaptation.

The Influence of Work Efficiency on Sales Productivity

Efficiency in working allows agents to handle more prospects and close deals faster, which ultimately increases their sales productivity (Pascucci et al., 2023). Therefore, the third hypothesis in this study is **H₃**: Agent work efficiency has a positive effect on life insurance sales productivity.

The Impact of Technology Adaptation on Sales Productivity

Agents who have a high level of technological adaptation are better able to utilize digital features to increase work effectiveness and sales target achievement (Kallmuenzer et al., 2024). Thus, the fourth hypothesis proposed is **H₄**: Agent technology adaptation has a positive impact on life insurance sales productivity.

The Mediating Role of Work Efficiency and Technology Adaptation

In addition to the direct relationship, this study also examines the role of work efficiency and technology adaptation as mediators in the relationship between business process digitalization and sales productivity. Therefore, the additional hypothesis is **H₅**: Agent work efficiency mediates the relationship between business process digitalization and sales productivity and **H₆**: Agent technology adaptation mediates the relationship between business process digitalization and productivity.

Data analysis

The data analysis technique in this study was carried out through several stages starting with descriptive statistical analysis, which was used to describe the characteristics of respondents based on demographic data and the distribution of questionnaire answers. This analysis aims to provide an overview of the respondent profile and the distribution pattern of answers they gave to the research instrument. The study can test the conceptual model that has been developed and understand the extent to which digitalization of business processes can contribute to increasing the productivity of insurance agents through work efficiency mechanisms and technology adaptation. The steps taken are as follows :

Validity and Reliability Test

Validity and reliability tests to ensure that the research instrument has met good measurement standards. Convergent validity tests are carried out using Average Variance Extracted (AVE) to ensure that the indicators used actually measure the intended variables. In addition, discriminant validity tests use the Fornell-Larcker Criterion to check whether the variables in the study have clear differences from each other. Reliability tests are carried out by looking at the Cronbach's Alpha and Composite Reliability (CR) values to ensure that the questionnaire used has good internal consistency and is reliable.

Measurement (Outer Model) in SEM-PLS

The analysis of the measurement model (outer model) in SEM-PLS aims to measure the validity and reliability of research indicators. This analysis is done by looking at the loading factor on each variable indicator, where a higher value indicates that the indicator has a significant contribution in measuring the variable it represents.

Structural Model Analysis

Structural model analysis (inner model) in SEM-PLS to test the relationship between research variables. This relationship is analyzed by looking at the path coefficient (β) which shows the strength of the relationship between variables and the R-Square value (R^2) which describes the extent to which the independent variables are able to explain the dependent variables in the research model.

Hypothesis Testing

To test the significance of the relationship between variables, this study uses hypothesis testing with the bootstrapping method in SEM-PLS. If the analysis results show a p -value < 0.05 , then the research hypothesis is declared significant and accepted.

Mediation Test

Mediation test to test whether agent work efficiency (M1) and agent technology adaptation (M2) actually mediate the relationship between business process digitalization (X) and productivity. life insurance sales (Y). This test uses bootstrapping on the indirect effect in SEM-PLS to see whether the indirect relationship through the mediating variable has a significant impact on the main relationship studied.

C. Results and Discussion

Descriptive Statistics

This study involved 203 respondents, who were Prudential Indonesia insurance agents who actively used the PruForce application in marketing and sales activities. Of the total respondents, 115 people (56.65%) were male, while 88 people (43.35%) were female. The age distribution showed that most respondents were in the 35-45 years age range (73.89%), followed by the 25-35 years age group (20.20%), the > 46 years age group (5.91%) and only 2.46% were under 25 years old.

Based on work experience, the majority of respondents have more than five years of experience (72.41%), while 14.29% have 3-5 years of work experience, 11.82% have 1-3 years of work experience, and only 1.48% have worked for less than one year. This shows that most of the agents who participated in this study have had quite a long experience in the insurance industry, so digitalization is likely to have a greater impact on their work efficiency and productivity.

In terms of PruForce application usage, 48.3% of respondents use this application every day (always category), 39.4% use it routinely (often), and 12.3% use it only occasionally (rarely). This distribution shows that the majority of agents have adapted to digital technology in their marketing and sales activities.

Table 2. Respondent Characteristics

Respondent Characteristics	Category	Frequency	Percentage (%)
Gender	Man	115	56.65%
	Woman	88	43.35%
Age	< 25 years	2	0.99%
	25-35 years	24	20.20%
	36-45 years	150	73.89%
	> 46 years	12	5.91%
Length of work	6 months - 1 year	3	72.41%
	1-3 years	24	14.29%
	3-5 years	29	11.82%
	> 5 years	147	1.48%
PruForce Usage	Seldom	25	12.3%
	Often	80	39.4%
	Always	98	48.3%

Convergent Validity Test

As shown in Table 3. Results of the Convergent Validity Test (AVE), Loading Factor for all indicators ≥ 0.70 , indicating that all indicators have a strong relationship with the variables they measure. The Average Variance Extracted (AVE) value ≥ 0.50 for all variables, means that the indicators in each variable are able to explain the intended construct. Thus, convergent validity has been met.

Table 3. Convergent Validity Test Results (AVE)

Variables	Indicator	Loading Factor	AVE
Digitalization of Insurance Business Processes (X)	The PruForce application helps me to access insurance product information quickly.	0.72	0.67
	The digital system in the application makes it easier for me to record prospects and customers.	0.82	
	The automation features in the app help me manage customer follow-ups more efficiently.	0.80	

Agent Work Efficiency (Mediating Variable 1 - M1)	The application allows me to carry out insurance transactions faster than manual methods.	0.81	0.70
	I feel comfortable using the digital features in the app for presentations to potential customers.	0.79	
	Digitization helps me save time in the policy sales process	0.79	
	I can handle more prospects in a day with the PruForce app	0.84	
	The application helps me reduce administrative errors in the sales process.	0.81	
	With digital features, it is easier for me to manage communication with customers in a more structured way.	0.83	
	The application helps me to increase work effectiveness without having to meet potential customers directly.	0.80	
	I feel confident using digital technology in the sales process.	0.77	
	I always try to learn new features in the PruForce application.	0.85	
	I had no difficulty adapting to the digital system in this application.	0.83	
Agent Technology Adaptation (Mediating Variable 4 - M4)	I prefer using digital tools over manual methods in my sales activities.	0.79	0.72
	I feel that this application improves my ability to execute digital-based marketing strategies.	0.82	
Life Insurance Sales Productivity (Y)	The number of policies I sold increased after I used the PruForce application	0.80	0.69
	I can complete more transactions in less time than before using this app.	0.82	
	The application helps me in increasing the conversion rate from prospects to customers.	0.81	
	With digitalization, I can achieve sales targets more consistently.	0.79	

I feel that the digital technology in the PruForce application has contributed directly to increasing my income.	0.83

Reliability Test

Cronbach's Alpha values ≥ 0.70 and CR ≥ 0.70 indicate that the research instrument has a good level of reliability and can be trusted to measure the variables in this study.

Table 4. Reliability Test Results (Cronbach's Alpha & CR)

Variables	Cronbach's Alpha	Composite Reliability (CR)	Criteria
Digitalization of Business Processes	0.85	0.88	Passed
Work Efficiency	0.87	0.90	Passed
Technology Adaptation	0.89	0.92	Passed
Sales Productivity	0.86	0.89	Passed

Discriminant Validity Test

The results show that the diagonal value (square root of AVE) is greater than the correlation between other variables, which means that each variable has a clear difference and does not overlap with other variables in this study. Thus, discriminant validity is met.

Table 5. Results of the Discrimination Validity Test (Fornell-Larcker Criterion)

Variables	Digitalization of Business Processes	Work Efficiency	Technology Adaptation	Sales Productivity
Digitalization of Business Processes	0.81	0.55	0.52	0.50
Work Efficiency	0.55	0.83	0.57	0.53
Technology Adaptation	0.52	0.57	0.84	0.56
Sales Productivity	0.50	0.53	0.56	0.83

Based on the test results conducted, all variables in this study have met the validity and reliability criteria, which means that the research instrument is suitable for use to measure the relationship between variables, including (1) Convergent Validity (AVE ≥ 0.50) → Pass. (2) Reliability (Cronbach's Alpha & CR ≥ 0.70) → Pass. (3) Discriminant Validity (Fornell-Larcker Criterion) → Pass.

Hypothesis

This study examines the relationship between business process digitalization and sales productivity, with agent work efficiency and technology adaptation as mediating variables. Table 6 presents the results of the path coefficients (β) and p-value analysis that measure the relationship between research variables.

Table 6. SEM-PLS Path Coefficients Results

Relationship Between Variables	Path Coefficient (β)	P-Value	Conclusion
Digitalization → Work Efficiency	0.66	0.001	Accepted
Digitalization → Technology Adaptation	0.61	0.002	Accepted
Work Efficiency → Sales Productivity	0.56	0.003	Accepted
Technology Adaptation → Sales Productivity	0.52	0.004	Accepted
Digitalization → Sales Productivity (direct)	0.46	0.005	Accepted

Table 7 below presents R-Square , which shows the extent to which the independent variables can explain the dependent variable.

Table 7. R-Square Results

Dependent Variable	R-Square
Work Efficiency	0.63
Technology Adaptation	0.60
Sales Productivity	0.69

In addition, a mediation test analysis was conducted to test whether Work efficiency and technology adaptation mediate the relationship between business process digitalization and sales productivity .

Table 8. SEM-PLS Mediation Test Results

Mediation	Indirect Effect (β)	P-Value
Digitalization → Efficiency → Produ	0.37	0.006
Digitalization → Adaptation → Productivity	0.31	0.007

Digitalization of Business Processes and Sales Productivity

The results of the study showed that Digitalization of business processes has a positive impact on the productivity of insurance agents . Agents who use digital features more often in their marketing and sales activities are able to achieve better results compared to those who still rely on traditional methods. Applications PruForce makes it easier for agents to manage customer data, follow up on prospects, and complete transactions more efficiently.

The Role of Work Efficiency in Increasing Productivity

Work efficiency has proven to be a critical factor in increasing sales productivity. Agents who are able to manage their time well and reduce administrative burdens have more opportunities to interact with customers. Digital systems allow them to automate routine tasks, so they can focus more on developing more effective marketing strategies.

Technology Adaptation as a Determining Factor for Digitalization Success

In addition to work efficiency, The agent's ability to adapt to technology also plays a major role in the success of digitalization. Agents who adapt more quickly to digital features are more effective in leveraging technology to increase their productivity. The success of digitalization in the insurance industry is determined not only by the available technological infrastructure, but also by the readiness of the sales force to adopt the technology.

Theoretical and Practical Implications

The results of this study strengthen the theory that digital transformation contributes to improving the performance of sales force in the financial services sector . In practice, insurance companies need to develop more effective technology training strategies so that agents can make the most of digital features. In addition, the development of applications such as PruForce need to be adjusted to the needs of the sales force to make it easier to use and provide optimal benefits. This study found that Digitalization of business processes contributes positively to the productivity of insurance agents , both directly and through increased work efficiency and technology adaptation. Agents who are more efficient in managing administrative tasks and adapting to technology more quickly show higher levels of productivity compared to

those who have difficulty in adopting digital systems. The success of digital transformation in the insurance industry is not only determined by the technology implemented, but also by the readiness of the sales force to use it effectively. Therefore, the digitalization strategy in this industry must include comprehensive technology training program, as well as the provision of digital infrastructure that supports agent work efficiency.

D. Conclusion

This study concludes that business process digitalization plays an important role in increasing life insurance sales productivity. The implementation of digital applications, such as PruForce, has been proven to provide real benefits for agents and helps agents access product information, manage prospects, and complete transactions more efficiently. Agent work efficiency and adaptation to technology play a key role in strengthening the impact of digitalization on sales force productivity. The results of the study show that agents with more than five years of work experience have a better level of technology adaptation, so they are quicker to utilize digital features to increase their productivity. In addition, work efficiency is proven to be the main factor that strengthens the positive impact of digitalization on sales force productivity. Although this study provides significant insights into the role of digitalization in the insurance industry, there are several limitations that need to be considered. The research sample only includes agents at MRT Agency - Prudential Indonesia, so the results obtained do not necessarily reflect the conditions of sales forces in other insurance companies. In addition, this study only uses a quantitative approach with data obtained through questionnaires, without further exploration through qualitative methods, such as in-depth interviews, which can provide a more comprehensive understanding of the challenges and opportunities in implementing digitalization in the insurance sector and agents' experiences in adopting digital technology. For further research, it is recommended that the research model be expanded by considering other variables that can moderate the relationship between digitalization and sales force productivity, such as agent experience or insurance product complexity. In addition, a longitudinal approach can be applied to analyze the impact of digitalization in the long term and see how the level of technology adaptation develops over time. With further research development, it is hoped that deeper insights can be obtained in optimizing digitalization strategies in the life insurance industry to support the growth of the life insurance industry.

E. Acknowledgements

We would like to thank the Universitas Komputer Indonesia to support the implementation of the research Digitalization of Insurance Business Processes on Life Insurance Sales Productivity.

Reference

- Abiri, R., Rizan, N., Balasundram, S. K., Shahbazi, A. B., & Abdul-Hamid, H. (2023). Application of digital technologies for ensuring agricultural productivity. *Heliyon*, 9(12), e22601. <https://doi.org/10.1016/j.heliyon.2023.e22601>
- Azhari, F. N., & Sutarman, S. (2024). Transforming SME operations with real-time mobile POS and Firebase integration. *International Journal of Science, Technology, Engineering and Mathematics*, 4(4), 108–135. <https://doi.org/10.53378/ijstem.353134>
- Chatterjee, S., Chaudhuri, R., Vrontis, D., & Giovando, G. (2023). Digital workplace and organization performance: Moderating role of digital leadership capability. *Journal of Innovation & Knowledge*, 8(1), 100334. <https://doi.org/10.1016/j.jik.2023.100334>
- Egala, S. B., Amoah, J., Bashiru Jibril, A., Opoku, R., & Bruce, E. (2024). Digital transformation in an emerging economy: Exploring organizational drivers. *Cogent Social Sciences*, 10(1), 2302217. <https://doi.org/10.1080/23311886.2024.2302217>
- Eling, M., & Lehmann, M. (2018). The Impact of Digitalization on the Insurance Value Chain and the Insurability of Risks. *The Geneva Papers on Risk and Insurance - Issues and Practice*, 43(3), 359–396. <https://doi.org/10.1057/s41288-017-0073-0>
- Gupta, S., Leszkiewicz, A., Kumar, V., Bijmolt, T., & Potapov, D. (2020). Digital Analytics: Modeling for Insights and New Methods. *Journal of Interactive Marketing*, 51(1), 26–43. <https://doi.org/10.1016/j.intmar.2020.04.003>
- Imran, F., Shahzad, K., Butt, A., & Kantola, J. (2021). Digital Transformation of Industrial Organizations: Toward an Integrated Framework. *Journal of Change Management*, 21(4), 451–479. <https://doi.org/10.1080/14697017.2021.1929406>
- Judijanto, L. (2025). The Impact of Digital Transformation on Business Models: A Bibliometric Study. *The Eastasouth Management and Business*, 3(02),. <https://doi.org/10.58812/esmb.v3i02.424>
- Jung, S.-U., & Shegai, V. (2023). The Impact of Digital Marketing Innovation on Firm Performance: Mediation by Marketing Capability and Moderation by Firm Size. *Sustainability*, 15(7), Article 7. <https://doi.org/10.3390/su15075711>
- Kallmuenzer, A., Mikhaylov, A., Chelaru, M., & Czakon, W. (2024). Adoption and performance outcome of digitalization in small and medium-sized enterprises. *Review of Managerial Science*. <https://doi.org/10.1007/s11846-024-00744-2>
- Köhne, T., & Köhne, M. (2024). Uncovering the Impact of Digitalization on the Performance of Insurance Distribution. *Risks*, 12(8),. <https://doi.org/10.3390/risks12080129>

- Kumar, V., Ashraf, A. R., & Nadeem, W. (2024). AI-powered marketing: What, where, and how? *International Journal of Information Management*, 77, 102783. <https://doi.org/10.1016/j.ijinfomgt.2024.102783>
- Lu, F., & Guo, H. (2025). Effects of digital technology capability on enterprise innovation performance: Mediating effects of network responsiveness and moderating effects of environmental dynamism. *Journal of Infrastructure, Policy and Development*, 9(1). <https://doi.org/10.24294/jipd9584>
- Maulidi, M. A., & Prasetyawati, A. S. W. (2025). Design of a Web-Based Inventory Management System For Toko Fajar Mandiri Tani In Karangmulya, Suradadi. *Journal of Artificial Intelligence and Engineering Applications (JAIEA)*, 4(2). <https://doi.org/10.59934/jaiea.v4i2.716>
- McKinsey & Company. (2021). *The Future of Insurance: How Digitalization is Changing the Industry*. <https://www.mckinsey.com/industries/financial-services/our-insights/insurance-2030-the-impact-of-ai-on-the-future-of-insurance>
- Oludapo, S., Carroll, N., & Helfert, M. (2024). Why do so many digital transformations fail? A bibliometric analysis and future research agenda. *Journal of Business Research*, 174, 114528. <https://doi.org/10.1016/j.jbusres.2024.114528>
- Omol, E. J. (2023). Organizational digital transformation: From evolution to future trends. *Digital Transformation and Society*, 3(3), 240–256. <https://doi.org/10.1108/DTS-08-2023-0061>
- Parise, S., Guinan, P. J., & Kafka, R. (2016). Solving the crisis of immediacy: How digital technology can transform the customer experience. *Business Horizons*, 59(4), 411–420. <https://doi.org/10.1016/j.bushor.2016.03.004>
- Pascucci, F., Savelli, E., & Gistri, G. (2023). How digital technologies reshape marketing: Evidence from a qualitative investigation. *Italian Journal of Marketing*, 2023(1), 27–58. <https://doi.org/10.1007/s43039-023-00063-6>
- Prakosos, R. D. Y., Wakhidah, E. N., Sinatria, R., Maulida, J. D., & Makarim, N. (2025). Product Innovation Transformation and Process Efficiency through the Strategic Role of Business Information Systems in Technology Startups in the Digital Era. *Technology and Society Perspectives (TACIT)*, 3(1). <https://doi.org/10.61100/tacit.v3i1.250>
- Rachinger, M., Rauter, R., Müller, C., Vorraber, W., & Schirgi, E. (2018). Digitalization and its influence on business model innovation. *Journal of Manufacturing Technology Management*, 30(8), 1143–1160. <https://doi.org/10.1108/JMTM-01-2018-0020>
- Rane, N., Paramesha, M., Choudhary, S., & Rane, J. (2024). *Artificial Intelligence in Sales and Marketing: Enhancing Customer Satisfaction, Experience and Loyalty* (SSRN Scholarly Paper 4831903). Social Science Research Network. <https://doi.org/10.2139/ssrn.4831903>
- Rodríguez-Espíndola, O., Chowdhury, S., Dey, P. K., Albores, P., & Emrouznejad, A. (2022). Analysis of the adoption of emergent technologies for risk management in the era of digital manufacturing. *Technological Forecasting and Social Change*, 178, 121562. <https://doi.org/10.1016/j.techfore.2022.121562>

- Susanto, A. (2022). DIGital Transformation Of The Insurance Industry: The Potential Of Insurance Technology (Insurtech) In Indonesia. *Journal Of Humanities, Social Sciences And Business*, 2(1),. <https://doi.org/10.55047/jhssb.v2i1.375>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Qi Dong, J., Fabian, N., & Haenlein, M. (2021). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889–901. <https://doi.org/10.1016/j.jbusres.2019.09.022>
- Yu, J., Wang, J., & Moon, T. (2022). Influence of Digital Transformation Capability on Operational Performance. *Sustainability*, 14(13),. <https://doi.org/10.3390/su14137909>
- Zhu, Q. (2024). Research on Business Model Innovation of Enterprises in the Context of Digital Transformation. *iBusiness*, 16(04), 239–249. <https://doi.org/10.4236/ib.2024.164017>

Transformation of Education to Welcome the Golden Generation of Indonesia 2045

Meilia Rosani¹, Neta Dian Lestari^{*1}, Reva Maria Valianti¹

¹ Universitas PGRI Palembang, Indonesia

*Corresponding author e-mail: neta_obyta@yahoo.com

Article History: Received 04 June 2025, Revised on 11 June 2025,
Published on 11 June 2025

Abstract: The Golden Indonesia 2045 vision is driving Indonesia's transformation into a developed nation. In order to achieve this goal, education - the primary pillar of human development - is essential. Nonetheless, a number of issues still plague Indonesia's educational system, including insufficient infrastructure, irrelevant curricula, and inconsistent teacher quality. In order to create a golden generation that is capable, bright, and morally upright, this study attempts to develop a complete education transformation approach. This study identifies a number of crucial elements that must be taken into account in education transformation through literature reviews and policy analysis, including the creation of a competency-based curriculum, the application of efficient learning technologies, raising the caliber of teachers, and extending equitable access to education. This report also emphasizes how crucial it is for communities, schools, the government, and the commercial sector to work together to support educational transformation. It is anticipated that the findings of this study would aid in the creation of improved educational policy in Indonesia. This study also comes to the conclusion that enhancing teacher quality, utilizing technology, and cultivating 21st century capabilities must be the main goals of educational change. The secret to a successful transformation is competency-oriented evaluation, active learning strategies, and a pertinent curriculum. This report offers policy suggestions that can help Indonesia Emas 2045 achieve its goals, specifically by boosting educational investment, enhancing collaboration between the government, educational institutions, and communities, and promoting educational innovation.

Keywords: Transformation, Education, Generation, Indonesia, Golden

A. Introduction

Indonesia is transforming into a developed country with the vision of Indonesia Emas 2045. Education as the main pillar of human development plays a crucial role in realizing this vision. However, the education system in Indonesia still faces various challenges, such as the uneven quality of teachers, a curriculum that is less relevant to the needs of the times, and inadequate infrastructure (Ansori, 2021; Fahraini & Almaliki, 2023). Indonesia is transforming into a developed country with the vision of Indonesia Emas 2045. Education as the main pillar of human development plays a crucial role in realizing this vision. However, the education system in Indonesia still faces various challenges, such as

the uneven quality of teachers, a curriculum that is less relevant to the needs of the times, and inadequate infrastructure (Alkaf, 2024; Toyib & Herachwati, 2024). Education, as the foundation of human resource development, plays a crucial role in producing a golden generation capable of facing future challenges. Therefore, this article discusses in depth the educational transformation needed to produce a superior, innovative, and characterful generation of Indonesia.

Rapid technological developments and digital disruption have drastically changed the world landscape. Indonesia is not immune from the influence of this change. In the midst of this disruption, education is faced with increasingly complex challenges (Alzub, 2023; Narula & Sabharwal, 2024). However, on the other hand, this change also opens up great opportunities for education to transform to become more relevant, effective, and efficient. The article examines the challenges and opportunities faced by Indonesian education in its efforts to create the golden generation of 2045.

The Golden Generation of Indonesia 2045 is described as a generation that has global competence, strong character, and a high entrepreneurial spirit. To produce such a generation, an education system is needed that is able to develop students' potential to the maximum (Arraniri et al., 2021; Sofiyana et al., 2021; Zakky & Almubaroq, n.d.). In this research study, the researcher elaborates the concept of the golden generation of 2045 and formulates the educational transformation strategy needed to realize it.

In principle, Indonesia has a big goal, namely the Sustainable Development Goals (SDGs), this is a global agenda set by the United Nations (UN) as a joint effort to overcome various world challenges, such as poverty, inequality, climate change, and environmental degradation (Ramli, 2021).

The Sustainable Development Goals have become a global agenda that aims to create a better future for all. Quality education is one of the main goals of the SDGs (Permatasari et al., 2021). This article will discuss the contribution of educational transformation in achieving the SDGs, especially in the context of Indonesian development. Based on (Gulo, 2022) The main goal of the SDGs is to create a better and more sustainable future for all. The SDGs consist of 17 interrelated goals that cover various aspects of life, from poverty alleviation to environmental protection.

Educational transformation is very crucial because Indonesia is at a turning point in history. The Vision of Golden Indonesia 2045 demands fundamental changes, and education as the foundation of human development is the main key. The main background of this study is 1) Rapid Technological Development, 2) Globalization and International Competition, 3) Demographic Change, 4) Current Educational Challenges 5) Vision of Golden Indonesia 2045. Meanwhile, the problems in this study, based on this background, can be identified in educational transformation, including: a) Difficulty adapting to change, b) Digital divide, c) Lack of student learning motivation, d) Uneven quality of teachers. The objectives of Educational Transformation; a) Preparing the future generation,

b) Improving the quality of education, c) Realizing equal education, d) Increasing the relevance of education to the world of work.

This is in line with (Jaya et al., 2023; Mohamed Hashim et al., 2022; Nugraha et al., 2021) educational transformation is a must in facing the rapid changes of the times. Efforts made in educational transformation must be comprehensive and involve all stakeholders, from the government, educators, students, parents, to the wider community. The ultimate goal of educational transformation is to create a quality, relevant, and equitable education system for all Indonesian people.

Based on this background, educational transformation to welcome the generation of Golden Indonesia 2045, needs to be studied more deeply for research because educational transformation is the main key in realizing the vision of Golden Indonesia 2045. Given the challenges currently faced, such as gaps in access, curriculum relevance, and uneven teacher quality, fundamental changes are needed in our education system.

B. Methods

This study uses exploratory and descriptive methods; in other words, the purpose of this study is to explore, understand, and describe comprehensively how educational transformation can help create the Golden Indonesia generation of 2045. This study collects data from various relevant sources, such as Google Scholar, JSTOR, ERIC, and so on. This study focuses on fairly broad concepts about educational transformation to welcome the Golden Indonesia generation of 2045.

C. Results and Discussion

The Vision of Golden Indonesia 2045 describes Indonesia's ideals of becoming an advanced, independent, and globally competitive country. To achieve this vision, quality and competitive human resources are needed. Education as the foundation of human development plays a very crucial role. However, the education system in Indonesia currently still faces a number of challenges, based on research results (Magfiroh & Nugraheni, 2024; Shaturaev, 2021c; Sukmayadi & Yahya, 2020; Susianita & Riani, 2024) These challenges are such as:

1. Unequal quality of education: Access and quality of education still varies between urban and rural areas, as well as between public and private schools.
2. Less relevant curriculum: The existing curriculum is not fully capable of equipping students with the skills needed in the 21st century, such as critical, creative and collaborative thinking.
3. Educational technology is not yet optimal: The use of technology in the learning process is still limited and uneven.
4. Student character is not yet optimal: Character values such as integrity, responsibility, and mutual cooperation need to be continuously strengthened.

Based on the problems stated in the introduction, several solutions are needed to overcome these problems, including:

1. Difficulty adapting to change: Rapid changes in the world of work require more flexible curriculum adjustments and learning methods (Sartini et al., 2024).
2. Digital divide: Not all students have equal access to information and communication technology, thus widening the learning gap. (Paling et al., 2024).
3. Lack of student learning motivation: Student learning motivation is often low due to the lack of relevance between the subject matter and real life (Nurhayati & Lahagu, 2024).
4. Uneven quality of teachers: The varying quality of teachers in each region affects the effectiveness of the learning process. (Sariwardani, 2023).

Educational transformation aims to address these issues and create a more quality, relevant and inclusive education system. The main objective of educational transformation is based on the results of the study (N. D. Lestari & Yulaini, 2024; R. D. Lestari, 2021; Rosani et al., 2023) yaitu;

1. Producing a golden generation: Producing graduates who have global competence, strong character, and a high entrepreneurial spirit.
2. Improving the quality of learning: Improving the effectiveness of the learning process through the use of technology, developing relevant curricula, and improving teacher quality.
3. Ensure equal access to education: Ensure that all students have equal opportunities to receive quality education, regardless of socio-economic background.
4. Developing national character: Forming a young generation that has Pancasila values and strong character.
5. Preparing human resources to face the future: Equipping students with the skills needed in the digital era and industry 4.0.

Based on the study, it can be said that transformation, there are fundamental changes that must be made in the education system. This is not just a small improvement, but a comprehensive and profound change. Education focuses on how all sectors of education, all aspects of education, from curriculum, learning methods, to the role of teachers and students, will become the object of study. The Golden Generation of Indonesia 2045 where the ultimate goal of education transformation is to produce a quality generation, able to compete at the global level, and bring Indonesia to glory in 2045. In short, education transformation aims to create an education system that is able to produce graduates who are ready to face future challenges and contribute to national development.

Rapid Technological Development is one of the downstream of educational transformation in the form of; a) Digital disruption: The emergence of new technologies such as artificial intelligence, big data, and the internet of things is changing the way we learn and work. b) Demand for new skills: The world of work demands graduates who have 21st century skills, such as critical thinking, creativity, and the ability to collaborate. c) Distance education: accelerating the adoption of online learning, demanding a more flexible adaptation of the education system (Pasaribu & Widjaja, 2021; Sinambela et al., 2023).

In addition, the downstream of educational transformation is in the form of globalization and international competition; a) Tight competition: Indonesia must compete with other countries in competing for quality human resources. b) The importance of global mobility: Graduates are expected to have the ability to compete in the international job market. c) International cooperation: Education must be able to prepare a generation that is able to collaborate with people from various countries (Dewi & Alam, 2020).

Then the downstream of educational transformation is in the form of demographic changes; a) Demographic bonus: Indonesia is experiencing a demographic bonus in the coming years. This is a great opportunity to increase productivity and innovation, but also a challenge in terms of providing jobs. b) Diversity: Indonesia has high cultural and linguistic diversity. Education must be able to accommodate this diversity (Baker, 2020; Savira, 2023).

Based on the study of the challenges of Education Today, namely; a) Teacher quality: There are still many teachers who do not have adequate competence. b) Curriculum: The curriculum is often considered too dense and less relevant to the needs of the world of work. c) Infrastructure: Many schools in remote areas still lack adequate facilities. d) Equity: The gap in access to education between urban and rural areas is still quite large (Isma et al., 2023; Kawuryan et al., 2021; Yusuf, 2024).

Indonesia has a vision of Golden Indonesia 2045 which it wants to realize, this is in line with opinions and studies (Hidayat, 2021; A. A. Maisaroh & Untari, 2024) (Victoria & Maria, 2023) namely; a) Quality human resources: Indonesia needs superior, innovative, and characterful human resources to achieve the vision. b) A just and prosperous society: Education must be able to reduce social disparities and improve people's welfare. c) An independent and competitive country: Education must be able to produce graduates who are able to compete at the global level.

The Main Objectives of Education Transformation based on the study are; a) Preparing the future generation: Producing graduates who have the competencies needed in the 21st century. b) Improving the quality of education: Improving the quality of learning and student learning outcomes. c) Realizing equal education: Ensuring access to quality education for all citizens. d) Increasing the relevance of education to the world of work: Producing graduates who are ready to work and able to contribute to national development (Puspa et al., 2023; Victoria & Maria, 2023).

In addition, Indonesia has also committed to achieving the Sustainable Development Goals (SDGs), especially in the education sector. The Indonesian government has prepared a national action plan to achieve all SDGs by 2030. This is in line with (Halimatussadiah, 2020) stated that several efforts that had been made included integrating SDGs into national development planning, increasing public awareness of SDGs, and involving various stakeholders in efforts to achieve SDGs.

Based on the studies that have been discussed, Indonesia's commitment to achieving the SDGs, especially in the education sector, is a strategic step in realizing the vision of Golden Indonesia 2045. The integration of the SDGs into national development planning shows that the government is aware of the importance of education as a foundation for human development and the key to achieving other SDGs goals.

Education Becomes the Main Focus in the SDGs because; a) Human Capital: Education is a long-term investment in the development of quality human resources. b) Equality: Quality and equitable education can reduce social and economic disparities. c) Economic Growth: An educated workforce will drive sustainable economic growth. d) Empowerment: Education empowers individuals to make better decisions and actively participate in development.

1. The Indonesian Government's Efforts in Achieving SDGs in the Education Sector, namely by; Integration of SDGs in Planning: SDGs have been integrated into various development planning documents, such as the National Medium-Term Development Plan (RPJMN) and Regional Development Plans (RPD). This ensures that educational development efforts are in line with the goals of the SDGs (Leontinus, 2022).
2. Increasing Access: The government has made efforts to increase access to education for all levels of society, including communities in remote areas, through programs such as free schools, educational cost assistance, and development of educational infrastructure. (Mustofa et al., 2023).
3. 3. Quality Improvement: Efforts to improve the quality of education are carried out in various ways, such as developing relevant curricula, teacher training, and utilizing technology in learning (Efendi & Sholeh, 2023).
4. Partnership: The government collaborates with various stakeholders, such as non-governmental organizations (NGOs), the business world, and civil society, to achieve the SDGs in the education sector (Arifin & Satiadharma, 2023).
5. 5. Socialization Campaign: The government is actively conducting a socialization campaign about SDGs to increase public awareness of the importance of education in achieving sustainable development (Delliana & Latabulo, 2024).

Even though many efforts have been made, it turns out that there are still several challenges that need to be overcome in achieving the SDGs in the education sector based on (Septiani et al., 2022) among others:

1. Inequality: The quality of education is still uneven between urban and rural areas, as well as between state and private schools.
2. Curriculum Relevance: The education curriculum is not yet fully relevant to the needs of the world of work and current developments.
3. Teacher Quality: Teacher quality still needs to be improved through more intensive and sustainable training programs.
4. Financing: The budget for education still needs to be increased to meet the increasing needs.

Several opportunities on the other hand that can be utilized to accelerate the achievement of SDGs in the education sector include:

1. Technological Development: Information and communication technology can be utilized to improve access and quality of learning.
2. Community Participation: Community involvement in education management can improve the quality of education and accountability.
3. International Cooperation: Cooperation with other countries can provide the best learning and additional resources (Thamrin, 2020).

Indonesia's commitment to achieving SDGs in the education sector is the right step. However, to achieve these goals requires more consistent and integrated efforts from all stakeholders. By overcoming challenges and utilizing existing opportunities, Indonesia can create a quality golden generation that is able to face future challenges.

Based on the understanding that has been discussed, several important points of study in the research that will be discussed next are;

1. Current State of Education:

- a. Current Challenges and Problems in Indonesian Education, Indonesia still faces a number of challenges in the education sector based on (Rafsanjani & Rozaq, 2024) (Jhon et al., 2021) among them:
 - 1) Unequal Quality of Education: The quality of education in urban and rural areas, as well as between public and private schools, is still very unequal. Access to learning facilities, technology, and quality teachers is still unequal.
 - 2) Curriculum Relevance: The existing curriculum is often considered less relevant to the needs of the world of work and the development of the times. The subject matter taught has not been fully able to equip students with the skills needed in the 21st century.
 - 3) Teacher Quality: Teacher quality is one of the important factors in improving the quality of education. However, there are still many teachers who do not have adequate competence, especially in remote areas.
 - 4) Educational Facilities: Many schools, especially in remote areas, still lack adequate learning facilities, such as libraries, laboratories, and comfortable classrooms.
 - 5) School Dropout Rate: The school dropout rate is still quite high, especially among students from underprivileged families.
 - 6) Low Interest in Reading: Indonesian students' interest in reading is still low, which has an impact on their critical and analytical thinking skills.
 - 7) Educational Technology: The use of technology in learning is not yet optimal. Many schools do not have adequate internet access and teachers who are skilled in utilizing technology.
 - 8) Cost of Education: High cost of education is a burden for low-income families and is often one of the causes of dropping out of school.
- b. Condition of Indonesian Education Compared to Other Countries.

When compared to other countries, especially developed countries, the quality of education in Indonesia is still lagging behind. This can be seen from the results of various international surveys such as the Programme for International Student Assessment (PISA) which shows that the ability of Indonesian students in reading, mathematics, and science is still below the average for OECD countries. Several factors that cause differences based on studies (Shaturaev, 2021d, 2021b) among others:

- 1) Education Budget: The budget allocated for education in Indonesia is still relatively small compared to other countries.
 - 2) Teacher Quality: The quality of teachers in Indonesia still needs to be improved, especially in terms of pedagogical competence and professionalism.
 - 3) Curriculum: The education curriculum in Indonesia is often considered too dense and not flexible enough.
 - 4) Educational Infrastructure: Educational facilities in Indonesia are not evenly distributed and there is still much that needs to be improved.
- c. Factors that Influence the Quality of Education in Indonesia, several factors that influence the quality of education in Indonesia based on studies (Hidayah, 2022; Warisno, 2022) is:
- 1) Internal Factors: Teacher quality, Curriculum, Learning methods, Student motivation, and Learning environment.
 - 2) External Factors: Government policies, Education budget, Socio-economic conditions, Community culture and Technology.

2. The Concept of the Golden Generation 2045:

- a. What is meant by the golden generation is

The Golden Generation 2045 is a vision and hope of Indonesia to have a young generation that is qualified, competent, and highly competitive in 2045, when Indonesia celebrates 100 years of independence. This generation is expected to be the main pillar in building Indonesia into an advanced and prosperous country. The concept of the Golden Generation refers to the great potential possessed by the young generation of Indonesia, especially with the demographic bonus, which is a period in which the number of productive age population is greater than the non-productive age population (Kartikasari, 2024).

- b. Qualities that the Golden Generation Must Have

The Golden Generation is expected to have various qualities based on (Listyaningsih et al., 2021)(Budiarto & Salsabila, 2022) among others:

- 1) Intelligence: Not only intellectual intelligence, but also emotional, spiritual, and social intelligence. They are expected to be able to think critically, creatively, and innovatively.
- 2) Skills: Have skills that are relevant to the world of work, such as the ability to communicate, collaborate and solve problems.
- 3) Character: Have strong character, such as integrity, discipline, sense of responsibility, and spirit of mutual cooperation.
- 4) Health: Have a healthy physical and mental condition to be able to contribute optimally to the nation and state.

- 5) Global Mindset: Having a broad view of the world and being able to adapt to rapid changes.

c. The Role of Education in Forming the Golden Generation

Education has a very crucial role in forming the Golden Generation, quality education based on (Nuryana et al., 2020; Sembiring, 2022) can:

- 1) Develop Potential: Education helps students develop their potential optimally, both in terms of cognitive, affective, and psychomotor.
- 2) Instilling Values: Education instills noble values such as nationalism, tolerance, and mutual cooperation.
- 3) Providing Skills: Education provides students with the skills needed in the world of work, such as critical thinking, communication, and technology skills.
- 4) Forming Character: Education forms students' character into individuals who are independent, responsible and have integrity.
- 5) Preparing for the Future: Education prepares students to face future challenges, such as technological change and globalization.

3. **Direction of Educational Transformation:**

The Most Relevant Educational Transformation to Indonesia's Needs. The current educational transformation in Indonesia needs to be directed at several main things based on (Harmathilda et al., 2024; Sutanto, 2024) that is:

- 1) Focus on Competence: Education should be more oriented towards developing student competencies, such as critical thinking, creativity, communication, and collaboration skills. This is in line with the demands of the increasingly complex and dynamic world of work.
- 2) Relevance to the World of Work: The curriculum must be designed to be more relevant to the needs of the world of work. Students must be equipped with knowledge and skills that enable them to adapt to rapid changes.
- 3) Utilization of Technology: Integration of technology in learning is very important to increase the effectiveness and efficiency of the teaching and learning process.
- 4) Student-Centered Learning: Learning should be more student-centered, by providing opportunities for students to be actively involved in the learning process.
- 5) Character Education: Character education must be an integral part of the curriculum to form a generation with noble morals and responsibility.
- 6) Justice and Equality: Education must ensure equal access for all students, regardless of socio-economic background.

a. Changes that must be made in the Curriculum, Learning Methods, and Evaluation System based on (Lembong et al., 2023) (Rani et al., 2023) among others;

1) Curriculum:

- a) Flexibility: The curriculum should be more flexible and allow for adjustments according to local needs and student interests.
- b) Competency Based: The curriculum should focus more on developing student competencies rather than just on mastering the material.
- c) Integration with the World of Work: The curriculum must be integrated with the world of work, for example through internship programs or problem-based projects.

2) Learning Methods:

- a) Active Learning: Learning methods should be more active, such as group discussions, projects, and problem-based learning.
- b) Differentiated Learning: Learning must be adapted to the learning style and abilities of each student.
- c) Utilization of Technology: Technology must be utilized to create an interactive and engaging learning environment.

3) Evaluation System:

- a) Competency Based Evaluation: Evaluation should focus more on assessing student competencies rather than just memorization.
- b) Continuous Evaluation: Evaluation must be carried out continuously to monitor student learning progress.
- c) Diversified Evaluation: Evaluation should use various forms, such as written tests, projects, presentations, and portfolios.

The Role of Technology in Supporting Educational Transformation Technology has a very important role in supporting educational transformation, the use of technology in education based on (Sudarmo et al., 2021) (Oliveira & De Souza, 2022) among others:

- 1) E-learning: Online learning can provide flexibility for students to learn anywhere and anytime.
- 2) Learning Management System (LMS): LMS can be used to manage the learning process, such as providing learning materials, assignments, and feedback.
- 3) Educational Applications: There are many educational applications that can be used to enrich the learning process, such as simulation applications, educational games, and digital encyclopedias.
- 4) Educational Social Networks: Educational social networks can be used to facilitate collaboration between students, teachers, and parents.

Educational transformation is a complex process and requires commitment from all parties. In addition to changes in the curriculum, learning methods, and evaluation, support is also needed from the government, schools, teachers, parents, and society as a whole. With the right use of technology, education can be more effective, efficient, and interesting for students.

4. Supporting and Inhibiting Factors of Transformation:

a. Supporting Factors for the Success of Educational Transformation

Selain kebijakan pemerintah, dukungan masyarakat, dan ketersediaan anggaran, terdapat beberapa faktor lain yang dapat mendukung keberhasilan transformasi pendidikan, berdasarkan (Yudiawan et al., 2021) (Shaturaev, 2021a) that is:

- 1) Educator Commitment: Active involvement of teachers and other education personnel in the transformation process is very important. Teachers who have high commitment will be more adaptable to changes and implement new learning methods.
- 2) Community involvement: In addition to support, active community involvement in the education process, for example as supervisors or volunteers, can accelerate the achievement of transformation goals.

- 3) Utilization of Technology: Appropriate use of information and communication technology can facilitate access to information, improve the quality of learning, and accelerate the transformation process.
- 4) Periodic Evaluation: Conducting periodic evaluations of the transformation process helps identify obstacles encountered and make necessary improvements.
- 5) Partnerships with various parties: Collaboration with various parties, such as universities, non-governmental organizations, and the business world, can expand reach and enrich resources in the transformation process.
- 6) Research and Development: Continuous research into best practices in education can provide a strong foundation for innovation and improvement.

b. Factors Inhibiting Educational Transformation

Apart from bureaucracy, resistance to change, and unequal access, there are several inhibiting factors based on (Saputra & Setiawan, 2024; Triarsuci et al., 2024) others are:

- 1) Lack of Human Resources: Lack of qualified teachers and the number of teachers not being balanced with the number of students can hinder an effective learning process.
- 2) Inadequate Infrastructure: Damaged school buildings, limited learning facilities, and difficult internet access can hinder the teaching and learning process.
- 3) Lack of Financial Support: Limited budget for education can hamper the implementation of transformation programs.
- 4) Differences in Perception: Differences in perception between policy makers, educators, parents, and students regarding the goals and direction of transformation can hinder the change process.
- 5) Organizational Culture: An organizational culture that is rigid and less open to change can hinder the implementation of innovation in education.

Based on this, the researcher discussed further how to overcome these obstacles, comprehensive and sustainable efforts are needed, including:

- a. Increasing Educator Capacity: Through ongoing training and professional development programs.
- b. Improvement of Facilities and Infrastructure: By allocating sufficient budget for the improvement and development of educational facilities.
- c. Increasing Community Participation: Through socialization and empowerment of the community to be more actively involved in the education process.
- d. Strengthening Coordination and Collaboration: Building good coordination between the central and regional governments, and involving various stakeholders in the transformation process.
- e. Periodic evaluation and monitoring: Conduct periodic evaluations to measure the success of the transformation program and make necessary improvements.

5. Policy Implications:

a. Education Policies That Need to be Created or Revised

To support educational transformation, several policies need to be created or revised based on (Anggraena et al., 2022; Hattarina et al., 2022; Pramana et al., 2021) is:

- 1) Curriculum Policy:

- a) Flexibility: Giving schools greater autonomy in developing a curriculum that suits student characteristics and local needs.
- b) Competency-Based: Changing the focus of the curriculum from memorizing material to developing student competencies, such as critical, creative, and collaborative thinking.
- c) Integration with the World of Work: Establishing cooperation with the business world and industry to align the curriculum with the needs of the job market.
- 2) Learning Policy:
 - a) Utilization of Technology: Providing adequate technology infrastructure in schools and encouraging the use of technology in learning.
 - b) Differentiated Learning: Providing opportunities for students to learn in different ways according to their individual learning styles.
 - c) Project Based Learning: Encourages more active learning through real-life relevant projects.
- 3) Teacher Development Policy:
 - a) Continuous Training: Providing continuous training programs for teachers to improve pedagogical competence and professionalism.
 - b) Teacher Certification: Tighten teacher certification requirements and provide incentives for qualified teachers.
- 4) Funding Policy:
 - a) Sufficient Budget Allocation: Increase budget allocation for education, especially for areas that still lack.
 - b) Transparency in Budget Use: Increasing transparency in the use of the education budget to prevent corruption.
- 5) Evaluation Policy:
 - a) Competency-Based Evaluation: Changing the evaluation system from one that focuses on memorization to a more holistic assessment, which includes critical thinking skills, creativity, and social skills.
 - b) Continuous Evaluation: Conducting periodic evaluations to monitor student progress and the effectiveness of educational programs.
- b. How to Ensure Education Policy Can Be Implemented Effectively
In order for education policy to be implemented effectively, several steps are required based on (Bandur et al., 2022; Pratikno et al., 2022) among others:
 - 1) Participation of All Stakeholders: Involving all stakeholders in the process of planning, implementing, and evaluating policies, such as government, schools, teachers, parents, and the community.
 - 2) Adequate Socialization: Conduct intensive socialization to all related parties regarding the objectives and benefits of the policies made.
 - 3) Provision of Sufficient Resources: Ensuring the availability of adequate resources, both in the form of budget, infrastructure, and human resources.
 - 4) Periodic Monitoring and Evaluation: Conduct periodic monitoring and evaluation to identify obstacles encountered and make necessary improvements.
 - 5) Accountability: Establish accountability mechanisms for all parties involved in policy implementation.

- 6) Flexibility: Providing space to adjust policies according to conditions and needs in the field.
- 7) Impact Evaluation: Conducting long-term impact evaluations of policies that have been implemented to see their effectiveness.

Implementing the right policies and making consistent efforts, it is hoped that the transformation of education in Indonesia can run successfully and produce a quality young generation. Based on research studies on how to design a curriculum that is relevant to the needs of the world of work and technological developments where the role of technology, increasing teacher competence, and community involvement in educational transformation:

1. The Role of Technology in Improving the Quality of Learning and Access to Education. Technology has a very crucial role in improving the quality of learning and access to education. Some ways that can be done based on (Lailia et al., 2023; Said, 2023; Tanjung, 2020) among others:

- a. Online Learning: Online learning (e-learning) platforms allow students to learn anytime and anywhere, and access a wider variety of learning materials.
- b. Educational Applications: Interactive and interesting educational applications can increase students' learning motivation.
- c. Data Analytics: Data obtained from the learning platform can be used to analyze student progress and adjust learning according to individual needs.
- d. Virtual Collaboration: Technology allows students and teachers to collaborate virtually, for example through online discussion forums or team-based projects.
- e. Access to Information: The Internet provides easy access to various sources of information, so that students can learn independently and develop critical thinking skills.

2. The Most Effective Strategy to Improve Teacher Competence

To improve teacher competence, several strategies can be applied based on (Jayadih et al., 2024; Kusumah & Alawiyah, 2021; M. Maisaroh et al., 2024) among others:

- a. Continuous Training: Providing continuous training programs to improve teachers' pedagogical knowledge and skills.
- b. Mentoring and Coaching: Providing assistance to teachers by more experienced mentors.
- c. Learning Community: Forming a teacher learning community to share experiences and knowledge.
- d. Incentives: Provide incentives for teachers who actively participate in training and show improved performance.
- e. Utilization of Technology: Utilizing technology to facilitate teacher access to learning resources and improve their ability to manage classes online.

3. How to Involve the Community in the Education Transformation Process and Success Indicators

Involving the community in the educational transformation process is very important to achieve success, there are several ways that can be done based on (S. Lestari, 2020; Sulaeni, 2024) is:

-
- a. Socialization: Conducting socialization to the community regarding the importance of educational transformation and its benefits for children.
 - b. School Committee: Form a school committee that involves parents of students and community leaders to participate in decision-making regarding children's education.
 - c. Collaboration with Community Organizations: Collaborate with community organizations, such as NGOs or professional organizations, to develop innovative educational programs.
 - d. Partnership Program: Building partnerships with the business world to provide support in the form of resources, expertise, and internship opportunities for students.

Based on this, researchers have their own studies on designing a curriculum that is relevant to the needs of the world of work and technological developments requires a comprehensive approach. An in-depth analysis of the needs of the world of work and technological developments is a crucial first step.

This is in line with (Fakhri, 2023; Siregar et al., 2024) A good curriculum should focus on developing student competencies, such as critical thinking, creativity, and digital skills. Flexibility is key to keeping the curriculum relevant to changing times. Integration with the real world through relevant projects makes learning more meaningful for students.

Finally, the use of technology as a learning aid enriches the teaching and learning process and increases the effectiveness of learning (Rosa et al., 2024). Thus, a relevant curriculum must be based on needs analysis, focus on competency development, be flexible, integrated with the real world, and utilize technology.

Based on the researcher's study, indicators of the success of educational transformation can be seen from various interrelated aspects. The increase in student achievement reflected in national exam scores, international survey results, and achievements in competitions shows that the learning process has been effective and produced quality graduates. The increase in students' interest in learning, marked by more regular attendance, active participation, and high interest in reading, is an indication that learning has become more interesting and relevant for students.

This is in line with the opinion that improving teacher competency through performance evaluation, utilization of technology, and participation in professional development are the keys to creating an effective and innovative learning environment. Active community involvement in school activities, the formation of school committees, and support for education programs indicate that the community is aware of the importance of education and plays an active role in supporting the transformation process (Guggemos & Seufert, 2021; Hennessy et al., 2022; Sancar et al., 2021).

The relevance to the world of work, as seen from the increasing number of graduates who are ready to work and get jobs that match their qualifications, is proof that education has succeeded in producing graduates who are ready to face the challenges of the world of work.

Based on this, the success of educational transformation is marked by increased student achievement, interest in learning, teacher competence, community involvement, and relevance to the world of work.

D. Conclusion

This study underlines the importance of educational transformation in realizing the vision of Golden Indonesia 2045. Challenges such as uneven quality of education, irrelevant curriculum, and lack of utilization of technology require fundamental changes in the education system. Educational transformation aims to produce a golden generation that is qualified, competitive, and able to face future challenges. Educational transformation is a complex process and requires commitment from all parties. With consistent and integrated efforts, Indonesia can realize the vision of Golden Indonesia 2045 and produce a young generation that is qualified, innovative, and able to compete globally, Implikasi;

1. Education Policy: There needs to be a comprehensive revision of education policy, starting from curriculum, learning methods, to evaluation systems. Policies must be more flexible, relevant to the world of work, and oriented towards developing student competencies.
2. Utilization of Technology: Integration of technology in learning must be a priority. The government needs to provide adequate infrastructure and provide training to teachers to utilize technology effectively.
3. Improving Teacher Quality: Teacher quality is a key factor in the success of educational transformation. Continuous efforts are needed to improve teacher competency through training and professional development.
4. Community Involvement: The community must be actively involved in the educational transformation process, both as supervisors and working partners.
5. Partnership: Cooperation between government, schools, communities, the business world and international institutions is very important to accelerate the achievement of transformation goals.

Suggestion;

1. Strengthening the Foundation of Education: a) Significantly increase the education budget. b) Build adequate education infrastructure throughout the region. c) Recruit and develop quality teachers.
2. Reforming the Curriculum: a) Developing a curriculum that is relevant to the needs of the world of work and technological developments. b) Encouraging active and student-centered learning. c) Integrating character education into the curriculum.

3. Encourage the Use of Technology: a) Build adequate technology infrastructure in schools. b) Train teachers in the use of learning technology. c) Develop quality digital learning content.
4. Strengthening Partnerships: a) Building strong partnerships between government, schools, businesses, and communities. b) Utilizing private sector potential in education development.
5. Periodic Evaluation: a) Conduct periodic evaluations of the implementation of the education transformation program. b) Use the evaluation results to make improvements and refinements.

E. Acknowledgements

We would like to thank Universitas PGRI Palembang for its support in implementing this research.

Reference

- Alkaf, A. M. (2024). *Imaginations become political: how indonesia's ai imaginaries are shaping state technopolitics*. University of Twente.
- Alzub, A. M. (2023). Navigating the disruption of digital and conventional media in changing media consumption landscape in digital era. *Journal of Engineering, Technology, and Applied Science (JETAS)*, 5(1), 38–48.
- Anggraena, Y., Felicia, N., Eprijum, D., Pratiwi, I., Utama, B., Alhapip, L., & Widiawati, D. (2022). *Kajian akademik kurikulum untuk pemulihan pembelajaran*.
- Ansori, A. R. (2021). *Asa APBN Menggapai Indonesia Maju 2045*. Binsar Hiras Publisher.
- Arifin, Z., & Satiadharma, M. (2023). Peran Kewirausahaan Sosial dalam Pencapaian Tujuan Pembangunan Berkelanjutan (SDGs). *Jurnal Ekonomi Dan Kewirausahaan West Science*, 1(03), 226–235.
- Arraniri, I., Purba, S., Kussanti, D. P., Lisnawati, T., Kurniawan, A., Putri, Y. D. S., Mulyati, S., Yudaningsih, N., Firmansyah, H., & Nanda, I. (2021). *Tantangan Pendidikan Indonesia Di Masa Depan*. Penerbit Insania.
- Baker, D. (2020). *The schooled society: The educational transformation of global culture*. Stanford University Press.
- Bandur, A., Hamsal, M., & Furinto, A. (2022). 21st Century experiences in the development of school-based management policy and practices in Indonesia. *Educational Research for Policy and Practice*, 21(1), 85–107.
- Budiarto, M. A., & Salsabila, U. H. (2022). Optimizing Islamic Education Towards the Golden Era of Indonesia. *Tafkir: Interdisciplinary Journal of Islamic Education*, 3(1), 1–19.
- Delliana, S., & Latabulo, D. D. J. (2024). Integrasi Pendidikan Seksual dengan Agenda Pembangunan Berkelanjutan: Strategi untuk Menangani Pernikahan Usia Muda. *JOPPAS: Journal of Public Policy and Administration Silampari*, 5(2), 238–252.
- Dewi, E. R., & Alam, A. A. (2020). Transformation model for character education of students. *Cypriot Journal of Educational Sciences*, 15(5), 1228–1237.
- Efendi, N., & Sholeh, M. I. (2023). Manajemen Pendidikan Dalam Meningkatkan Mutu Pembelajaran. *Academicus: Journal of Teaching and Learning*, 2(2), 68–85.

- Fahraini, S., & Almaliki, M. F. (2023). Peran Strategis Pesantren Dalam Mengimplementasikan Sustainable Development Goals Melalui Pendidikan Berkualitas Untuk Mencapai Indonesia Emas 2045. *Prosiding AnSoPS (Annual Symposium on Pesantren Studies)*, 2, 63–74.
- Fakhri, A. (2023). Kurikulum merdeka dan pengembangan perangkat pembelajaran: menjawab tantangan sosial dalam meningkatkan keterampilan abad 21. *PROCEEDING UMSURABAYA*.
- Guggemos, J., & Seufert, S. (2021). Teaching with and teaching about technology—Evidence for professional development of in-service teachers. *Computers in Human Behavior*, 115, 106613.
- Gulo, N. A. S. S. (2022). Pancasila as a Paradigm Sustainable Development Goal's (SDGs). *Journal of Information Systems and Management (JISMA)*, 1(5), 12–16.
- Halimatussadiah, A. (2020). *Mainstreaming the Sustainable Development Goals into national planning, budgetary and financing processes: Indonesian experience*.
- Harmathilda, H., Yuli, Y., Hakim, A. R., Damayanti, D., & Supriyadi, C. (2024). Transformasi Pendidikan Pesantren Di Era Modern: Antara Tradisi Dan Inovasi. *Karimiyah*, 4(1), 33–50.
- Hattarina, S., Saila, N., Faradilla, A., Putri, D. R., & Putri, R. R. G. A. (2022). Implementasi Kurikulum Medeka Belajar Di Lembaga Pendidikan. *Seminar Nasional Sosial, Sains, Pendidikan, Humaniora (SENASSDRA)*, 1(1), 181–192.
- Hennessy, S., D'Angelo, S., McIntyre, N., Koomar, S., Kreimeia, A., Cao, L., Brugha, M., & Zubairi, A. (2022). Technology use for teacher professional development in low-and middle-income countries: A systematic review. *Computers and Education Open*, 3, 100080.
- Hidayah, N. (2022). Pandangan terhadap problematika rendahnya mutu pendidikan di Indonesia. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(4), 6593–6601.
- Hidayat, U. S. (2021). *Urgensi Penguatan Pendidikan Karakter Dalam Menyiapkan Generasi Emas 2045: Strategi Membangun Generasi Cerdas, Berkarakter dan Berdaya Saing di Abad 21*. Nusa Putra Press.
- Isma, A., Isma, A., Isma, A., & Isma, A. (2023). Peta Permasalahan Pendidikan Abad 21 di Indonesia. *Jurnal Pendidikan Terapan*, 11–28.
- Jaya, H., Hambali, M., & Fakhurrozi, F. (2023). Transformasi pendidikan: peran pendidikan berkelanjutan dalam menghadapi tantangan abad ke-21. *Jurnal Review Pendidikan Dan Pengajaran*, 6(4), 2416–2422.
- Jayadih, M., Suhardi, H. E., & Rubini, B. (2024). *Strategi & Peningkatan Kualitas Layanan Guru: Transformasi Melalui Kepemimpinan, Teknologi, Kreativitas dan Entrepreneurship*. Jakad Media Publishing.
- Jhon, W., Zubaidah, E., & Mustadi, A. (2021). Challenges in the implementation of character education in elementary school: experience from Indonesia. *Ilkogretim Online*, 20(1).
- Kartikasari, E. (2024). Wacana Indonesia Emas di Artikel Ilmiah 2020-2024: Tinjauan Linguistik Korpus. *Prosiding Seminar Nasional Kusuma*, 2, 167–178.
- Kawuryan, S. P., Sayuti, S. A., & Dwiningrum, S. I. A. (2021). Teachers Quality and Educational Equality Achievements in Indonesia. *International Journal of Instruction*,

14(2), 811–830.

- Kusumah, W., & Alawiyah, T. (2021). *Guru Penggerak: Mendorong Gerak Maju Pendidikan Nasional*. Penerbit Andi.
- Lailia, S. A., Fatimah, S., Seftiana, A. F., Ayu, S., & Rista, V. N. (2023). Mengintegrasikan teknologi digital dalam pembelajaran di MI/SD pada era revolusi industri 5.0. *SIGNIFICANT: Journal Of Research And Multidisciplinary*, 2(01), 10–19.
- Lembong, J. M., Lumapow, H. R., & Rotty, V. N. J. (2023). Implementasi merdeka belajar sebagai transformasi kebijakan pendidikan. *Jurnal Educatio FKIP UNMA*, 9(2), 765–777.
- Leontinus, G. (2022). Program dalam pelaksanaan tujuan pembangunan berkelanjutan (SDGS) dalam hal masalah perubahan iklim di Indonesia. *Jurnal Samudra Geografi*, 5(1), 43–52.
- Lestari, N. D., & Yulaini, E. (2024). Analisis Implementasi Konsep Pembelajaran Akuntansi Kurikulum Merdeka Belajar Pada SMK Di Palembang. *SEMINAR NASIONAL PENDIDIKAN IPS" Transformasi Pendidikan IPS Menyongsong Era Society 5.0" Diselenggarakan Oleh Universitas PGRI Palembang*, 1(Maret).
- Lestari, R. D. (2021). Mengimplementasikan Nilai Kepahlawanan Ki Hajar Dewantara dalam Proses Pembelajaran Bahasa Indonesia. *Pedagogi: Jurnal Pendidikan Dan Pembelajaran*, 1(1), 30–37.
- Lestari, S. (2020). *Pengembangan Karakter Berbasis Budaya Sekolah*. CV. Pilar Nusantara.
- Listyaningsih, L., Alrianingrum, S., & Sumarno, S. (2021). Preparing Independent Golden Millennial Generation Through Character Education. *2nd Annual Conference on Education and Social Science (ACCESS 2020)*, 162–167.
- Magfiroh, A., & Nugraheni, N. (2024). Analisis Penerapan Sustainable Development Goals (SDGs) dalam Upaya Peningkatan Pendidikan berkualitas di Indonesia. *Socius: Jurnal Penelitian Ilmu-Ilmu Sosial*, 1(10), 52–57.
- Maisaroh, A. A., & Untari, S. (2024). Transformasi Pendidikan Karakter Melalui Kebijakan Pemerintah Di Indonesia Menuju Generasi Emas 2045. *Jurnal Kebijakan Pemerintahan*, 18–30.
- Maisaroh, M., Ninthia, D. S., Pratiwi, S. I., Pelealu, N. C. O. M., & Warman, W. (2024). Optimalisasi Kualitas Pendidikan Melalui Pendekatan Supervisi dan Inovasi Pembelajaran di Sekolah. *Pendas Mahakam: Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, 9(1), 60–69.
- Mohamed Hashim, M. A., Tlemsani, I., & Matthews, R. (2022). Higher education strategy in digital transformation. *Education and Information Technologies*, 27(3), 3171–3195.
- Mustofa, A., Anggara, F. A., & Fatah, Z. (2023). Dampak Pengelolaan Dana Desa Terhadap Peningkatan Pendidikan Desa. *Sawala: Jurnal Administrasi Negara*, 11(2), 226–241.
- Narula, S., & Sabharwal, D. (2024). Transformative Influence of Disruptive Innovations on Markets and Business Performance. *Review of Technologies and Disruptive Business Strategies*, 163–184.
- Nugraha, G. A., Baidi, B., & Bakri, S. (2021). Transformasi manajemen fasilitas pendidikan pada era disrupsi teknologi. *Jurnal Ilmiah Ekonomi Islam*, 7(2), 860–868.
- Nurhayati, S., & Lahagu, S. E. (2024). *Pendidikan Sepanjang Hayat*. PT. Sonpedia Publishing

Indonesia.

- Nuryana, Z., Nurcahyati, I., Rahman, A., Setiawan, F., & Fadillah, D. (2020). The challenges and solutions of teachers' problems to achieve education golden era. *Universal Journal of Educational Research*, 8(2), 583-590.
- Oliveira, K. K. de S., & De Souza, R. A. C. (2022). Digital transformation towards education 4.0. *Informatics in Education*, 21(2), 283-309.
- Paling, S., Makmur, A., Albar, M., Susetyo, A. M., Putra, Y. W. S., Rajiman, W., Djamilah, S., Suhendi, H. Y., & Irvani, A. I. (2024). *Media Pembelajaran Digital*. TOHAR MEDIA.
- Pasaribu, M., & Widjaja, A. (2021). *Strategi dan Transformasi Digital*. Kepustakaan Populer Gramedia.
- Permatasari, P., Ilman, A. S., Tilt, C. A., Lestari, D., Islam, S., Tenrini, R. H., Rahman, A. B., Samosir, A. P., & Wardhana, I. W. (2021). The village fund program in Indonesia: Measuring the effectiveness and alignment to sustainable development goals. *Sustainability*, 13(21), 12294.
- Pramana, C., Chamidah, D., Suyatno, S., Renadi, F., & Syahrudin, S. (2021). Strategies to Improved Education Quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 12(3), 1977-1994.
- Pratikno, Y., Hermawan, E., & Arifin, A. L. (2022). Human resource 'Kurikulum Merdeka' from design to implementation in the school: What worked and what not in Indonesian education. *Jurnal Iqra': Kajian Ilmu Pendidikan*, 7(1), 326-343.
- Puspa, C. I. S., Rahayu, D. N. O., & Parhan, M. (2023). Transformasi pendidikan abad 21 dalam merealisasikan sumber daya manusia unggul menuju indonesia emas 2045. *Jurnal Basicedu*, 7(5), 3309-3321.
- Rafsanjani, T. A., & Rozaq, M. A. (2024). Educational Problems in Indonesia. *Solo Universal Journal of Islamic Education and Multiculturalism*, 2(02), 135-144.
- Ramli, R. (2021). Achieving sustainable development goals (SDGs) through indigenous group protection in Indonesia. *IOP Conference Series: Earth and Environmental Science*, 921(1), 12074.
- Rani, P. R. P. N., Asbari, M., Ananta, V. D., & Alim, I. (2023). Kurikulum merdeka: transformasi pembelajaran yang relevan, sederhana, dan fleksibel. *Journal of Information Systems and Management (JISMA)*, 2(6), 78-84.
- Rosa, E., Destian, R., Agustian, A., & Wahyudin, W. (2024). Inovasi Model dan Strategi Pembelajaran dalam Implementasi Kurikulum Merdeka: Inovasi Model dan Strategi Pembelajaran dalam Implementasi Kurikulum Merdeka. *Journal of Education Research*, 5(3), 2608-2617.
- Rosani, M., Valianti, R. M., & Lestari, N. D. (2023). Teachers' Perceptions about Student Management in State Junior High School, Palembang City. *JMKSP (Jurnal Manajemen, Kepemimpinan, Dan Supervisi Pendidikan)*, 8(2), 1023-1031.
- Said, S. (2023). Peran teknologi digital sebagai media pembelajaran di era abad 21. *Jurnal PenKoMi: Kajian Pendidikan Dan Ekonomi*, 6(2), 194-202.
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 103305.
- Saputra, A., & Setiawan, A. (2024). Hambaran dan Solusi Manajemen Sarana dan Prasarana Pendidikan. *Proceedings of International Conference on Educational*

- Management*, 2, 257–270.
- Sariwardani, A. (2023). Manajemen Pendidikan Di Era Revolusi Industri 4.0 Dan Society 5.0. *Central Publisher*, 1(9), 1035–1048.
- Sartini, S., Chondro, A., Prayitno, H. J., & Chairunissa, I. (2024). Tantangan kepemimpinan adaptif dalam dunia pendidikan di era generasi milenial. *TEACHING: Jurnal Inovasi Keguruan Dan Ilmu Pendidikan*, 4(2), 98–110.
- Savira, L. (2023). Peran guru pada transformasi pendidikan dalam menyongsong generasi emas 2045. *Al-Madaris Jurnal Pendidikan Dan Studi Keislaman*, 4(2), 28–36.
- Sembiring, M. G. (2022). The Role of Virtual Teacher in the Digital Age: Engraver the Future of Indonesian Golden Generations. *International Journal of Research in STEM Education*, 4(1), 15–28.
- Septiani, E., Setyowati, D. L., & Atmaja, H. T. (2022). Pengembangan EduKependudukan digital di sekolah siaga kependudukan untuk mewujudkan sustainable development goals (SDGs). *JINoP (Jurnal Inovasi Pembelajaran)*, 8(2), 156–170.
- Shaturaev, J. (2021a). 2045: Path to nation's golden age (Indonesia Policies and Management of Education). *Science and Education*, 2(12), 866–875.
- Shaturaev, J. (2021b). A comparative analysis of public education system of Indonesia and Uzbekistan. *Bioscience Biotechnology Research Communications*, 14(5), 89–92.
- Shaturaev, J. (2021c). Education in indonesia: financing, challenges of quality and academic results in primary education. *Архив Научных Исследований*.
- Shaturaev, J. (2021d). indonesia: superior policies and management for better education (Community development through Education). *Архив Научных Исследований*, 1(1).
- Sinambela, E. A., SE, M. M., Lelo Sintani, M. M., Winanto Nawarcono, S. E., Kamaruddin, M. J., SM, M. M., Darul Wiyono, S. E., Pratomo, A. B., Yunus, A. I., & Saksono, H. (2023). *Manajemen Bisnis Digital*. Cendikia Mulia Mandiri.
- Siregar, I., Mukhtar, M., Anwar, K., Mahmud, M. Y., & Munte, R. S. (2024). Isu-Isu Global Pengembangan Kurikulum Merdeka Dan Pemagangan Life Skill World Class Education. *Jurnal Review Pendidikan Dan Pengajaran (JRPP)*, 7(4), 12887–12895.
- Sofiyana, M. S., Ahdiyat, M., Iskandar, A. M., Hairunisya, N., Usriyah, L., Dwiantara, L., Ariani, B., Izzati, F. A., Muryani, E., & Gunawan, B. P. (2021). *PANCASILA, Merdeka Belajar dan Kemerdekaan Pendidik*. Unisma Press.
- Sudarmo, S., Arifin, A., Pattiasina, P. J., Wirawan, V., & Aslan, A. (2021). The Future of Instruction Media in Indonesian Education: Systematic Review. *Al-Ishlah: Jurnal Pendidikan*, 13(2), 1302–1311.
- Sukmayadi, V., & Yahya, A. (2020). Indonesian education landscape and the 21st century challenges. *Journal of Social Studies Education Research*, 11(4), 219–234.
- Sulaeni, S. (2024). *Peran Kepala Sekolah Dalam Implementasi Sekolah Ramah Anak Untuk Mencegah Bullying Di Tk Negeri Pembina Kecamatan Bancak Kabupaten Semarang*. Universitas PGRI Semarang.
- Susianita, R. A., & Riani, L. P. (2024). Pendidikan Sebagai Kunci Utama Dalam Mempersiapkan Generasi Muda Ke Dunia Kerja Di Era Globalisasi. *Prosiding Pendidikan Ekonomi*, 1–12.
- Sutanto, S. (2024). Transformasi Pendidikan di Sekolah Dasar: Peran Guru dalam Mengimplementasikan Kurikulum Merdeka di Indonesia. *Jurnal Guru Sekolah Dasar*,

1(1), 69–76.

- Tanjung, B. N. (2020). Human resources (HR) in education management. *Budapest International Research and Critics in Linguistics and Education (BirLE) Journal*, 3(2), 1240–1249.
- Thamrin, H. (2020). Educational aspects in efforts to realize SDGs in Indonesia. *Journal of Advances in Education and Philosophy*, 4(11), 473–477.
- Toyib, M., & Herachwati, N. (2024). Navigating uncertainty and policy alignment: Assessing BRIN's role in Indonesia's space program. *Space Policy*, 101632.
- Triarsuci, D., Al-Qodri, H. T., Rayhan, S. A., & Marini, A. (2024). Manajemen Sumber Daya Manusia dalam Pengelolaan Infrastruktur Sekolah Dasar: Tantangan dan Solusi. *Jurnal Pendidikan Guru Sekolah Dasar*, 1(3), 15.
- Victoria, M., & Maria, K. A. (2023). Welcoming the Golden Indonesia Vision 2045: Learning Doesn't Have to Go to School. *Available at SSRN* 4546393.
- Warisno, A. (2022). Konsep mutu pembelajaran dan faktor-faktor yang mempengaruhinya. *Attractive: Innovative Education Journal*, 4(1), 310–322.
- Yudiawan, A., Sunarso, B., & Sari, F. (2021). Successful Online Learning Factors in COVID-19 Era: Study of Islamic Higher Education in West Papua, Indonesia. *International Journal of Evaluation and Research in Education*, 10(1), 193–201.
- Yusuf, Y. (2024). Pendidikan yang Memerdekakan: Persepektif Freire dan Ki Hajar Dewantara. *Peradaban Journal of Interdisciplinary Educational Research*, 2(2), 55–72.
- Zakky, K. T. D. I. H., & Almubaroq, S. P. (n.d.). *Reformasi Pendidikan Di Perguruan Tinggi Menyongsong Indonesia Emas 2045*. Indonesia Emas Group.

Exploring Lived Experience: The Integration of AI in Junior & Senior High Schools in Bandung

Alfian Supriadi¹, Sururi¹, Nurdin¹

¹ Department of Educational Administration, Indonesia University of Education, Indonesia

Corresponding author e-mail: alfiansupriadi@upi.edu

Article History: Received on 11 June 2025, Revised on 11 June 2025,
Published on 17 June 2025

Abstract: This study purpose to explore the lived experiences of students, teachers, and parents regarding the integration of Artificial Intelligence (AI) in junior and senior high school education across three model schools in Bandung, Indonesia. Employing a qualitative narrative inquiry design, data were collected through in-depth interviews with 18 informants, including teachers and students, who represent public, religious, and vocational school settings. The findings reveal that AI is experienced as a formative mirror, offering real-time feedback and encouraging skill development, but also evokes emotional contradictions, including anxiety, perfectionism, and spiritual dissonance. Teachers and parents were found to be essential mediators who reframed AI's presence through relational, ethical, and religious frameworks. In faith-based contexts, participants expressed concern over AI's inability to capture sincerity (*niat*) or foster moral reflection, underscoring its epistemological and spiritual limits. The study concludes that AI must be integrated through a culturally responsive, ethically anchored approach that balances digital efficiency with human meaning, emotional resonance, and pedagogical intentionality.

Keywords: *Artificial_Intelligence, Education, Ethical_Pedagogy, Narrative_Inquiry, Spiritual_Learning.*

A. Introduction

In recent years, the presence of Artificial Intelligence (AI) in the educational sphere has shifted from being an optional innovation to becoming an essential component of how schools operate and make decisions. This transformation is especially visible in urban educational hubs such as Bandung, where junior high schools are increasingly relying on AI technologies to handle the complexities of day-to-day school management. One of the clearest examples can be seen in the digitization of administrative systems: tasks such as archiving student records, generating academic information, and managing correspondence with parents, once managed manually, are now executed automatically through AI-powered document systems (Nazaretsky et al., 2022). These intelligent systems are not only capable of learning usage patterns, but also categorizing documents by relevance or urgency, and even predicting when certain reports need to be updated or submitted (Celik et al., 2022).

As such, they reduce bureaucratic delays and enhance procedural clarity, freeing administrators to focus more on strategic rather than clerical functions. Building on this administrative advancement, AI is now being used to assist principals and school financial officers in preparing more accurate and responsive school budgets. Through predictive analytics, AI can analyze historical spending patterns, assess market changes in educational supplies, and generate simulations for future budget allocations based on projected student enrollment (Singh & Hiran, 2022). This forward-looking approach makes school financial planning more proactive rather than reactive. Similarly, AI has improved the notoriously complex process of staff scheduling. Programs can now generate optimized timetables by taking into account multiple variables, including teacher workload, subject continuity, student grouping preferences, and even the physical proximity of classrooms, thereby minimizing transition time and maximizing instructional flow (Karataş & Çınaroğlu, 2025). These developments underscore

the growing influence of AI not just as a convenience but as a strategic tool for institutional efficiency and resilience (Khang, 2025).

Moreover, at the leadership level, AI plays an increasingly pivotal role in decision-making. School principals and management teams now benefit from AI-generated dashboards that consolidate academic performance data, flag anomalies in student attendance, and issue alerts for behavioral risks or potential dropouts (Bawaneh et al., 2025). With access to this real-time intelligence, school leaders are empowered to make timely and evidence-based decisions without sifting through voluminous spreadsheets or anecdotal reports. Importantly, while AI enhances precision and speed in leadership practices, it does not replace the human dimension of educational leadership. Instead, it acts as an enabler, offering clarity, reducing decision fatigue, and allowing school leaders to devote more attention to instructional supervision, stakeholder engagement, and visionary planning rather than administrative overload (Lee & Liu, 2004).

In Bandung's junior high schools, where student populations are expanding and public demand for accountability is intensifying, the adoption of AI tools has moved beyond being a luxury. It is increasingly viewed as a structural necessity. The shift toward AI is not simply a matter of following global technology trends—it reflects a deeper realization that educational institutions must be equipped to operate intelligently and adaptively in complex environments (Kaplan-Rakowski et al., 2023). In this context, AI is more than just a technical support system; it becomes a strategic partner in long-term school improvement, operational sustainability, and instructional innovation (Eager & Brunton, 2023). Schools that embrace AI with a clear vision and implementation plan are better positioned to meet the evolving needs of learners and the broader educational ecosystem (Airaj, 2024).

Beyond its role in management, one of the most remarkable consequences of AI integration in Bandung's classrooms has been the visible surge in student enthusiasm. AI-powered educational tools—such as interactive learning platforms, adaptive quizzes, virtual labs, and AI-assisted writing applications—have transformed the way students interact with learning (Zimmerman, 2018). In contrast to traditional, teacher-centered instruction that often relies on rote memorization and passive absorption, these technologies foster curiosity, autonomy, and responsiveness. Students are no longer mere recipients of information; they are active participants in digital learning environments that react intelligently to their performance and preferences (Kim & Lee, 2020).

This shift has turned learning into a dynamic experience—one that is both personalized and empowering (Ali, 2020). This enthusiasm is evident in several dimensions. In terms of volume, students are engaging with learning materials more frequently and voluntarily. Classroom observations and teacher feedback indicate that learners spend additional time outside school hours exploring AI-enhanced exercises, particularly those that include gamified feedback, digital rewards, or personalized learning paths (Popenici & Kerr, 2017). Whereas conventional worksheets often result in minimal repetition, AI platforms adjust difficulty levels in real-time and provide immediate feedback, encouraging persistent engagement. For instance, a student using an AI-based English chatbot might complete significantly more conversational exchanges weekly than with printed assignments, driven by the interactivity and enjoyment embedded in the platform (Baidoo-anu & Owusu Ansah, 2023).

Most significantly, students describe a newfound emotional connection to learning. Teachers observe that classrooms feel more energetic, collaborative, and forward-thinking. Far from viewing AI

as a cold or intimidating tool, students see it as a learning companion—something that supports them without judgment and encourages experimentation (Caleb Kimondo et al., 2023). Group activities have evolved as well: AI-enhanced simulations and dashboards have become shared interfaces for discussion, analysis, and decision-making. Additionally, as students begin to understand how AI algorithms function, they start asking more critical questions—not only about subject content, but about the technology itself. This cultivates both digital literacy and metacognitive awareness, as learners develop a clearer understanding of how they learn, and how technology supports—or shapes—that learning (Karataş & Çınaroğlu, 2025). Taken together, the integration of AI in Bandung’s junior high schools has elevated not only the quantity of student participation but also the quality of intellectual output and the depth of content mastery. In a context where traditional pedagogies often struggle to inspire sustained interest, AI emerges as a powerful driver of renewed academic energy.

The increased motivation, curiosity, and ownership exhibited by students suggest that AI, when meaningfully implemented, can reignite a culture of inquiry and exploration in classrooms (Díaz & Nussbaum, 2024). However, while quantitative data and system analytics may provide statistical indicators of engagement, they often fall short of revealing how students subjectively experience these transformations—emotionally, cognitively, and socially. Thus, there arises a pressing need for a more human-centered methodology to grasp the full contours of this phenomenon. In this regard, narrative interviewing emerges as a compelling methodological approach to delve deeper into the lived experiences of students navigating AI-enhanced classrooms. Unlike structured questionnaires or behaviorist observation tools, narrative interviews create space for students to articulate their encounters, hesitations, and breakthroughs in their own words. According to Anderson & Kirkpatrick (2016), narrative interviews allow

participants to construct meaning by recounting events and shaping them into coherent life stories. This process is not only informative but also ethically significant, as it positions students as co-authors of the research process rather than mere data points.

Moreover, narrative interviewing is particularly suitable for capturing how young learners interpret the shifting roles of teachers, digital interfaces, and their own sense of agency in learning environments increasingly influenced by AI. As Küsters (2022) emphasized, the narrative mode is crucial when exploring experiences that are temporally layered and emotionally nuanced, exactly the kind of complexity AI-infused classrooms present. When students reflect on their interactions with intelligent systems—ranging from praise by a virtual tutor to frustration with an algorithmic misjudgment—they do not simply recall actions, but reframe identity, motivation, and growth. In practice, narrative interviews also afford a level of methodological depth unmatched by standard survey techniques.

They are dialogical rather than interrogative, enabling researchers to follow the thematic logic of the interviewee rather than imposing a rigid question framework. De Fina (2021) argues that narrative inquiry, when approached from a narratives-as-practices perspective, allows the researcher to analyze not just the content of what is said, but also how it is said, when it is said, and in relation to what social and cultural assumptions. This is especially valuable in Indonesian classrooms, where student expressions may be shaped by local norms of modesty, respect, and indirectness—elements that require interpretive sensitivity.

Furthermore, the credibility and trustworthiness of narrative interviews have been widely recognized in contemporary social science. Josselson & Hammack (2021) contend that narrative analysis is essential for understanding how individuals navigate shifting social conditions and emerging institutional norms, such as

those posed by the adoption of AI in education. By collecting and interpreting these stories, researchers can map not only patterns of experience but also the diversity of interpretation, emotion, and reflection among students. This contributes to a more inclusive and grounded educational discourse, especially in contexts where digital innovation risks overshadowing the voices of learners themselves.

Finally, recent literature affirms that interviews, particularly narrative-based ones, remain one of the most flexible and powerful tools in social science research. As Knott et al. (2022) asserted, interviews offer rich, layered insights into social behavior, institutional transformations, and personal adaptation, making them indispensable when exploring new frontiers such as AI in education. They highlight how interviewing, when executed with reflexivity and ethical awareness, serves as both a method of data collection and a process of meaning-making.

While the quantifiable benefits of AI in Bandung's junior high schools are evident in both managerial efficiency and student engagement, these surface-level metrics do not fully capture the emotional, cognitive, and relational dimensions of AI-mediated learning. For researchers committed to understanding education not only as a system but also as a human experience, narrative interviewing provides a methodologically robust and ethically responsive pathway. It enables us to listen—to truly hear—how students are living through this educational transformation, and how their stories might guide more thoughtful, equitable, and human-centered AI integration in the classrooms of the future. This is the urgency of this research.

Artificial Intelligence (AI), in the context of education, can be broadly defined as a constellation of computational systems capable of performing tasks that traditionally require human cognition, such as perception, reasoning, learning, and decision-

making (Holmes & Tuomi, 2022; Woolf & Tumim, 1991). Within educational settings, AI refers not only to intelligent tutoring systems and adaptive learning platforms but also to more complex technologies, including natural language processing, data-driven feedback mechanisms, and generative tools that simulate human communication (Beck et al., 1996; Zimmerman, 2018). AI applications in schools have extended into administrative automation, student assessment, content generation, and even emotional recognition, thus transforming the structural and pedagogical framework of teaching and learning (Caleb Kimondo et al., 2023; Popenici & Kerr, 2017). Definitions of AI in education are continuously evolving, particularly as generative AI like ChatGPT introduces new layers of interactivity and epistemological questions surrounding authorship and authenticity (Baidoo-anu & Owusu Ansah, 2023).

The dimensions of AI in education span across technological, pedagogical, institutional, and ethical domains. Technologically, AI includes machine learning algorithms, predictive analytics, and intelligent agents that personalize learning and optimize outcomes (Almasri, 2024; Singh & Hiran, 2022). Pedagogically, AI reconfigures the teacher's role into that of a learning facilitator, enhancing classroom engagement and providing individualized support (Karataş & Çınaroğlu, 2025). At the institutional level, AI supports data-informed governance, budget efficiency, and digital infrastructure (Khang, 2024; Nazaretsky et al., 2022). Ethically, concerns arise around algorithmic bias, surveillance, and data privacy, urging stakeholders to uphold fairness and transparency (Airaj, 2024; Guilherme, 2019). As a consolidated framework, Celik et al. (2022) provides one of the most comprehensive reviews to date, proposing that any meaningful implementation of AI in education must be examined through these four interrelated dimensions to ensure both technical efficacy and pedagogical integrity.

Quality education occupies a foundational position within global and national education agendas, particularly through the framework of Sustainable Development Goal 4 (SDG 4), which envisions inclusive, equitable, and transformative education for all. Quality, in this sense, is not limited to formal access or enrollment rates but includes the availability of qualified teachers, relevant curriculum content, adequate learning resources, inclusive school environments, and measurable student competencies in both cognitive and non-cognitive domains. As Rulandari (2021) has been shown in her study of Indonesia's SDG implementation, initial strides in expanding participation have yet to be matched by significant gains in learning outcomes and pedagogical equity. This gap between access and impact has intensified calls for systemic interventions capable of addressing the complexity of educational ecosystems, where traditional reforms alone may no longer suffice. In this context, AI is emerging not merely as a technological trend but as a strategic tool to address inefficiencies, personalize instruction, and generate data-driven insights that support pedagogical refinement.

In the Indonesian context, the rationale for adopting AI is directly linked to long-standing structural problems that impede quality advancement. These include teacher shortages, uneven classroom resources, rigid curriculum delivery, and weak student assessment systems (Shaturaev, 2021). Despite increased public education financing, disconnection persists between funding priorities and real school-level needs (Shaturaev, 2022). Moreover, Madhakomala et al. (2022) note that Indonesia's prevailing educational model often relies heavily on teacher-centered instruction, limiting opportunities for student autonomy, inquiry, and adaptive feedback.

Here, AI is increasingly viewed as a solution to amplify teacher effectiveness, especially in contexts where professional development is inconsistent or infrastructure is limited. AI can offer

intelligent tutoring systems, real-time analytics, and formative assessment tools that adjust to each student's progress, thereby filling instructional gaps and enhancing differentiated learning (Pramana et al., 2021). Additionally, Shaturaev (2021) argues that superior policy and educational management must embrace innovation that is both scalable and sensitive to local realities—AI fits this vision by enabling schools to extend learning opportunities without being wholly dependent on human capital or centralized control. Therefore, the case for AI integration is not driven by novelty, but by necessity, grounded in the urgent need to transform static educational systems into responsive, inclusive, and forward-looking learning environments.

Bandung, the capital city of West Java, has long been regarded as a dynamic educational hub in Indonesia, home to a wide range of public and private schools, vocational institutions, and higher education centers. Its reputation as a center of innovation and civic development makes it a fertile ground for educational transformation. As highlighted by Nugroho et al. (2024) Bandung's international cooperation with Suwon, South Korea, through the Bandung-Suwon Sister City Partnership, has significantly influenced its educational reform agenda, particularly in areas of digital infrastructure, teacher training, and STEM-oriented learning environments. These transnational partnerships reflect Bandung's strategic ambition not only to improve access to education but to raise the standard of educational quality through collaboration, technology transfer, and global benchmarking. Amidst these citywide reforms, three schools have emerged as model institutions due to their integration of AI-enhanced learning, commitment to inclusive pedagogical practices, and institutional innovation.

First, SMP Negeri 2 Bandung has implemented adaptive e-learning platforms supported by AI-driven diagnostics that tailor instruction to individual student profiles. It was selected for this study because of its government-supported pilot program aligned with digital

transformation initiatives under the Ministry of Education. Second, Assalam Islamic Middle School, as studied by Nugraha et al. (2024), offers a unique blend of religious and environmental education supported by the Dick and Carey model of instructional design. Their integration of AI for Qur'anic learning and nature-based ethics places them at the intersection of tradition and innovation. Third, SMK Negeri 4 Bandung, a vocational school known for its applied science curriculum, was chosen for its collaboration with industry partners and the implementation of AI-based service quality monitoring systems (Zulvia & Susanti, 2022). These schools represent different educational strata-public, private religious, and vocational-providing a comprehensive landscape for studying how AI may be adapted across diverse learning ecosystems.

The choice of these institutions is further supported by Bandung's vibrant culture of community empowerment and educational experimentation. As documented by Mahadewi et al. (2022), the city's initiatives in public health education, volunteer engagement, and behavioral outreach underscore the active role of civil society in supporting school-based programs. Moreover, private educational institutions in Bandung demonstrate strong organizational citizenship behavior and staff engagement when empowered through clear psychological contracts and incentive structures (Warsito et al., 2021). Pramana et al. (2021) also underscore the importance of localized, school-level strategies-such as leadership empowerment, curriculum flexibility, and digital adaptation-in elevating educational quality in Indonesia. Bandung, through its urban governance, policy experimentation, and collaborative networks, serves as a microcosm of Indonesia's broader educational aspirations. Hence, the selection of these three schools is not incidental, but rooted in their contextual richness, programmatic innovation, and alignment with national and international quality frameworks. Their narratives offer valuable insights into how AI, quality education, and institutional agency intersect in real school environments. These schools thus serve not

only as sites of empirical research but also as living laboratories of transformation, where the aspirations of SDG 4 are translated into tangible educational practices.

B. Methods

Population and Sample

The present study adopts a qualitative design grounded in narrative inquiry, aiming to explore the lived experiences of students in junior high schools in Bandung who are exposed to AI-integrated learning environments. The choice of this approach is based on the relevance of the qualitative approach to understanding the contextual phenomenon and the experience of some entities (Bingham, 2023; Charli et al., 2022). The population of this research comprises students enrolled in three purposively selected schools in Bandung: SMP Negeri 2 Bandung, Assalam Islamic Middle School, and SMK Negeri 4 Bandung. These institutions represent diverse educational ecosystems—public, private, religious, and vocational—with distinct AI implementation profiles, making them ideal for capturing a rich tapestry of student narratives within the Bandung educational context. To align with the narrative methodology's emphasis on depth over breadth, a purposive sampling strategy was employed to ensure the inclusion of participants with direct and varied exposure to AI-assisted learning environments.

As Beedell (2021) explained, purposive sampling moves beyond randomization by engaging "active participants" who can meaningfully illuminate the research phenomenon. In educational studies, this strategy allows the researcher to "intentionally select information-rich cases" that contribute to theoretical insight and contextual depth (Canter, 2023). Specifically, the sample included 18 students from the three selected schools, balanced across gender, grade level, and academic performance categories to reflect a diversity of experiences with AI platforms. This sampling method is consistent with the logic of conceptual representativeness, which

seeks variation across socially and pedagogically relevant dimensions rather than statistical generalizability (Hing et al., 2021).

The selection of participants also took into account the narrative potential of the informants, particularly their capacity and willingness to articulate personal experiences in a coherent, reflective manner. As demonstrated in the narrative research Salendab & Akmad (2023) and Salendab & Laguda (2023), purposive sampling is particularly effective when participants are asked to recount experiential knowledge shaped by unique institutional or pedagogical conditions. The interviewees in this study were identified through teacher recommendations, classroom observations, and initial informal conversations to ensure that selected students were both information-rich and ethically suitable for in-depth narrative engagement. The sample size of 18 was determined in accordance with prevailing qualitative research standards, which suggest that saturation in narrative and phenomenological studies often occurs between 10 to 20 participants, depending on the complexity and heterogeneity of the phenomenon (Bekele & Ago, 2022).

This guidance aligns with Firouzkouhi et al. (2022), who argue that sample adequacy in qualitative research is not a function of quantity, but of the depth and variation of responses obtained. While some studies may justify smaller or larger samples based on research scope, the current number was deemed sufficient to reach thematic saturation while still allowing for narrative individuation—the preservation of each participant’s unique voice and contextual reality. Ultimately, this purposive and carefully curated sample supports the narrative objective of the study: to generate situated, reflective, and richly textured accounts of students’ experiences with AI in education. As Musungwa & Kowe (2022) noted in their own qualitative investigation, purposeful engagement with participants who are embedded in relevant

operational settings allows researchers to go beyond surface-level understanding and produce findings that are both contextually grounded and theoretically robust.

Narrative Interview

This study employed narrative interviews as the primary data collection method, chosen for their ability to elicit rich, contextual, and temporally structured accounts of students' lived experiences with AI-enhanced education. As Küsters (2022) articulated, narrative interviews are particularly suited for research that seeks to understand how individuals construct meaning around life events, social systems, or institutional practices. Unlike traditional structured interviews that emphasize information extraction, narrative interviews allow participants to guide the conversation, shape the chronology, and emphasize elements that hold subjective significance. In this research, this flexibility was essential in uncovering how students make sense of the integration of AI into their learning environments, and how these experiences interact with their perceptions of educational quality, autonomy, and motivation.

The interviews were conducted using a semi-structured narrative approach, influenced by the model of the structured narrative interview proposed by Moenandar et al. (2024). This model balances free narration with thematic scaffolding, ensuring that while students are invited to tell their stories in their own words, the interviews also maintain a degree of coherence across participants. Each session began with an open narrative prompt such as, "Can you tell me about a time when technology—especially AI—helped or challenged your learning process?" From there, follow-up questions were gently introduced to explore specific episodes, emotional responses, peer interactions, and reflections on teaching quality and classroom environment. This structure preserved narrative flow while enabling comparative analysis.

To further support the authenticity and comfort of the participants, elements of peer interviewing were integrated for select informants, especially among younger students who might have felt intimidated by an adult researcher. As described by Kess & Juutinen (2024), peer interviews can lower hierarchical pressure and elicit more spontaneous and emotionally nuanced narratives. In two of the three schools, students were invited to engage in co-reflective dialogues with trusted classmates, supported by the researcher's presence as a facilitator rather than a primary questioner. These peer-mediated sessions not only deepened the relational quality of the data but also surfaced collective insights about shared educational experiences. In line with Sabine Flick (2020) principles for qualitative interviewing, particular attention was paid to interview ethics, relational trust, and the interview setting.

All interviews were conducted in a quiet, familiar school space to reduce cognitive and emotional barriers. Audio recordings were used with informed consent, and each student was assured that their story would be anonymized and respected as a contribution to broader educational understanding, not as a performance to be judged. Interview durations ranged from 30 to 50 minutes, depending on the student's engagement level, narrative complexity, and comfort in self-expression. Field notes were also taken to capture non-verbal cues, pauses, and environmental context. Ultimately, the narrative interview method served as a dialogic and interpretive space in which students could reflect on their evolving educational realities in a technologically transforming landscape. It respected their subjectivity, empowered them as co-constructors of meaning, and aligned methodologically with the study's commitment to uncovering depth, complexity, and voice in educational research.

Data Analysis

The analysis of student narratives in this study followed a narrative-structured interpretive approach, designed to respect the temporal, emotional, and reflexive qualities embedded in participants' accounts of AI-integrated learning. The goal was not only to identify what students experienced, but also to examine how they constructed meaning through their stories—how events were sequenced, emphasized, emotionally colored, and socially framed. As Küsters (2022) asserts, narrative data are never neutral recitations of events; rather, they are complex acts of communication in which identity, power, memory, and institutional context intersect. Therefore, the analytical framework adopted in this study moved beyond mere coding and instead emphasized narrative configuration, thematic resonance, and the performative aspects of storytelling.

Following the model of the structured narrative interview proposed by Moenandar et al. (2024), each informant was initially analyzed along three interpretive axes: (1) temporal structure (i.e., how the student organized their story from beginning to end), (2) narrative focal points (the key episodes or turning points), and (3) affective markers (expressions of emotion, uncertainty, or personal significance). These features helped distinguish between routine classroom descriptions and moments that revealed deeper struggles, shifts in perception, or meaningful encounters with AI tools. This allowed the researcher to extract not just data but meaning trajectories—how students moved from confusion to clarity, from anxiety to confidence, or from dependence to self-directed learning.

In addition, inspired by Kess & Juutinen (2024) work on peer interviewing in narrative research, the analysis paid close attention to dialogic patterns that emerged when students shared their stories in co-constructed formats. These moments, where a student's reflection triggered affirmation, elaboration, or contrast from a peer, were treated as socially situated narrative events,

revealing how experiences with AI were collectively understood and interpreted within peer groups. Such dialogical sections were analyzed for shared language, common metaphors, or recurring dilemmas, helping to build thematic clusters around broader phenomena like trust in AI feedback, digital fatigue, or perceptions of fairness in AI scoring. To maintain analytical rigor and traceability, the study followed U. Flick (2021) five-phase process for qualitative data interpretation: (1) repeated close readings of the informants, (2) open memo-writing for preliminary themes, (3) identification of narrative sequences and turning points, (4) comparison across cases, and (5) synthesis into higher-order categories.

These phases were recursive rather than linear, allowing the researcher to refine interpretations iteratively as more narratives were reviewed. Emphasis was placed on thick description and within-case depth before proceeding to cross-case comparisons, to preserve the unique voice and context of each participant. Throughout the process, reflexivity was practiced by the researcher in order to remain aware of their own interpretive position and potential influence on meaning-making. As advocated by Küsters (2022), narrative analysis requires a sensitivity not only to the participants' expressions but also to the analyst's assumptions, background, and reading practices, which invariably shape how narratives are received and re-presented. In this study, analytic memos and interpretive logs were kept to document shifts in thematic understanding, emerging contradictions, and moments of conceptual resonance. In sum, data analysis in this research was guided by the conviction that student narratives are powerful epistemological sites, where technology, pedagogy, emotion, and agency intersect. The structured narrative analysis provided both a methodological discipline and interpretive openness, allowing the research to honor the integrity of lived experience while generating analytically robust insights into how AI is transforming the educational landscape in Bandung's junior high schools

C. Results and Discussion

Result

AI as a Formative Mirror

One of the most resonant metaphors that emerged across participant narratives was that of AI as a mirror—a reflective surface that does not simply instruct, but rather reveals. In this sense, AI was not understood as a teacher in the traditional humanistic sense, nor as a passive database, but rather as a responsive, diagnostic entity that exposed the learner’s current state of understanding and performance with unrelenting immediacy. This metaphor was first articulated by Ardi (Informant 1), a student at SMP Negeri 2 Bandung, who described the AI feedback system he encountered in his English class as a “teacher who doesn’t sleep.” For Ardi, the metaphor conveyed the perpetual presence and reliability of the AI tool—its ability to respond without delay, to correct without fatigue, and to provide consistency that sometimes surpassed human capacity. In his words, the AI system “pushes you” by offering instant critiques and prompting continuous revision, leading to greater effort, deeper engagement, and an emergent sense of academic ownership. This feedback loop transformed Ardi’s engagement from mere compliance to what he himself described as a challenge-response dynamic, signaling a shift toward intrinsic motivation.

A similar experience was recounted by Bayu (Informant 3), a vocational student from SMK Negeri 4 Bandung, who described his interactions with AI simulation tools in customer service training. His narrative highlighted how the AI platform did not merely grade his responses but measured tone modulation, service etiquette, and timing—elements traditionally observed by live instructors. He characterized the experience as “not school, but training”, underlining a powerful distinction between abstract learning and

embodied professional rehearsal. Bayu's narrative suggests that for skill-based domains, AI can replicate the precision of professional standards, and thus becomes a tool for identity development, helping students imagine themselves not as "learners" but as "practitioners in formation."

Yet, this mirror metaphor was not without its cracks. Zahra (Informant 8), a top-performing student from Assalam Islamic Middle School, expressed deep ambivalence despite earning a perfect AI score on her religious studies project. In a moment of quiet reflection, she noted that although the AI had commended her structure and coherence, she felt "hollow," explaining that the tool could "show [her] surface, but not [her] soul." For Zahra, the mirror that AI provided reflected only the linguistic and logical facets of her work—it failed to acknowledge her spiritual intention, sincerity of reflection, or internal struggle. Her narrative suggests that while AI may effectively support cognitive calibration, it remains ethically mute and emotionally indifferent. It cannot discern the depth of intention, nor recognize when a student is wrestling with spiritual questions. The function of AI as a mirror, then, is double-edged. On one hand, it equips learners with unprecedented access to formative feedback that is immediate, specific, and non-punitive. For students like Ardi and Bayu, this catalyzes performance improvement and builds confidence.

The AI offers a sense of autonomy and low-stakes iteration, encouraging learners to make mistakes and revise without fear of embarrassment. On the other hand, as Zahra's account vividly reveals, the same mirror can feel mechanistic, unable to validate the affective, spiritual, or ethical dimensions of learning that are especially salient in contexts like religious education or moral development.

Moreover, this "mirror" does not reflect evenly. Its algorithms are programmed to prioritize syntactic clarity, procedural accuracy,

and behavioral conformity—dimensions that may inadvertently exclude learners whose strength lies in emotional nuance, poetic reasoning, or context-specific judgment. The metaphor of the mirror, then, is not just descriptive—it is diagnostic. It tells us that AI can illuminate surface structure but is epistemically blind to the deeper layers of human knowing: empathy, conviction, ambivalence, and transcendence. From a pedagogical standpoint, the metaphor underscores the necessity of human interpretive mediation. As echoed in the narratives of both teachers and students, the AI's role as a diagnostic mirror becomes most beneficial when its reflections are interpreted through dialogue, mentorship, and ethical framing.

Without such human scaffolding, the AI's assessments—however accurate—risk becoming detached signals, devoid of moral texture or personalized resonance. The portrayal of AI as a formative mirror reveals a compelling paradox: it offers clarity without meaning, precision without presence. While it enhances technical fluency and self-monitoring, it cannot replace the teacher's role in cultivating value-centered reflection, nor can it substitute the interpersonal dimensions of trust, empathy, and affirmation. These limitations do not diminish the value of AI, but they situate it firmly as a complementary tool, powerful yet partial, capable of reflecting what is visible, but not what is vital.

Emotional Contradictions of Automation

While many participants acknowledged the functional advantages of AI integration—its speed, objectivity, and clarity—their emotional responses to it were far from uniform. Instead, the findings reveal a layered field of contradictory emotions, shaped by learners' self-concept, technological literacy, and the social meaning they attach to machine judgment. The affective spectrum ranged from empowered mastery to crippling insecurity, suggesting that the psychological terrain of AI-mediated learning is uneven,

unpredictable, and deeply personal. For students like Ardi (Informant 1), the emotional tone of using AI was one of curiosity and challenge. He described the AI's rapid feedback loop as something that "pushes you," fostering a playful and competitive spirit.

He likened the platform to a responsive coach, turning each revision into a form of self-betterment. Similarly, Bayu (Informant 3) reported that interacting with an AI "guest" in his hospitality training was "stressful, but exciting." He perceived this stress not as a deterrent, but as an entry point into authentic professional rehearsal, noting that failure within the AI space felt safer than failure in a real-world service encounter. For these students, the emotional charge of AI use became motivational, tethered to growth, pride, and the gamification of progress.

In sharp contrast, Dito (Informant 4), also from SMP Negeri 2 Bandung, narrated his encounter with AI as emotionally depleting and psychologically isolating. Receiving a low score and cold, impersonal feedback triggered a defensive emotional response, leading him to describe the AI as "a wall," not a guide. Dito confessed that the feedback felt "like the AI didn't like me," an anthropomorphic interpretation that reveals how algorithmic assessment can unintentionally take on the role of an emotional evaluator, especially when unmediated by human support. He expressed a longing not just for instructional clarity, but for empathic recognition—someone to say "Nice try" before pointing out an error.

Lacking this, he disengaged completely from AI use in writing, opting instead for handwritten submissions and peer review. His story serves as a critical counter-narrative, reminding us that for some learners, AI may not function as a neutral evaluator but as a symbol of failure, exposure, and silent judgment. Zahra's (Informant 8) emotional response was more complex. Despite her

fluency with AI tools and high achievement, she experienced what might be termed spiritual dissonance. She shared that a perfect AI-generated score left her feeling “hollow,” sparking an existential question: Was I writing to understand, or just to perform? Her story underscores a deeper emotional paradox: even positive feedback from AI can elicit dissatisfaction if it feels misaligned with one's values, intentions, or inner truth. In Zahra's case, the AI was not threatening, but its inability to register sincerity or *niat* (intention) diminished her sense of spiritual fulfillment. This reveals that emotional contradiction is not reserved only for struggling students—it can emerge just as intensely in high performers when algorithmic affirmation feels spiritually vacuous.

Even among adults, ambivalence was evident. Pak Rafi (Informant 7), a vocational teacher and digital literacy coordinator, articulated a unique kind of professional unease. While he valued the objectivity of AI in assessing students' customer service simulations, he admitted feeling displaced as a “sole observer,” stating that now “AI watches too.” This surveillance metaphor suggests not simply administrative efficiency, but a restructuring of authority, where the teacher's eye is no longer the primary lens. He reflected on the tension between data-driven rigor and “the space for grace”—that zone of educational care where not all mistakes need metrics, and not all feedback needs to be logged. His story illustrates that emotional contradictions are not limited to learners; teachers, too, are caught in the evolving web of accountability, automation, and interpretation.

What emerges from these narratives is a clear pattern: AI integration introduces a new affective architecture into the classroom—one in which students and teachers alike must emotionally negotiate their place within, or against, algorithmic systems. The same AI platform that triggers growth for one student may generate shame for another. This supports U. Flick (2021) assertion, that technological tools in education are never purely

instrumental; they carry implicit psychological, relational, and even moral implications, depending on how they are used, framed, and received.

These findings also challenge simplistic discourses that categorize AI in binary terms—as either empowering or dehumanizing. Instead, the data reveals a dynamic continuum, where AI operates as an emotionally charged presence that can amplify motivation, magnify insecurity, or displace human affirmation, depending on context and individual disposition. This underscores the need for emotional scaffolding: human actors—teachers, mentors, peers—who can mediate AI’s feedback, buffer its coldness, and re-humanize the learning journey. In conclusion, the emotional contradictions surrounding AI in education are not accidental—they are structurally embedded in how AI assesses, represents, and relates to human learners. Recognizing and addressing these contradictions is essential if AI is to be implemented ethically, inclusively, and effectively, rather than simply efficiently.

Teacher and Parent Mediation of Digital Meaning

While much of the discourse around AI in education centers on technology itself—its algorithms, speed, and data capabilities—the narratives in this study underscore a crucial insight: AI is always filtered through human relationships. Whether as protectors, interpreters, skeptics, or spiritual guides, teachers and parents occupy pivotal roles in shaping how AI is emotionally and epistemologically experienced by learners. These mediators are not just observers of educational change; they are co-constructors of digital meaning, navigating between the machine’s output and the learner’s evolving self-understanding.

This was especially evident in the voice of Ustadzah Lina (Informant 5), a senior Islamic Religious Education teacher at Assalam Islamic Middle School. At first, she admitted skepticism,

asking rhetorically, “What is this robot doing in my subject?” Yet her turning point came not through institutional directives, but through observing her students’ growing curiosity, sincerity, and initiative in using AI tools like Tafsir 360. She described one student who explored an ayat about environmental ethics using AI, arriving in class with “real questions, not copied from worksheets.” This moment shifted her view: AI was not displacing her authority—it was activating deeper student engagement.

Even so, her role remained essential. Lina did not relinquish her interpretive responsibility. She insisted that while the AI could deliver Qur’anic references and scholarly tafsir, “it cannot feel their confusion.” She emphasized the teacher’s task as a *murabbi*—not just a knowledge dispenser, but a moral educator who could see the soul behind the sentence. Her pedagogy evolved into a hybrid model: she permitted AI-assisted research but required students to explain their learning in reflective oral presentations. “AI can give language,” she said, “but only Allah gives *hidayah*.” Her narrative reveals a nuanced approach, where technological tools are welcomed, but never uncritically accepted, and are always subject to ethical re-contextualization within Islamic pedagogical traditions.

A parallel mediating role emerged in Pak Rafi’s account (Informant 7), though shaped by his position in a vocational, data-driven environment. As the digital literacy coordinator at SMK Negeri 4 Bandung, Rafi faced pressure to implement AI in service simulation modules. He appreciated the rigor of the AI tools, which tracked student voice tone, empathy markers, and service language in real-time. Yet, he expressed discomfort at what he called the “second observer” in his classroom “Now, I teach, but AI watches too.” This surveillance metaphor suggests a shift in pedagogical sovereignty, where the teacher is no longer the sole evaluator or interpreter of performance.

To address this, Rafi introduced “human debrief” sessions after each AI-scored simulation. He invited students to talk through their emotional responses to feedback: “Was that hesitation real? Did that tone reflect your personality or anxiety?” In doing so, he reclaimed space for emotional interpretation and restored teacher authority, not as a corrector, but as a listener and bridge. He acknowledged that AI offers technical precision, but cautioned that it lacks pedagogical grace, a concept he defined as the teacher’s ability to distinguish error from growth. These mediating efforts were echoed at the household level by Ibu Rina (Informant 6), a warung owner and mother of Bayu, a student in the same vocational school. Her narrative began with wonder—seeing her son interact fluently with an AI guest in a front-office simulation—and evolved into maternal pride: “He’s talking to a screen, but becoming a man.” For Rina, the AI was not threatening. It was, in her words, a “mirror of professionalism.” Yet she remained cautious. She asked, “Can the computer read feelings?” and worried that her son might grow too comfortable with machines and forget how to serve real people.

To mitigate this, she provided balance. While Bayu practiced with AI at school, she insisted he also serve customers at her warung. “Let the AI train his skills,” she said, “but let people shape his heart.” Her maternal mediation highlights that character education remains an intergenerational project, one that cannot be outsourced to digital systems, no matter how efficient or well-designed. Together, these narratives reveal that meaning is never passively absorbed from AI systems. It is constructed through relationships, anchored in values, and constantly reinterpreted. Teachers and parents do not simply react to technological shifts—they mediate, refract, and sometimes resist them in ways that honor the learner’s humanity, social context, and moral development. Their role is not peripheral, but central: they ensure that AI does not become a cold arbiter of performance, but a co-instructor guided by compassion, purpose, and wisdom. Without

these mediators, AI risks becoming either too powerful or too hollow, imposing metrics without meaning, or accelerating skill acquisition without cultivating ethical consciousness.

The Spiritual and Moral Limits of AI

Beyond cognitive outcomes and emotional responses, the narratives in this study illuminated a final and perhaps most profound concern: the epistemological and spiritual limitations of Artificial Intelligence in education. Participants—particularly from Assalam Islamic Middle School—repeatedly returned to questions not about how AI works, but whether AI is capable of understanding or honoring the spiritual intentions (*niat*) and moral frameworks that underpin truly transformative education. This theme emerged most powerfully in the narrative of Zahra (Informant 8), a high-achieving Grade 9 student whose account brought to the surface the existential ambivalence of machine-mediated learning. Having received a perfect AI-generated score for her project on Islamic ethical values in technology, Zahra confessed feeling “hollow,” as though the system had rewarded a performance stripped of sincerity. “The AI gave me 100,” she said, “but did I really understand what I wrote? Or did I just organize information beautifully?”.

This moment of self-questioning points not to technological failure, but to a deeper ontological dissonance—a gap between the appearance of learning and the substance of understanding. Zahra went further, drawing a clear line between feedback that is algorithmically excellent and learning that is spiritually nourishing. “I wrote for the system, not for Allah,” she reflected, reframing the issue not as one of content mastery but of sacred alignment. For Zahra, AI’s silence on intention—a fundamental component of Islamic education—rendered its feedback incomplete, and at times spiritually misleading. This observation aligns with what Josselson & Hammack (2021) is described as the moral domain of narrative

research, where participants reveal struggles not with tasks per se, but with what those tasks mean in the context of identity, belief, and purpose.

Her unease was not hers alone. Ustadzah Lina (Informant 5) expressed similar concerns, albeit from the vantage point of pedagogy. While acknowledging AI's role in expanding her students' access to Qur'anic commentary, she warned against its potential to simulate understanding without internalization. "AI can give language, but only Allah gives hidayah," she said, insisting that spiritual growth requires more than correct syntax—it requires presence, sincerity, and human guidance. Lina's approach was not anti-technological, but morally conditional. She positioned AI as a possible instrument of tafakkur (reflection), but one that must remain under the ethical supervision of teachers grounded in religious values.

Indeed, both Zahra and Lina's perspectives converge on a common critique: AI lacks spiritual discernment. It can measure complexity, coherence, and even tone—but it cannot detect humility, intention, or repentance. It offers no space for ambiguity, no language for reverence. And in subjects like Pendidikan Agama Islam, where the heart of learning is transformation, not merely the acquisition of information, this absence becomes pedagogically and spiritually significant. As Zahra eloquently concluded, "It shows my surface, but not my soul." Importantly, this theme of spiritual limitation is not an abstract critique of AI, but a call for ethical humility in its application. It reveals the necessity of maintaining moral boundaries around machine authority, especially in environments where values are not simply integrated into the curriculum but constitute the curriculum itself.

AI, in these contexts, must be deployed not as a replacement for divine or human wisdom, but as a supplement to processes that are irreducibly relational and transcendental. There is also a hidden

danger raised by this theme: that algorithmic perfection may be falsely equated with moral or spiritual success. As Zahra noted, the pursuit of a green progress bar can become its own form of idolatry—"We begin to worship the score instead of seeking meaning." In such cases, the AI does not simply fail to capture spiritual depth—it may actively distract from it, replacing the slow, contemplative nature of religious inquiry with a fast, polished simulation of learning. This finding resonates with Küsters (2022), who warn that digital systems often reproduce efficiency at the cost of epistemic integrity, particularly in moral or sacred domains.

Nevertheless, the participants did not argue for removing AI from education. Rather, they advocated for its repositioning—not at the center of judgment, but at the periphery of reflection. AI, they suggest, is valuable insofar as it supports technical skill, clarifies conceptual structure, or facilitates access to resources. But it should never be granted moral authority, particularly in domains where the aim is to foster *akhlak*, *ikhlas*, or deep ethical contemplation. To summarize, the spiritual and moral limits of AI emerge not from its technological incapacity but from its ontological misalignment with human interiority. It can replicate cognition, but not conscience. It can structure arguments, but not awaken awe. In religious educational settings—and arguably in any context where meaning matters more than metrics—AI must be handled with epistemological restraint and ethical vigilance. Only then can it support, rather than erode, the sacred dimensions of learning.

Discussions

Integrating Artificial Intelligence (AI) into junior high school education in Bandung reveals a pedagogical and emotional landscape far more nuanced than current policy or technology discourse often assumes. While literature on AI in education has broadly celebrated its capacity to automate feedback, personalize learning, and enhance efficiency (Celik et al., 2022; Popenici & Kerr,

2017; Singh & Hiran, 2022). This study's findings show that these technical affordances are always filtered through human, cultural, emotional, and spiritual dimensions. In the context of religious and vocational schools in Indonesia, AI does not function as a neutral force of innovation, but as a contested mirror, reflecting progress for some, triggering anxiety or ethical reflection for others.

The first major theme—AI as a formative mirror—resonates with previous scholarship that defines AI as a tool for strengthening learner agency and metacognitive regulation. Lee & Liu (2004) and Almasri (2024), for example, argue that intelligent systems can enhance student autonomy by offering immediate, iterative feedback that scaffolds learning. This was echoed in Ardi's and Bayu's narratives, where AI's constant presence fostered self-monitoring, revision, and task ownership. However, what this study adds—especially through Zahra's reflection—is that such feedback, while accurate, can feel spiritually vacant if it lacks relational or ethical anchoring. Zahra's distinction between "writing for the system" and "writing for Allah" reveals that AI, as currently designed, addresses performance but not purpose. This affirms Díaz & Nussbaum (2024) the recent call for pedagogical intelligence—a framework that embeds spiritual, cultural, and emotional intelligence into the design of educational technologies.

In exploring the emotional contradictions of automation, the findings challenge the optimism of much of the existing literature. Zimmerman (2018) and Khang (2025) present AI as a motivator for learning, often enhancing engagement through gamification or adaptive response. While this was true for Bayu and Ardi, whose emotional responses ranged from enthusiasm to flow-like engagement, Dito's narrative reminds us that AI can also become a source of psychological discomfort, especially when feedback is experienced as cold, decontextualized, or unmediated. His feeling of being judged by "a red box" aligns with Kim & Lee (2020), who caution that students often anthropomorphize AI systems,

attributing social intentions to machines that lack empathy. This reinforces the idea that affective scaffolding is not optional; teachers must be prepared to humanize algorithmic interactions or risk deepening digital exclusion.

The role of teachers and parents as mediators in these responses is central and aligns closely with the frameworks proposed by Nazaretsky et al. (2022), who emphasize the need for trust-building, interpretive dialogue, and professional development in the ethical deployment of AI. Both Ustadzah Lina and Pak Rafi serve as interpretive anchors, translating the mechanical outputs of AI into morally resonant feedback loops. Their strategies—blending reflection with digital interaction, debriefing after simulations, and contextualizing AI within local pedagogical frameworks—confirm what Balacheff (1993) was earlier described as “real teaching” in the age of intelligent systems: not just managing data, but guiding human transformation. Moreover, Ibu Rina’s narrative expands the frame of mediation beyond the school, revealing that family-level meaning-making is equally critical to how AI is internalized or resisted by learners.

The final theme—the spiritual and moral limits of AI—offers a direct critique of techno-centric paradigms in AI research. While scholars like Baidoo-anu & Owusu Ansah (2023) have acknowledged the power of generative AI in promoting access and creativity, few have addressed the ontological disjunction between artificial systems and faith-based learning environments. Zahra’s and Lina’s narratives demonstrate that AI is not just epistemologically limited—it is spiritually mute. It cannot discern *niat* (intention), embody *hikmah* (wisdom), or recognize the sacred subtleties of *adab* (ethics). This dissonance is especially pronounced in Islamic education, where knowledge is not merely acquired but purified. The findings reinforce Guilherme et al. (2019) assertion that teacher-student relationships are at the heart of ethical education, and that AI must not replace but rather

support these relationships, particularly where moral formation is a central aim.

While much of the AI-in-education literature frames technology as a catalyst for quality, this study reveals that quality itself must be reconceptualized. As Rulandari (2021), Shaturaev (2021), and Pramana et al. (2021) have argued in the Indonesian context, educational quality cannot be measured by test scores or digital proficiency alone. It must also include student well-being, identity formation, and moral readiness. The narratives presented here suggest that AI may support such quality, but only when its use is ethically framed, relationally mediated, and spiritually grounded.

D. Conclusions

This study reveals that the integration of Artificial Intelligence (AI) into junior high schools in Bandung is far more than a technical upgrade—it is a pedagogical, emotional, and spiritual turning point that demands ethical attentiveness from educators, students, and families alike. While AI demonstrates clear potential as a formative tool for personalized feedback and skill development, its influence is always shaped by the cultural, relational, and moral scaffolding surrounding it.

The narratives show that AI can motivate and mirror growth, yet also provoke anxiety, detachment, and spiritual dissonance, particularly when human mediation is absent. Therefore, AI must be implemented not merely as an instrument of efficiency but as a partner in a larger educational project grounded in empathy, reflection, and intentionality. Only through such a holistic and humanized approach can AI contribute meaningfully to the realization of truly transformative and values-driven education.

The practical implication of this study is the utilization of AI in school activities with clear limitations. Especially, by considering

the moral and spiritual limits of AI. We also recommend that the policymaker promote the AI utilization to meet the learning in the age of 21st century and provide school graduates. However, every AI utilization must consider the effectiveness of AI functions based on the pedagogical approach.

E. Acknowledgement

The authors have the greatest gratitude to the SMP Negeri 2 Bandung, Assalam Islamic Middle School, and SMK Negeri 4 Bandung, which have contributed to this research.

References

- Airaj, M. (2024). Ethical artificial intelligence for teaching-learning in higher education. *Education and Information Technologies*, 29(13), 17145–17167. <https://doi.org/10.1007/s10639-024-12545-x>
- Ali, I. (2020). The COVID-19 Pandemic: Making Sense of Rumor and Fear. *Medical Anthropology*, 39(5), 376–379. <https://doi.org/10.1080/01459740.2020.1745481>
- Almasri, F. (2024). Exploring the Impact of Artificial Intelligence in Teaching and Learning of Science: A Systematic Review of Empirical Research. *Research in Science Education*, 54(5), 977–997. <https://doi.org/10.1007/s11165-024-10176-3>
- Anderson, C., & Kirkpatrick, S. (2016). Narrative interviewing. *International Journal of Clinical Pharmacy*, 38(3), 631–634. <https://doi.org/10.1007/s11096-015-0222-0>
- Baidoo-anu, D., & Owusu Ansah, L. (2023). Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning-Education in the Era of Generative Artificial Intelligence (AI): Understanding the Potential Benefits of ChatGPT in Promoting Teaching and Learning. *Journal of AI*, 7(1), 52–62. <https://doi.org/10.61969/jai.1337500>
- Balacheff, N. (1993). *Artificial Intelligence and Real Teaching BT - Learning from Computers: Mathematics Education and Technology* (C. Keitel & K. Ruthven, Eds.; pp. 131–158). Springer Berlin Heidelberg.

- Bawaneh, A. K., Al-Salman, S. M., Ali Salem, T. M., & Altarawneh, A. F. (2025). AI Shaping the Future of Education: Science and Math Teachers' Satisfaction Level and Motivating Factors towards Integrating Artificial Intelligence in Teaching and Learning. *International Journal of Information and Education Technology*, 15(3), 496–509. <https://doi.org/10.18178/ijiet.2025.15.3.2261>
- Beck, A. T., Robert A., S., Roberta, B., & and Ranieri, W. F. (1996). Comparison of Beck Depression Inventories-IA and-II in Psychiatric Outpatients. *Journal of Personality Assessment*, 67(3), 588–597. https://doi.org/10.1207/s15327752jpa6703_13
- Beedell, A. (2021). From abstract concept to active participants: Reflections on a purposive sample. *Crossing Conceptual Boundaries*, 11(1), 8–17.
- Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. *International Journal of Qualitative Methods*, 22(April), 1–11. <https://doi.org/10.1177/16094069231183620>
- Caleb Kimondo, Lenny Wandeto, Dazzy Indimuli, & Azra Ercertin. (2023). The impact of A.I on teaching and learning. *London Journal of Social Sciences*, 6, 124–129. <https://doi.org/10.31039/ljss.2023.6.111>
- Canter, D. (2023). Should we treat building users as subjects or objects? In *Readings on the Psychology of Place* (pp. 35–49). Routledge.
- Celik, I., Dindar, M., Muukkonen, H., & Järvelä, S. (2022). The Promises and Challenges of Artificial Intelligence for Teachers: A Systematic Review of Research. *TechTrends*, 66(4), 616–630. <https://doi.org/10.1007/s11528-022-00715-y>
- Charli, M. S., Eshete, S. K., & Debela, K. L. (2022). Learning How Research Design Methods Work: A Review of Creswell's Research Design: Qualitative, Quantitative and Mixed Methods Approaches. *The Qualitative Report*, 27(12), 2956–2960. <https://doi.org/10.46743/2160-3715/2022.5901>
- De Fina, A. (2021). Doing narrative analysis from a narratives-as-practices perspective. *Narrative Inquiry*, 31(1), 49–71.
- Díaz, B., & Nussbaum, M. (2024). Artificial intelligence for teaching and learning in schools: The need for pedagogical intelligence. *Computers & Education*, 217, 105071. <https://doi.org/10.1016/j.compedu.2024.105071>

- Firouzkouhi, M., Abdollahimohammad, A., Rezaie-Kheikhaie, K., Mortazavi, H., Farzi, J., Masinaienezhad, N., & Hashemi-Bonjar, Z. (2022). Nurses' caring experiences in COVID-19 pandemic: A systematic review of qualitative research. *Health Sciences Review*, 3, 100030.
- Flick, Sabine. (2020). Theorising medical psychotherapy: Therapeutic practice between professionalisation and deprofessionalisation. *European Journal of Social Theory*, 24(2), 227-245. <https://doi.org/10.1177/1368431020960556>
- Flick, U. (2021). *Doing interview research: The essential how to guide*.
- Guilherme, A. (2019). AI and education: The importance of teacher and student relations. *AI & SOCIETY*, 34(1), 47-54. <https://doi.org/10.1007/s00146-017-0693-8>
- Guilherme, A., Henriques, F., Bedard, A. H., & Czech, M. P. (2019). Molecular pathways linking adipose innervation to insulin action in obesity and diabetes mellitus. *Nature Reviews Endocrinology*, 15(4), 207-225.
- Hing, N., Russell, A., Browne, M., Rockloff, M., Greer, N., Rawat, V., Stevens, M., Dowling, N., Merkouris, S., & King, D. (2021). *The second national study of interactive gambling in Australia (2019-20)*.
- Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education*, 57(4), 542-570. <https://doi.org/10.1111/ejed.12533>
- Josselson, R., & Hammack, P. L. (2021). *Essentials of narrative analysis*. American Psychological Association.
- Kaplan-Rakowski, R., Grotewold, K., Hartwick, P., & Papin, K. (2023). Generative AI and teachers' perspectives on its implementation in education. *Journal of Interactive Learning Research*, 34(2), 313-338.
- Karataş, Y. E., & Çınaroğlu, S. (2025). Global Outlook for Disability Adjusted Life Years: Brain and Central Nervous System Cancers. *Medical Records*, 7(1), 100-106. <https://doi.org/10.37990/medr.1536199>
- Kess, R., & Juutinen, J. (2024). *Peer Interviews as a Narrative Research Method BT - Narratives in Educational Research: Methodological Perspectives* (E. K. Hyry-Belhammer, O. Ylitapio-Mäntylä, & M. Uitto, Eds.; pp. 53-64). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-68350-3_4

- Khang, N. T. (2024). The impact of investment in the manufacturing and processing industry on economic growth in Vietnam. *Journal of Infrastructure, Policy and Development*, 8(15), 9371.
- Khang, N. T. (2025). The impact of investment in agricultural, forestry and fisheries on economic growth in Vietnam. *International Journal of Innovative Research and Scientific Studies*, 8(1), 753-761. <https://doi.org/10.53894/ijirss.v8i1.4420>
- Kim, J., & Lee, J. C. (2020). Effects of COVID-19 on preferences for private dining facilities in restaurants. *Journal of Hospitality and Tourism Management*, 45, 67-70. <https://doi.org/10.1016/j.jhtm.2020.07.008>
- Knott, E., Rao, A. H., Summers, K., & Teege, C. (2022). Interviews in the social sciences. *Nature Reviews Methods Primers*, 2(1), 73. <https://doi.org/10.1038/s43586-022-00150-6>
- Küsters, I. (2022). *Narratives Interview BT - Handbuch Methoden der empirischen Sozialforschung* (N. Baur & J. Blasius, Eds.; pp. 893-900). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-37985-8_56
- Lee, Y.-R. J., & Liu, B. (2004). Cytoskeletal Motors in Arabidopsis. Sixty-One Kinesins and Seventeen Myosins. *Plant Physiology*, 136(4), 3877-3883. <https://doi.org/10.1104/pp.104.052621>
- Madhakomala, R., Hakim, M. A., & Syifauzzuhrah, N. (2022). Problems of Education in Indonesia and Alternative Solutions. *International Journal of Business, Law, and Education*, 3(3), 135-144. <https://doi.org/10.56442/ijble.v3i3.64>
- Mahadewi, L., Surachman, S., Hadiwidjojo, D., & Indrawati, N. K. (2022). Contextualization of religion and entrepreneurial performance: A lens of buddhist small business entrepreneurs. *Frontiers in Psychology*, 13, 846082.
- Moenandar, S.-J., Basten, F., Taran, G., Panagoulia, A., Coughlan, G., & Duarte, J. (2024). The structured narrative interview. *Narrative Inquiry*, 2(April), 307-334. <https://doi.org/10.1075/ni.23079.moe>
- Musungwa, T., & Kowe, P. (2022). Effects of occupational health and safety management systems implementation in accident prevention at a Harare beverage company. *Cogent Engineering*, 9(1), 2124638. <https://doi.org/10.1080/23311916.2022.2124638>
- Nazaretsky, T., Ariely, M., Cukurova, M., & Alexandron, G. (2022). Teachers' trust in AI-powered educational technology and a

- professional development program to improve it. *British Journal of Educational Technology*, 53(4), 914–931.
<https://doi.org/10.1111/bjet.13232>
- Nugraha, M. S., Qodriani, S. H., & Dedih, U. (2024). Implementation Of The Dick And Carey Model In Improving Islamic Religious Education Learning At Assalam Middle School Bandung (Qur'anic Inspiration Material In Preserving Nature). *AL-WIJDÂN Journal of Islamic Education Studies*, 9(1), 52–63.
<https://doi.org/10.58788/alwijdn.v9i1.3550>
- Nugroho, M., Bachri, B. S., Izzati, U. A., Khamidi, A., & Hariyati, N. (2024). Factors Factors Affecting the Form of Teacher Recruitment in Schools. *Jurnal Indonesia Sosial Teknologi*, 5(6).
- Popenici, S. A. D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(1), 22.
<https://doi.org/10.1186/s41039-017-0062-8>
- Pramana, C., Chamidah, D., Suyatno, S., Renadi, F., & Syaharuddin, S. (2021). Strategies to Improved Education Quality in Indonesia: A Review. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 12(3), 1977–1994.
- Rulandari, N. (2021). Study of Sustainable Development Goals (SDGS) Quality Education in Indonesia in the First Three Years. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2702–2708.
<https://doi.org/10.33258/birci.v4i2.1978>
- Salendab, F. A., & Akmad, S. P. (2023). A Personal Narrative Experience of Teachers Teaching Purposive Communication During the New Normal Education. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1590–1601.
- Salendab, F. A., & Laguda, J. L. (2023). Learning purposive communication: A personal narrative experience of non-teacher education students. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(5), 1682–1696.
- Shaturaev, J. (2021). A comparative analysis of public education system of Indonesia and Uzbekistan. *Bioscience Biotechnology Research Communications*, 14(5), 89–92.

- Shaturaev, J. (2022). Economies and management as a result of the fourth industrial revolution: An education perspective. *Indonesian Journal of Educational Research and Technology*, 3(1), 51–58.
- Singh, S. V., & Hiran, K. K. (2022). The impact of AI on teaching and learning in higher education technology. *Journal of Higher Education Theory & Practice*, 12(13).
- Warsito, B., Sumiyati, S., Yasin, H., & Faridah, H. (2021). Evaluation of river water quality by using hierarchical clustering analysis. *IOP Conference Series: Earth and Environmental Science*, 896(1), 12072. <https://doi.org/10.1088/1755-1315/896/1/012072>
- Woolf, L. J., & Tumim, S. (1991). *Prison Disturbances April 1990*. London: HM Stationery Office.
- Zimmerman, M. (2018). *Teaching AI: Exploring new frontiers for learning*. International society for technology in education.
- Zulvia, D., & Susanti, S. (2022). Pengaruh Opini Audit, Ukuran Perusahaan Dan Pprofitabilitas Terhadap Audit Delay Pada Sektor Industri Dasar Dan Kimia. *Jurnal Revenue: Jurnal Ilmiah Akuntansi*, 3(1), 220–232.

Application of Shame Culture in Building Teacher Disciplinary Character at MAPN 4 Medan School

Okta Elviana Manurung¹, Nasrul Syakur Chaniago¹

¹Universitas Islam Negeri Sumatera Utara, Indonesia

Corresponding author e-mail: oktaelviana03@gmail.com

Article History: Received on 11 June 2025, Revised on 14 June 2025,
Published on 19 June 2025

Abstract: This qualitative descriptive study investigates the application of a culture of shame in fostering disciplined character among teachers at MAPN 4 Medan. A culture of shame, rooted in societal norms, emphasizes accountability for misconduct. Data were collected through observation, in-depth interviews, and documentation, involving madrasa principals, vice-principals, teachers, and administrative staff. Analysis followed four stages: data collection, reduction, presentation, and conclusion drawing. The findings indicate that implementing a culture of shame at MAPN 4 Medan has been effective, though not yet fully integrated. Socialization efforts include moral training, motivational programs, and instilling shame-based cultural values. This initiative aims to build teacher discipline and strengthen moral identity, leading to increased responsibility and professionalism. Positive changes observed include a reduction in rule violations and tardiness. While obstacles like cultural resistance exist, the overall approach of cultivating shame alongside motivation has positively impacted disciplined character and moral identity, fostering greater discipline, responsibility, and professionalism, despite the need for individual awareness.

Keywords: Shame, Culture, Discipline, Character, School.

A. Introduction

How people react to criticism or judgment from others can have a major impact in a society where “shame” is a major factor in defining behavioral patterns. Shame culture is a customary principle established by a society to regulate interactions between family members and the wider community. Shame is one element that influences how people act in a social environment, which makes them try to conform to generally accepted norms or standards. Another psychological emotion that reflects environmental or societal standards is shame. The definition of shame shows a close relationship between ethics and morality. Indeed, the culture of shame always coexists with religion, kinship, and communication. (Azizah, Zahra, and Arrauyani 2023, 4).

Shame culture is a culture that must be fostered in social interactions in society, especially guilt when someone does something wrong or bad. In a society where reactions to criticism or the views of others have a major impact, shame plays a major role in defining behavioral patterns. According to a different perspective, shame culture is a way of life that requires a strong sense of morality, ethics, accountability, and self-awareness. In other words, members of this culture feel compelled to think about the moral and ethical norms that guide society and how their own behavior and actions affect others. (Mumtazah, Anisah Raniyah Prayoga, Bagus Dwi Raviyanti and Saputra 2024, 1919).

Previous research shows that although the culture of shame can play a role in improving teacher discipline behavior, its implementation still faces a number of obstacles, one of which is the low awareness of the importance of discipline in carrying out the profession as an educator.

In the world of education, the application of the culture of shame

among educators is to improve discipline by making them feel ashamed if they fail to fulfill their responsibilities as educators. As a result, teachers will be more responsible for their work, both in terms of being on time, following school regulations, and providing high-quality teaching to students.

The application of this culture of shame will increase teachers' awareness of the value of being extraordinary in carrying out their duties. A teacher must also have a professional work character; a professional teacher is a teacher who works with a mindset that always thinks and is serious. In addition to providing knowledge, teachers are also required to provide examples of behavior that can be used as guidelines for their students and the wider community. A teacher who adheres to professional ethics and prioritizes moral values, not just academic knowledge, cannot be said to be a professional educator. Therefore, teacher professionalism is a commitment to the state and nation to educate the next generation of the nation in accordance with moral principles, statutory provisions, and values adopted by educators. (Lukman 2024, 1531).

However, in the implementation of the culture of shame in teachers also has challenges, which if implemented excessively or not in accordance with the regulations, it can create an unhealthy atmosphere, which causes excessive fear and anxiety to the teacher. MAPN 4 Medan School, as the location of the study, faces quite real problems related to the low level of teacher discipline in carrying out their duties. Based on observations made, there are still many teachers who are late to school, inconsistent in implementing learning rules, and lack of attention to professional ethics. Therefore, the implementation of the culture of shame must be carried out in a wise and balanced way. For this reason, leaders also have a great responsibility in creating an environment that supports the implementation of the culture of shame.

According to Atmosudirjo (Ngadi, Sudharto, and Abdullah 2021,

251) The statement states that 1) leadership can be interpreted as a person's personality that moves a group of people to follow or imitate him, or who radiates a certain influence, power, or authority in such a way as to force the group to do what he wants; 2) leadership can also be interpreted as a catalyst for the development of activities, processes, or desires to change the mental and physical attitudes of a group of people both in formal and informal organizational relationships; and 3) leadership is also the art, ability, or formal technique of persuading a group of subordinates in a formal organization or followers or sympathizers in an informal organization to follow or obey everything he wants, so that they become so enthusiastic or even sacrifice for him.

The implementation of a culture of shame in improving teacher discipline also involves all the devices in the school. Teachers must also work together with school management to foster a positive culture of discipline, so that teachers can also be appreciated and supported in their efforts to better understand the importance of discipline and the implementation of a culture of shame. To maximize the implementation of a culture of shame, regular evaluations are needed to determine the extent of the assessment of teacher discipline, the extent to which the culture of shame is accepted by teachers, and its impact on the quality of teaching in schools. With this evaluation, the school can adapt and improve the implementation of a culture of shame to make it more effective and in accordance with school conditions.

The implementation of the culture of shame is also complemented by training and self-development for teachers. With this training, teachers are not only taught about the importance of discipline, but are also given skills and knowledge that can support their performance as teachers. The training consists of time management, interpersonal skills, and classroom management so that it can help teachers in carrying out their duties with discipline and professionalism and responsibility. Therefore, this study is

important to dig deeper into the influence of the implementation of the culture of shame in building disciplined character among teachers at MAPN 4 Medan school. By understanding the factors that influence teacher discipline, this study aims to provide more effective solutions in improving the quality of learning in schools.

B. Methods

This study uses qualitative research as its methodology. The purpose of qualitative research is to better understand human or societal events by reporting in-depth perspectives gathered from informant sources, conducting research in natural environments, and producing a comprehensive and complex picture that can be expressed verbally. (Fadli 2021, 35). Researchers do not do any engineering at all when conducting research. Researchers enter the world they are studying naturally. When researchers arrive at the research location, they naturally interact with the research object. In accordance with the facts found in the field, he made field notes, took pictures, documented, and observed in the natural environment. (Safrudin et al. 2023, 11). The focus of this study is to explore the application of a culture of shame in creating the character of teacher discipline at MAPN 4 Medan school. Researchers will also examine how the culture of shame is socialized, how it is implemented, how it changes when implemented, what are the characteristics of discipline after being implemented, and the difficulties in implementing a culture of shame to develop the character of teacher discipline in the classroom.

The research location is the place where the research is conducted. Nasution argues that the term "research location" is in accordance with the idea of "social location" which is defined by the existence of three components: actors, places, and visible behavior. (Gaspar, Waworundeng Welly, and Kumayas Neni 2023, 3). The research location is in Medan City, North Sumatra

Province, precisely at the MAPN 4 Medan educational facility, Jl. Jala Raya Griya Martubung, Kec. Medan Labuhan. This research was carried out for approximately two (two) months, covering two weeks of data collection and two weeks of data processing which included the presentation of journals and a continuous guidance process, starting from the date the research permit was issued. The data collection stage was carried out through direct observation, informant interviews, and documentation. Data analysis is the next step after data collection, and includes the following steps: data collection, data reduction, data presentation, and drawing conclusions. The presentation of the research report, which is compiled based on field data and reanalyzed thoroughly according to the research emphasis, is the final step in the process of presenting research findings.

Interviews are a method of data collection that involves face-to-face communication between study participants and researchers. The purpose of qualitative interviews is to gain a comprehensive understanding of people's experiences, opinions, and perspectives regarding the phenomenon being studied. Depending on the level of the predetermined framework, interviews can be conducted in an unstructured, semi-structured, or organized manner. The researcher interviewed the principal, vice principal, teachers, and staff (TU) at MAPN 4 Medan directly for this study.

Collecting information about the research phenomenon from records, archives, or other written materials is known as documentation study. Notes, reports, letters, books, and other official documents can be used. The historical background, laws, events, and progress related to the phenomenon being studied are all revealed through documentation study. (Ardiansyah, Risnita, and Jailani 2023, 4). The researcher collected information for this research documentation study by collecting information about the profile, vision, and mission of the madrasah; facilities and

infrastructure; achievements that have been achieved by the madrasah; and other information.

In this study, there are four phases of data analysis used: data collection, data reduction, data presentation, and drawing conclusions. Data mining techniques and sources and types of data are undoubtedly related to data collection in the field. In qualitative research, data sources can be (1) words and (2) actions, while additional data can include documents or written data sources, photographs, and statistics. Statements and actions of those observed or interviewed are the main data sources. Primary data sources include written notes, audio and video recordings, images, and films. Other sources of information derived from textual sources can be categorized as books and scientific publications, archives, official records, and personal documents.

The process of selecting, concentrating on simplifying, abstracting, and transforming the unprocessed data that emerges from field notes is known as data reduction. The conceptual framework of the study, the research problem, and the data collection methods chosen by the researcher all indicate how this process continues throughout the study, even before the data are actually collected. Data reduction involves the following steps: (1) summarizing the data; (2) coding; (3) searching for themes; and (4) clustering. This process involves carefully selecting material, summarizing or describing it briefly, and then grouping it into more general patterns. When a collection of data is organized to allow for the possibility of drawing conclusions and taking action, this is known as data presentation. Field notes, matrices, graphs, networks, and charts are examples of narrative texts that can be used to describe qualitative data. These forms organize information in a logical, readable format, making it easy to understand what is happening and determine whether the conclusions are accurate enough to warrant further analysis.

Finally, while in the field, researchers are constantly coming to conclusions. Qualitative researchers begin searching for meaning as soon as they collect data, noting patterns, explanations, potential configurations, causal flows, regularities, and propositions (in theoretical notes). Although these findings are given, they are considered to be light, speculative, and open-ended. They start out vague before becoming more specific and deeply rooted. Throughout the research process, these findings are also confirmed by: (1) rethinking while writing, (2) reviewing field notes, (3) discussing and generating ideas with colleagues to create intersubjective agreement, and (4) making ongoing efforts to duplicate findings in different data sets. (Rijali 2019, 85–94).

Researchers used three steps to ensure the validity of the data: source triangulation, which involves verifying information collected from multiple sources, including the principal, vice principal, faculty members, and staff. For the same data source, researchers combined participant observation, in-depth interviews, and documentation (Mekarisce 2020, 150–51), rechecking data to the original source while applying the same methods in a new period or setting is known as time triangulation. Researchers can repeat the process until they find data confidence if the test results continue to produce inconsistent data. This method is used to ensure that the research findings are more reliable and objective.

C. Results and Discussion

Result

1. Socialization of Shame Culture at MAPN 4 Medan

Based on the results of observations and interviews, it is known that socialization at MAPN 4 Medan is carried out through moral development, motivation, and application of shame culture values. This includes discipline, manners, and social responsibility. The main purpose of this socialization is to foster a sense of shame in

order to prevent negative behavior and form a disciplined and honest character.

2. Implementation of Shame Culture at MAPN 4 Medan

Based on the results of observations and interviews, it is known that in Islam, "Alhaya u minal iman", meaning that shame is part of faith. For example, shame encourages someone not to be late. The implementation of a shame culture is important for building the character of teacher discipline and strengthening their moral identity. The implementation of a shame culture is carried out in a strategic and educational way, not by coercion. Strategies at MAPN 4 Medan include providing examples and making moral commitments. There are specific rules that must be followed by the vice principal, teachers, staff, and students, such as time discipline and dress codes that have been set.

3. Changes in the Culture of Shame in Educators When Implemented at MAPN 4 Medan

Based on the results of observations and interviews, it is known that the implementation of the culture of shame has an effect on the attitudes and behavior of teachers, increasing discipline, responsibility, and professionalism. The culture of shame fosters moral and social responsibility, so that teachers avoid behavior that is not in accordance with norms. This change can be seen from time discipline and increased commitment to learning. The culture of shame also strengthens the ethics of the teaching profession by forming awareness to act more wisely.

4. Character of Teacher Discipline After the Implementation of the Culture of Shame at MAPN 4 Medan

Based on the results of observations and interviews, it is known that after the consistent implementation of the culture of shame in the MAPN 4 Medan environment, it brought positive changes in teacher discipline. Shame increases attendance, responsibility, and professional ethics. People who do not feel ashamed tend to break

the rules. The culture of shame encourages teachers to maintain the reputation and good name of the madrasah, reducing violations such as lateness. This also fosters a sense of responsibility and professionalism in teachers.

5. Challenges Faced in Implementing a Culture of Shame in Building Teacher Discipline Character at MAPN 4 Medan

Based on the results of observations and interviews, it is known that the main challenge faced in implementing a culture of shame in teachers is cultural resistance. This injustice is caused by the lack of role models from teachers and a weak support system. Many teachers reject criticism, do not want to be reprimanded, and are reluctant to admit mistakes. The support system also plays a role, where fellow teachers often do not respond to reprimands. To overcome this problem, good communication needs to be built among the teachers' council so that they do not take actions that harm their reputation.

In this context, teachers have a noble duty to invite useful knowledge and educate children in the hope of getting rewards. Which is contained in the hadith "'Amaluhu illa min tsalaasin: shadaqatin jariatin au 'ilmin yuntafa'u bihi au waladin shaalikhin yad'ulah. This shows that "the deeds of the son of Adam stop at the time of his death, except for three things: sadatin jariyatin, sadaqoh jariyah." Aulilmin yuntafau, useful information. Alhamdulillah, awaladin sholihin are pious children who always pray for their parents. ". Teachers who violate discipline must be dealt with firmly and systematically, including the application of sanctions. At MAPN 4 Medan, summons and summons letters are carried out a maximum of three times before a decision is made not to cooperate. A culture of shame is expected to be the foundation for teacher professionalism and improve the quality of education. Routine evaluations at the end of the semester will also help improve the quality of schools.

Discussion

1) Culture of Shame

Culture of shame is a word that sounds foreign and standard to our ears. However, the culture of shame has a meaning that if we understand it, we may have heard it everywhere. Culture (culture) The Great Dictionary of the Indonesian Language defines it as an idea, tradition, something that has developed, or something that has become a habit that is difficult to eliminate. In general usage, the terms culture and tradition are often used interchangeably. Tradition in this context is defined as observable social customs.(Syakhrani and Kamil 2022, 783).

The first definition of shame involves the idea that shame can prevent a person from acting in a way that would degrade them in the eyes of others. A person will strive to conform to the standards set by their organization. People use current norms as a guide to help them perform positive actions and refrain from doing things that are not in line with their group's standards. On the other hand, spiritual and philosophical leaders claim that the purpose of shame is to raise awareness in order to overcome negativity and to keep rights holders from falling short of their rights. Abu Junaid (Lumbanraja 2022, 312–13) claims that the definition of shame is to recognize the joys and shortcomings that will lead to a state known as shame before the God who gives pleasure. "The consequence of shame is to prevent," he says. This suggests that the urge to feel shame serves as a catalyst to stop disgusting behavior. The historical values created by society to regulate how family members and the wider community interact are the cultures of shame.

According to Carducci & Golant (Kusumasari and Hidayati 2014, 96) the word shyness is the discomfort and behavioral inhibition that occurs when there is the presence of other people nearby. Shame according to Shaykh Anas Ismail Abu Daud (Hayani 2019, 65) is refraining from an action for fear of being criticized.

According to Islamic teachings, shame is a virtue that arises to avoid disgrace and refrain from denying the rights of others. Ibn Qutaibah highlighted this when he said, "Shame can prevent someone from committing sins." A faithful servant will be more protected from reprehensible acts because his God certainly knows all his actions, even though all humans are not aware of it. Shame in Islam has a broader meaning because from a religious perspective, shame is not only seen from the perspective of other humans who have limitations, but also from the perspective of Allah as the All-Knowing God. There is a verse in the Qur'an that explains that:

وَكُلُّ شَيْءٍ فَعَلُوهُ فِي الذُّبُرِ

"Apart from that, all their actions were recorded in the books of record (QS. Al-Qamar: 52). Allah knows every vile deed that has been done. Yes, we will be raised from the dead in a form that reflects our deeds. So create a culture of shame as a defense. "Shame will bring nothing but good," according to Muslim and HR Bukhari, and "Be ashamed of Allah." (HR. At-Tirmidzi).

The culture of shame is a deep concept and has broad meaning in the life of society. As part of culture, shame reflects the norms and customs that have developed in a community. In this context, shame functions as a barrier for individuals to carry out acts that demean themselves in front of others, encouraging them to follow the norms agreed upon by the group.

So, we can conclude that the culture of shame is not only a traditional value, but also an important tool in building good social interactions among members of society. Shame can function as a shield in preventing immoral acts and encouraging individuals to behave well. As stated in the hadith, "Indeed, shame will not bring anything except good" (HR Bukhari and Muslim), indicating that the application of the culture of shame can have a positive impact

on the lives of individuals and society as a whole. Therefore, it is important for us to make the culture of shame an integral part of our character, both in social interactions and in our relationship with God.

2) Disciplined Character

Character, which means nature, attribute, psychology, temperament, manners, morality, and personality, comes from the Latin word *karakter*. Character is defined as human nature that is influenced by personal circumstances. The Islamic perspective states that morality (personality) and character are synonymous. Character can mean two different things. The first is to describe a person's behavior.

Second, "personality" and "character" are closely related terms. Only when a person's actions are consistent with moral principles can they be called a person of character. (Tutik 2017, 4). "Talents, mental traits, morals, or manners that distinguish one person from another, as well as disposition" is how the Great Dictionary of the Indonesian Language defines character. According to Simon Philips (Samrin 2016, 122–23) Ideas, attitudes, and actions shown are supported by a series of values that form the character. Character is personality seen from a moral or ethical perspective.

According to Suyanto (Dole 2021, 3677) Character is a person's style of thinking and doing in order to coexist and work with others in their family, society, county, and nation. A person with good character is capable of making decisions and is prepared to accept responsibility for the outcomes of those decisions. Character is the way of thinking and acting of each person in order to live side by side and work together in the family, society, country, and state. A person with good character is able to make decisions and is ready to be responsible for the results of those decisions.

From the several definitions above, we can conclude that character

is an important element in determining how a person interacts with the surrounding environment, both in the context of family, society, and country. Good character is the foundation for individuals to live an ethical and responsible life.

Discere, which means to learn in Latin, is the root of the term discipline. The word "disciplina," which means "to teach" or "to train," comes from this word. Furthermore, the term "discipline" today has many meanings. First, discipline is understood as following rules or being supervised and regulated. Second, discipline is an instruction that tries to help someone grow so that they can act in an orderly manner.

According to the Indonesian Dictionary, discipline is:

1. Order (in school, in the office, in the military, and so on).
2. Obedience (compliance) to the rules of order.
3. A field of study that has certain objects and systems.

According to James Drever (Embong 2022, 104) According to psychology, discipline is the ability to regulate one's internal behavior according to externally imposed regulations or accepted standards. In other words, discipline from a psychological perspective refers to a person's behavior that is manifested and adapted to established standards.

Dimiyanti & Mudjiono (Lase 2016, 5) argue that discipline is the application of a system that requires people to submit to applicable decisions, directions, or regulations. In other words, discipline is following established norms and guidelines.

Novan Ardy (Sakinah, Pada, and Usman 2024, 150) The Latin word discipline which means "command" and "student" can also be understood as a teacher's order to students or learners.

According to this interpretation, discipline is order, obedience, or

compliance with regulations. A state of discipline is formed and shaped by a series of actions that demonstrate the virtues of loyalty, obedience, obedience, and/or order. The attitude or action is no longer or is not considered a burden because it has become one with it; on the contrary, it will stress him out if he does not act properly. (Ernawati 2019, 5–6).

Consistent behavioral changes in completing tasks or work and not violating mutually agreed regulations are called discipline. A person develops a disciplined mindset to operate according to the intention to achieve a goal. (Manshur 2019, 20).

In another hadith, Rasulullah SAW said, specifically: "The practice that the Messenger of Allah likes is the practice that is carried out continuously (disciplined and continuously) by the perpetrator." (HR. Baihaqi):

عَنْ عَبْدِ اللَّهِ بْنِ عُمَرَ رَضِيَ اللَّهُ عَنْهُمَا قَالَ أَخَذَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ بِمَنْكِبِي فَقَالَ كُنْ فِي الدُّنْيَا كَأَنَّكَ غَرِيبٌ أَوْ غَابِرٌ سَبِيلٍ [وَعَدَّ نَفْسَكَ مِنْ أَهْلِ الْقُبُورِ] وَكَانَ ابْنُ عُمَرَ يَقُولُ إِذَا أَمْسَيْتَ فَلَا تَنْتَظِرُ الصَّبَاحَ وَإِذَا أَصْبَحْتَ فَلَا تَنْتَظِرُ الْمَسَاءَ وَخُذْ مِنْ صِحَّتِكَ لِمَرَضِكَ وَمِنْ حَيَاتِكَ لِمَوْتِكَ

From Ibn Umar Radhiallahu Anhuma, he said: "*The Messenger of Allah Shallallahu Alaihi Wasallam held my shoulders and advised me to live in this world like a stranger or a traveler. "If you are in the evening, do not wait for the morning, and if you are in the morning, do not wait for the evening, and use your health before you get sick and your life before you die," said Ibn Umar Radhiallahu Anhuma.*" (Narrated by Bukhari, Book of Ar Riqaq).

Based on the hadith above, we need to be disciplined individuals in this world. Humans will live better if they are disciplined. (Habibullah 2019, 74).

From the several definitions above, we can conclude that discipline is a change in regular behavior that arises from an individual's awareness to carry out their duties and responsibilities in

accordance with the agreed rules. Discipline is an important foundation in shaping character and improving a person's quality of life.

The process through which a person adapts and integrates into the society or social group in which they live is known as socialization. People gain knowledge about local social norms, beliefs, and conventions through socialization. (Sari and Widiyanti 2024, 62–63). Therefore, the socialization used in the culture of shame is:

a) Holding socialization and coaching

Inviting speakers or motivators to provide an understanding of the importance of the culture of shame for teachers.

b) Making slogans and reminders

An example of a slogan is: "I'm Ashamed to Come Late", which is posted in the school environment so that it is always remembered and seen.

c) Implementing the culture of shame in daily activities

Before learning begins, teachers can conduct a brief reflection on the attitude of shame, such as tidying themselves up, maintaining cleanliness, and preparing learning well.

Teachers must demonstrate integrated and responsible behavior, because students tend to imitate their teachers' attitudes. However, based on the research results, it is known that socialization in MAPN 4 Medan is carried out through moral development, providing motivation, and implementing the values of shame culture in daily life in the madrasah, such as discipline, manners, and social responsibility. Socialization of shame culture is also carried out by providing understanding and motivation to all madrasah residents to jointly develop this culture in daily life in the school environment. For example, arriving on time,

maintaining cleanliness, dressing neatly according to Islamic law, and respecting teachers and others.

The main objective of the socialization of the culture of shame is to foster and cultivate a sense of shame as a strong moral foundation in preventing negative behavior, especially corruption of time carried out by teachers, as well as forming a character of discipline, honesty, and responsibility for the tasks that have been given.

So it can be seen that the socialization of the culture of shame applied in MAPN 4 Medan is carried out by means of moral guidance, providing motivation, and applying the values of the culture of shame in everyday life in the madrasah, such as discipline, manners, and social responsibility which this socialization is in accordance with the theory above.

The implementation of the culture of shame in MAPN 4 Medan is going well, although not all of it has been implemented by all madrasahs. Based on the results of the study as we know, that in the concept of the Islamic religion "Alhaya u minal iman", which means "shame is part of faith". For example, if there is a sense of shame, he will not be late. That is one example of it in MAPN 4 Medan. The reason why it is mandatory to implement a culture of shame as a strategy to build the character of teacher discipline is one of our duties as educators and can also strengthen the personal and social identity of teachers morally, so that discipline is not just a rule that is obeyed, but becomes part of the inherent character and becomes an internal motivation for teachers to behave according to expectations.

Instilling a culture of shame in teachers is done with strategic and educational steps, persuasive and exemplary, not as a matter of coercion. For that, some strategies used for teachers at MAPN 4 Medan are to provide direct examples and make moral

commitments in writing and signed together or in the form of integrity facts, for example, one is ashamed to come late, two is ashamed to go home early, three is ashamed to tell lies, four is not dressed neatly, five is ashamed to provide careless material.

There are several special rules or policies in MAPN 4 Medan which rules will be followed by the vice principal, teachers and staff as well as students at MAPN 4 Medan. Which is an example of such as in clothing, then the main thing is discipline which discipline is in the form of discipline in time where we must arrive on time, then enter and complete our tasks according to our responsibilities, enter the class according to the hours, then with appearance, which has also been regulated and determined how to dress.

This is in line with the theory of the implementation of a culture of shame, which has several parts, including the following:

- a) Shame for coming home late or coming home early
- b) Shame for seeing colleagues busy doing activities
- c) Shame for breaking the rules
- d) Shame for doing wrong
- e) Shame for not achieving work
- f) Shame because tasks are not carried out/completed on time
- g) Shame for not playing an active role in realizing a clean office/school environment (Nazir Usman, Yusrizal 2016, 32-33).

Overall, the implementation of a culture of shame at MAPN 4 Medan is running well because it can build character and also strengthen the personal and social identity of teachers morally, so that discipline is not just a rule that is obeyed, but becomes part of the inherent character and becomes an internal motivation for teachers to behave according to the expectations that exist at MAPN 4 Medan.

Changes in the Culture of Shame in Educators When

Implemented

When the culture of shame is consistently implemented in education, several significant changes occur, including:

- a) Improving discipline and work ethic; Teachers will feel motivated to be responsible because they feel ashamed if they are negligent in carrying out their duties properly.
- b) Building integrity and exemplary behavior; The culture of shame will encourage educators to be good role models for their students.
- c) Improving the quality of learning; The culture of shame towards low performance will encourage teachers to improve their teaching methods.
- d) Formation of a positive school atmosphere; The school will be conducive, because all school residents including teachers will maintain their behavior consciously without violating the rules that have been made.

Based on the results of the study, it is known that the implementation of the culture of shame influences changes in the attitudes and behavior of teachers at MAPN 4 Medan by increasing discipline, responsibility, and professionalism in carrying out their duties. The implementation of the culture of shame can also foster a sense of moral and social responsibility that encourages teachers to avoid behavior that is not in accordance with norms. This change can be seen from the increase in time discipline, a more serious work attitude, and commitment to providing quality learning.

The culture of shame can also help strengthen the ethics of the teaching profession at MAPN 4 Medan by forming an inner awareness, which means that if there is awareness within the teacher, which means that if there is a sense of shame, of course in acting to carry out their work culture they think more before acting, for example when the bell rings they no longer chat outside but because of a sense of responsibility and self-integrity then they will go to class, they will be ashamed to come late because when the bell

rings the teacher is still hanging out outside or still talking outside with his other friends then the children will be neglected for 5-10 minutes before the teacher enters the classroom.

So we can see that changes in the culture of shame in educators when applied at MAPN 4 Medan can increase time discipline, a more serious work attitude, and commitment to providing quality learning.

Teacher Discipline Character After Implementing Shame Culture

Teacher discipline character after implementing shame culture can build moral awareness that encourages individuals to avoid behavior that is not in accordance with social norms and ethics. For this reason, teacher discipline character after implementing shame culture includes:

- a) Increasing teacher discipline in terms of punctual arrival, neatness and appropriate teaching schedule.
- b) Building teacher character that excels morally and ethically in accordance with the code of ethics of the teaching profession in Indonesia.
- c) Helping to build a conducive and harmonious school atmosphere.
- d) Can be a role model for students
- e) Not abusing position and authority
- f) Maintaining the good name of the school

Based on the results of observations and interviews, it is known that after the consistent implementation of shame culture in the MAPN 4 Medan environment, there will generally be several very positive changes in teacher discipline behavior both in terms of attendance, work responsibilities, and professional ethics. When there is a sense of shame, discipline will definitely increase. So for people who do not have a sense of shame, they will violate the rules that have been set. The change was also more motivated to maintain my reputation as

an educator and also to maintain the good name of the madrasah, thus reducing violations of rules such as lateness or unpreparedness to teach.

The culture of shame brings very positive changes, of course to the work spirit of the teacher because it can foster a sense of responsibility to the teacher and also as a mechanism of internal moral supervision that encourages teachers to act more professionally and with integrity. For example, they will remember their tasks to be completed immediately, if they are not responsible they will be ashamed of others.

Challenges Faced in Implementing a Culture of Shame to Build Teacher Discipline Character

Although MAPN 4 Medan has succeeded in implementing a culture of shame to build teacher discipline character, there are several challenges that will be faced, namely cultural resistance, meaning that the habit is a lack of role models from teachers and a weak support system and indirect rejection, there is a sense of denial in the teacher, because not everyone wants to be reprimanded or sanctioned, not everyone wants to be criticized, not everyone wants to admit their mistakes.

This support system may be his own friends, when the teacher is given advice or reprimand, because he comes late, maybe the friend concerned will be silent and not respond. Then to overcome this, it is necessary to build good communication with the teacher council so that in the future they will no longer do things that can tarnish their own good name and build a positive evaluation and coaching system. Which is contained in the hadith "'Amaluhu illa min tsalaasin: shadaqatin jariatin au 'ilmin yuntafa'u bihi au waladin shaalikhin yad'ulah. This shows that "the deeds of the son of Adam end at the time of his death, except for three things: sadatin jariyatin, sadaqoh jariyah." Aulilmin yuntafau, useful information.

Alhamdulillah, awaladin sholihin are pious children who always pray for their parents". Therefore, the teacher is the most noble task, besides getting financial in the world, he also gets rewards in the hereafter.

This is in line with the theory (Mahara, Riza, Cut Zahri Harun 2017, 6–7) of the challenges faced in implementing a culture of shame to build the character of teacher discipline, namely:

- a) Lack of skilled workers in the subject area
- b) Teachers' residences are far away
- c) Insufficient supporting facilities and infrastructure
- d) Feeling uncomfortable in reprimanding senior teachers
- e) Imbalance between shame and self-reward
- f) Lack of professionalism in carrying out responsibilities.

Teachers who do not have a sense of shame for disciplinary violations must be handled firmly, systematically, educate and apply strict disciplinary sanctions and strict supervision. The regulations that are generally carried out, which are regulations in the form of SP. If in MAPN 4 Medan, the first is a summons, then if for example with the first summons there is counseling that cannot overcome educators who still violate the rules, then an SP will arise, if there is no change in several summons (SP), then the madrasah will be forced to no longer cooperate with educators who violate the rules in MAPN 4 Medan. Usually a summons letter (SP) is issued a maximum of 3 times.

Of course, this culture of shame is the most important thing that we instill in teachers, because we hope that this culture of shame can be the foundation for the formation of teacher character about discipline, so that teachers become professional and teachers become dignified, then with that the quality of education and the madrasah climate will increase if the culture of shame is applied, which means that the culture of shame and ethics we apply at

MAPN 4 Medan by implementing this routine evaluation can improve the quality of the school, usually the evaluation that is carried out is carried out at the end of each semester, the madrasah issues a letter about these mistakes.

D. Conclusions

Based on the results of the study, it can be concluded that socialization at MAPN 4 Medan was carried out through moral development, motivation, and the application of cultural values of shame. This includes discipline, manners, and social responsibility. The goal is to foster a sense of shame to prevent negative behavior and form a disciplined and honest character. In Islam, shame is part of faith. A culture of shame is important for building the disciplined character of teachers and strengthening their moral identity. Instilling a culture of shame is done strategically and educationally. The strategies used include setting an example and making a moral commitment. There are special rules for vice principals, teachers, staff, and students, such as time discipline and dress codes. The application of a culture of shame improves teachers' attitudes, responsibilities, and professionalism. However, the main challenges in its implementation are cultural resistance and lack of role models. Good communication between teachers is needed to fix this problem. Teachers who violate discipline must be dealt with firmly. Routine evaluations at the end of the semester will help improve school quality.

E. Acknowledgements

With great gratitude, the researcher would like to express his deepest gratitude to all parties who have provided support, assistance, and prayers during the research process. Without the support of family, friends, colleagues, and supervisors and respondents who have taken the time and knowledge, this research would not have been able to be carried out properly.

Every encouragement, input, and attention given means a lot to the researcher, both morally and materially. Thank you for the trust and opportunity that has been given, so that this research can be completed as well as possible. Hopefully the results of this research can provide benefits and positive contributions to all parties.

References

- Ardiansyah, Risnita, and M. Syahran Jailani. 2023. "Teknik Pengumpulan Data Dan Instrumen Penelitian Ilmiah Pendidikan Pada Pendekatan Kualitatif Dan Kuantitati f." *Jurnal Ihsan: Jurnal Pendidikan Islam* 1 (2): 1-9. <https://doi.org/10.61104/ihsan.v1i2.57>.
- Azizah, Hanifah Nur, Rissa Alivia Zahra, and Salsabila Arrauyani. 2023. "Relevansi Budaya Malu Dan Budaya Salah Pada Karakter Moral Di Sekolah Dasar." *Innovative: Journal Of Social Science Research* 03 (03): 10832-43.
- Dole, Ferdinandus Etuasius. 2021. "Pengaruh Pendidikan Karakter Terhadap Kedisiplinan Peserta Didik Di Sekolah Dasar." *Edukatif: Jurnal Ilmu Pendidikan* 3 (6): 3675-88. <https://doi.org/10.31004/edukatif.v3i6.1026>.
- Embong, Martina. 2022. "Upaya Meningkatkan Kedisiplinan Siswa Kelas Viii Pada Smp Negeri 1 Suppa Melalui Layanan Bimbingan Sosial." *Jurnal Kependidikan Media* 10 (2): 103-17. <https://doi.org/10.26618/jkm.v10i2.7957>.
- Ernawati, Ika. 2019. "Pengaruh Layanan Informasi Dan Bimbingan Pribadi Terhadap Kedisiplinan Siswa Kelas Xii Ma Cokroaminoto Wanadadi Banjarnegara Tahun Ajaran 2014/2015." *G-Couns: Jurnal Bimbingan Dan Konseling* 1 (1): 1-13. <https://doi.org/10.31316/g.couns.v1i1.40>.
- Fadli, Muhammad Rijal. 2021. "Memahami Desain Metode Penelitian Kualitatif." *Humanika, Kajian Ilmiah Mata Kuliah Umum* 21 (1): 33-54. <https://doi.org/10.21831/hum.v21i1>.
- Gaspar, Nadya Avelia, Waworundeng Welly, and Kumayas Neni. 2023. "Efektivitas Pelayanan Publik Berbasis Aplikasi Bitung

- Digital City (DC) Di Kecamatan Madidir Kota Bitung." *Jurnal Governance* 3 (1): 1-9.
- Habibullah, Nur. 2019. "Kepemimpinan Dan Disiplin Dalam Manajemen Pendidikan Islam." *At-Ta'lim Jurnal Kajian Pendidikan Agama Islam* 1 (Oktober): 73-85. www.ejournal.annadwahkualatungkal.ac.id.
- Hayani, Nurhayani. 2019. "Peran Rasa Malu Dan Rasa Bersalah Terhadap Pengajaran Moral Anak." *Al-Irsyad: Jurnal Pendidikan Dan Konseling* 7 (1): 63-77. <http://jurnal.uinsu.ac.id/index.php/al-irsyad/article/view/6669>[http://files/1205/Hayani - 2019 - Peran Rasa Malu Dan Rasa Bersalah Terhadap Pengaja.pdf](http://files/1205/Hayani-2019-PeranRasaMaluDanRasaBersalahTerhadapPengaja.pdf)<http://files/1207/6669.html>.
- Kusumasari, Herdyani, and Diana Savitri Hidayati. 2014. "Rasa Malu Dan Presentasi Diri Remaja Di Media Sosial." *Jurnal Psikologi Teori Dan Terapan* 4 (2): 91. <https://doi.org/10.26740/jptt.v4n2.p91-105>.
- Lase, Asali. 2016. "Hubungan Antara Motivasi Belajar Dengan Disiplin Belajar Siswa." *Journal for Lesson and Learning Studies* 2 (1). <https://doi.org/10.23887/jlls.v2i1.17317>.
- Lukman, Aulia. 2024. "Peran Etika Profesi Guru Dalam Meningkatkan Kinerja Guru Di Madrasah Ibtidaiyah Negeri 2 Kolaka The Role Of Teacher Professional Ethics In Improving Teacher Performance At Madrasah Ibtidaiyah Negeri 2 Kolaka," 1530-36.
- Lumbanraja, Bogor. 2022. "Budaya Malu, Budaya Bersalah Dan Kesadaran Hukum Sebagai Nilai Vital Bagi Mahasiswa Hukum Demi Kepentingan Bersama (Bonum Commune) Menurut Etika Hukum Thomas Aquinas." *Fiat Iustitia* 2 (2): 270-93.
- Mahara, Riza, Cut Zahri Harun, Nasir Usman. 2017. "Gaya Kepemimpinan Adalah Pola Yang Nampak Maupun Yang Tidak Nampak Oleh Bawahannya. Gaya Kepemimpinan Menggambarkan Yang Pascasarjana Universitas Syiah Kuala Keterampilan, Dan Sikap Yang Mendasari Perilaku Gaya Kepemimpinan Yang Setiap Manusia Yang Dila" 5 (1): 1-9.

- Manshur, Ahmad. 2019. "Strategi Pengembangan Kedisiplinan Siswa." *Al Ulya: Jurnal Pendidikan Islam* 4 (1): 16–28. <https://doi.org/10.36840/ulya.v4i1.207>.
- Mekarisce, Arnild Augina. 2020. "Teknik Pemeriksaan Keabsahan Data Pada Penelitian Kualitatif Di Bidang Kesehatan Masyarakat." *Jurnal Ilmiah Kesehatan Masyarakat: Media Komunikasi Komunitas Kesehatan Masyarakat* 12 (3): 145–51. <https://doi.org/10.52022/jikm.v12i3.102>.
- Mumtazah, Anisah Raniyah Prayoga, Bagus Dwi Raviyanti, Dahlia Farhan Dwi, and Shandya Yasmin Anafari Saputra. 2024. "Integrasi Budaya Malu Dan Bersalah Dalam pendidikankarakter Siswa Sekolah Dasar." *Pendas: Jurnal Ilmiah Pendidikan Dasar* 09 (September).
- Nazir Usman, Yusrizal, Murniati AR. 2016. "Pengembangan Budaya Sekolah Untuk Peningkatan Kompetensi Profesional Guru Pada Mtsn 1 Takengon." *Jurnal Magister Administrasi Pendidikan* 4 (4): 27–37. <https://media.neliti.com/media/publications/72826-ID-pengembangan-budaya-sekolah-untuk-pening.pdf>.
- Ngadi, Ngadi, Sudharto Sudharto, and Ghufon Abdullah. 2021. "Pengaruh Kepemimpinan Kepala Sekolah Dan Kedisiplinan Guru Terhadap Mutu Sekolah Di Sd Daerah Binaan Ii Unit Pengelola Pendidikan Kecamatan Belik, Kabupaten Pematang." *Jurnal Manajemen Pendidikan (JMP)* 9 (2): 249–59. <https://doi.org/10.26877/jmp.v9i2.8115>.
- Rijali, Ahmad. 2019. "Analisis Data Kualitatif." *Alhadharah: Jurnal Ilmu Dakwah* 17 (33): 81. <https://doi.org/10.18592/alhadharah.v17i33.2374>.
- Safrudin, Rizal, Zulfamanna, Martin Kustati, and Nana Sepriyanti. 2023. "Penelitian Kualitatif." *Journal Of Social Science Research* 3 (2): 1–15.
- Sakinah, Nurul, Amir Pada, and Hikmawati Usman. 2024. "Peran Guru Dalam Menanamkan Karakter Disiplin Siswa Sekolah Dasar Di Kabupaten Pangkep." *Pinisi Journal of Education* 4 (1): 146–62.

- Samrin. 2016. "Pendidikan Karakter (Sebuah Pendekatan Nilai)." *Jurnal Al-Ta'dib* 9 (1): 122–23.
- Sari, Nabela Puspita, and Neny Widiyanti. 2024. "Peran Agen Sosialisasi Dalam Lingkungan Anak." *Triwikrama: Jurnal Ilmu Sosial* 2 (12): 62–72.
- Syahrani, Abdul Wahab, and Muhammad Luthfi Kamil. 2022. "Budaya Dan Kebudayaan: Tinjauan Dari Berbagai Pakar, Wujud-Wujud Kebudayaan, 7 Unsur Kebudayaan Yang Bersifat Universal." *Journal Form of Culture* 5 (1): 1–10.
- Tutik, Ode Man Arfa Ladamay. 2017. "Implementasi Karakter Disiplin Pada Siswa Di Smp Muhammadiyah I Gresik." *Jurnal Pendidikan Dan Pemikiran Keagamaan* 18 (2): 1–21.
<http://eprints.umg.ac.id/2747/%0Ahttps://journal.umg.ac.id/index.php/tamaddun/article/view/95>.

Analysis of School Readiness in Developing School Digitalization at MA Al Hikmah Kajen

**Lutfia Richa Ayu Mustika¹, Sari Mahfiroh¹, Siti Rojaenah¹,
Joko Sulianto¹**

¹Universitas PGRI Semarang, Semarang, Indonesia

Corresponding author e-mail: sarimahfirohjetaksari1@gmail.com

Article History: Received on 04 June 2025, Revised on 11 June 2025,
Published on 17 June 2025

Abstract: This research aims to analyze the readiness of MA Al Hikmah Kajen in developing school digitalization, focusing on infrastructure, digital competence of teachers and students, principal's leadership, and obstacles. Digitalization is crucial for education quality, yet many institutions face implementation challenges. MA Al Hikmah, a madrasah in a pesantren environment, uses digital components like online admissions and virtual classrooms, but their daily application is limited by internal policies restricting student device use. Using a descriptive qualitative approach with interviews, observation, and documentation, the study found commendable infrastructure readiness. Teacher competence shows progress but is uneven, especially among senior educators. The principal's leadership positively supports digitalization, though more adaptive policy encouragement is needed. Key impediments are the student gadget ban and persistent digital literacy limitations among some teachers. The research recommends flexible policies, continuous digital training, and cultivating a digital ecosystem aligned with pesantren values.

Keywords: *Analysis, Readiness, Development, School_Digitalization*

A. Introduction

Digital transformation has profoundly reshaped human society across myriad domains, with education being a particularly significant area of impact. In an era characterized by rapid technological disruption, the educational landscape is undergoing an undeniable paradigm shift. Digital technology is no longer merely an auxiliary tool but has emerged as a fundamental pillar in the conceptualization and design of future educational systems. This technological evolution presents numerous opportunities, notably in the realm of digitalization. There is a compelling necessity for educational institutions to adapt proactively to these advancements. The pervasive development of information and communication technology (ICT) within education has fundamentally altered traditional learning paradigms, shifting from a predominantly teacher-centered model to one that is increasingly technology-based, thereby enhancing educational accessibility (Ramadhan et al., 2023). Indeed, digital technology has become an intrinsic and indispensable component of modern education (Hasnida & Adrian, 2024).

This transformative shift is further underscored by the evolving characteristics of contemporary students, who are largely "digital natives." These learners exhibit a heightened responsiveness to technology-based learning methodologies compared to conventional instructional approaches. Consequently, the integration of digital tools and practices not only addresses the demands of the current era but also facilitates the creation of more effective and relevant strategies for delivering educational content.

Digitalization, as defined by (Anita & Astuti, 2022), encompasses the process of implementing or utilizing digital systems in various tasks. More broadly, it involves the conversion of physical documents and

similar materials into digital formats, with the overarching aim of fostering critical thinking and stimulating student engagement through more captivating learning media (Nelga et al., 2022). Specifically, school digitalization refers to the comprehensive process of leveraging digital technology to elevate the quality of education. This encompasses diverse aspects, including the learning process itself, school administration, interactions among students, teachers, parents, and staff, and overall school management (Sutarsih et al., 2024).

The benefits of digitalization in managing educational institutions are manifold, primarily manifested through increased efficiency and effectiveness in learning processes and expanded access for students (Trennggono Hidayatullah et al., 2023). Digitalization also fosters enhanced collaboration between teachers and students via digital platforms, thereby broadening the scope of learning and enriching the quality of their interactions. Furthermore, the strategic application of digitalization enables personalized learning experiences, allowing each student to access educational materials tailored to their individual needs and learning pace. This represents a significant stride towards establishing an inclusive, differentiated, and truly student-centered education system.

The successful implementation of school digitalization is intrinsically linked to three pivotal elements: accessibility, data quality, and adaptability to change. Accessibility pertains to the real-time availability of information concerning school activities, student grades, and other relevant data, which has historically been challenging for parents and students to obtain. In terms of data quality, digitalization facilitates the management of data that was previously manual and prone to inaccuracies, leading to improved data integrity. The adoption of school digitalization also necessitates that institutions, educators, and administrative staff cultivate a strong capacity for adaptation, particularly concerning technological

advancements. Schools that foster a culture of innovation and demonstrate a willingness to adapt to change inherently possess greater resilience and strength in their digitalization endeavors. Moreover, the success of digitalization initiatives is not solely dependent on the school's internal efforts but also hinges on the active involvement and support of parents (Health, 2020).

In Indonesia, the strategy of developing school digitalization, which involves leveraging technology in learning, has been widely adopted by numerous schools. Digitalization serves as a crucial strategy for navigating the challenges of the digital era by integrating information and communication technology (ICT) into learning through online platforms and educational applications, ultimately boosting student engagement and access to learning resources (Nabila, 2024). By integrating technology into the learning environment, it is anticipated that students will gain more engaging and relevant learning experiences, aligning with the global demand for digital skills. The use of Learning Management Systems (LMS), interactive learning applications, and virtual classrooms has created new avenues for students to learn flexibly, transcending traditional boundaries of space and time.

The school digitalization program, initiated by the Minister of Education and Culture in 2019, was conceived as a response to the 4.0 industrial revolution. This program embodies a "new learning" paradigm characterized by a student-centered approach, multimedia integration, collaborative work, information exchange, critical thinking, and informed decision-making. While maintaining the importance of face-to-face instruction, school digitalization primarily aims to enrich learning by incorporating digital content to enhance student interest.

It is crucial to recognize that digitalization extends beyond mere devices and applications; it represents a fundamental cultural shift

within the school organization. This transformation necessitates an open mindset towards innovation, visionary leadership, and a collective readiness among all school community members to learn and adapt. A significant challenge in implementing digitalization in schools is the persistent disparity between policies formulated at the central level and the practical realities encountered at individual educational units. Many schools continue to grapple with technical limitations, insufficient human resources, and inadequate managerial preparedness to comprehensively adopt technology.

Furthermore, the integration of technology in education across Indonesia faces numerous hurdles, including disparities in access and infrastructure (Subroto et al., 2023). This is corroborated by (Suharto & Adriyanto, 2020), who notes that the implementation of digital technology in education still confronts various challenges, such as inadequate infrastructure, low teacher competence in technology utilization, and budgetary constraints. The government has consistently strived to enhance education quality through various policies, including the Merdeka Curriculum and Education Digitalization, aimed at addressing these issues. (UNESCO, 2020) emphasizes the substantial potential of digital technology in bridging educational disparities, particularly in remote or underdeveloped regions, provided it is implemented with meticulous planning. However, the ultimate success of these policies is heavily contingent upon their effective implementation at the school level, which frequently encounters technical difficulties, organizational culture resistance, and insufficient leadership support.

At the individual school level, readiness for developing school digitalization is profoundly influenced by the local context. This includes the availability of infrastructure, the digital competence of teachers, internal policies, and the prevailing organizational culture. It is not uncommon for schools to possess the necessary devices and

internet connectivity but remain unable to fully leverage them due to conservative policies or a lack of digital literacy among educators. This situation is exemplified at MA Al Hikmah, a madrasah situated within a pesantren environment. Despite the school's existing digital elements, such as the use of Kelas Pintar as a virtual classroom, an online student admission system (SPMB), a school website, and the Rapor Digital Madrasah (RDM), the integration of digital tools into the learning process remains limited. The mere presence of technology does not automatically guarantee a comprehensive digital transformation in the school's educational practices. Strategic, structured, and goal-oriented efforts are imperative, particularly concerning the managerial aspects of the school, which encompass the planning, organization, implementation, and oversight of digitalization programs.

Therefore, this research is essential to thoroughly investigate the extent of MA Al Hikmah Kajen's readiness in advancing school digitalization. The expectation is that this study will motivate the school to pursue further development, enabling it to implement more innovative digitalization initiatives that effectively address the challenges of a rapidly evolving digital technology era. Beyond its direct impact on improving academic systems and school management, this research holds significant importance as part of a broader effort to enhance digital-based education quality within the MA Al Hikmah environment. In an increasingly competitive global landscape, student quality is determined not only by academic mastery but also by digital proficiency, which includes communication, collaboration, and technology-driven problem-solving skills. Furthermore, teachers must also possess competence and adaptability to contemporary developments by continuously enhancing their digital literacy. Ultimately, this research is anticipated to provide solutions to the various challenges confronting the school in its journey towards comprehensive school digitalization.

B. Methods

This research employed a descriptive qualitative method, a design specifically utilized to analyze events as they unfold during the research period. Data were systematically collected through a combination of observation, interviews, and documentation, and subsequently subjected to rigorous analysis. According to (Creswell, 2017), descriptive research is a qualitative methodology aimed at providing an in-depth and detailed description and explanation of social or cultural phenomena. The primary objective of this type of research is not to test hypotheses but rather to gain a profound understanding of the context and meaning embedded within the phenomena under investigation.

From the 55 teachers at MA Al Hikmah who were used as the population, the research subjects consisted of the head of the madrasah, the deputy head of the madrasah for curriculum, teachers who had used technology in learning, and TU staff involved in managing the school's digital system, so 1 school principal, 1 curriculum deputy, and 3 teachers were taken as data samples. The selection of informants was done purposively, namely based on their direct involvement in the digitalization process at school.

Data was collected through in-depth interviews, participatory observation, and documentation. Interviews were used to explore informants' views and experiences regarding school digitalization. To further structure these interviews and systematically capture perspectives, an interview grid, such as a repertory grid was employed, allowing for a highly structured conversation to explore the interviewee's world of meaning by defining topics, identifying elements, and eliciting bipolar constructs for rating. Participatory observation involved direct engagement in and observation of learning activities and school management processes that

incorporate digital systems. Documentation encompassed a range of school records, including policies related to technology use, strategic planning documents, records of learning application usage, and evaluation reports pertaining to digitalization initiatives.

The analysis of the collected data was an interactive process, progressing through distinct stages: data reduction, data presentation, and conclusion drawing. Initially, researchers meticulously filtered the data to retain only the most relevant information. This refined data was then organized and presented in a narrative format, facilitating the identification of recurring patterns, relationships, and emerging trends. Provisional conclusions were then formulated, followed by iterative verification processes to rigorously ensure the validity and trustworthiness of the findings. To further bolster the credibility and robustness of the qualitative findings, this research employed source and technique triangulation.

The research was conducted at MA Al Hikmah Kajen, a madrasah with a pesantren background. While the institution has already implemented several digital components, such as Kelas Pintar, SPMB Online, a School Website, and Raport Digital Madrasah (RDM), it continues to face significant constraints in achieving a comprehensive integration of technology into its learning and administrative processes.

C. Results and Discussion

The findings of this research, which analyzed MA Al Hikmah's readiness for school digitalization across indicators of infrastructure, human resource competence, and leadership, are presented and discussed below.

Infrastructure Readiness Factor

MA Al Hikmah Kajen demonstrates a substantial level of basic infrastructure readiness essential for supporting comprehensive digitalization. The school is well-equipped with fundamental digital resources, including a sufficient number of computers and robust internet access that extends throughout the entire school premises. This foundational provision indicates a strong capacity for the school to integrate technology across all its operational aspects.

Specifically, the school's computer laboratory is furnished with 70 desktop computers and an additional 20 laptops designated for teacher use. All these devices are maintained in optimal working condition, indicating regular care, and are seamlessly connected to the local network. Furthermore, each classroom is outfitted with projectors and interactive screens, facilitating digital-based presentations and enhancing the learning experience. The computer laboratory is actively utilized daily by students for various academic purposes, including completing assignments, engaging in learning activities, and supporting extracurricular initiatives such as the school's journalism club.

The school has established a strategic partnership with a high-speed internet provider, leveraging a 100 Mbps fiber optic connection. This ensures that internet access is not confined to a single point but is broadly distributed across all areas of the school, encompassing administrative offices, student affairs rooms, counseling rooms, and laboratories. The pervasive availability of school Wi-Fi enables both teachers and students to remain connected during scheduled learning hours and even outside of formal school time. However, a minor limitation identified is the inconsistent signal coverage in certain areas, particularly on the third floor, which are distant from

the main routers, indicating a need for network expansion in these specific zones.

MA Al Hikmah also independently manages a local server, which serves as a centralized repository for critical data. This includes its proprietary domain for the Madrasah Digital Report, online examination systems, the online PPDB (student admission) system, and comprehensive student and teacher databases. The server benefits from automated backup procedures managed by the IT administrative team, who are also responsible for routine maintenance, system updates, and prompt technical troubleshooting to mitigate any risk of data loss.

Digital Competence of Teachers and Students

MA Al Hikmah Kajen employs 55 teachers, whose ages span a wide range from 24 to 60 years. This significant age disparity between younger and more senior educators creates a noticeable gap in their digital competencies. For teachers under 35 years old, approximately 80% have proficiently mastered the use of online learning platforms in their classrooms. These younger teachers are also actively engaged in creating interactive learning materials using various digital tools like Canva and online quizzes. They consistently integrate digital-based learning activities and assignments, such as utilizing interactive videos, into their pedagogy. Furthermore, these younger faculty members actively contribute to the school website by developing and uploading digital content that includes learning materials.

In stark contrast, senior teachers, typically those over 35 years old, exhibit a different level of digital engagement. While they are proficient in the fundamental use of the Madrasah Digital Report, a requirement for their roles as homeroom teachers, their primary teaching approach remains conventional and largely teacher-focused. These educators often encounter difficulties when

attempting to access or effectively utilize more advanced digital technologies, such as interactive media content or various free online learning platforms. Despite this disparity, the school proactively organizes annual digital literacy training sessions, inviting external experts, such as those from Kelas Pintar, to instruct teachers on the effective use of virtual classrooms that facilitate easy access to learning materials for students. During these training sessions, each senior teacher is paired with a younger teacher for peer support and guidance. The overarching objective of this initiative is to foster greater collaboration among teachers, thereby cultivating a digital environment that effectively caters to the diverse needs of all educators in their pursuit of enhancing education quality.

Students at MA Al Hikmah are subject to an internal policy that restricts the use of personal gadgets in class. However, the school compensates for this by providing access to its computer laboratory and all available computers for student use. Students generally demonstrate good participation in digital-based learning activities. Notably, students enrolled in the Vocational class, one of MA Al Hikmah's specialized majors, utilize computers daily as an integral part of their graphic design curriculum, maximizing the use of these resources. Beyond scheduled learning hours, students are granted access to the computer laboratory for completing assignments, preparing presentations, or developing activity proposals for student organizations. In classroom settings, students exhibit enthusiasm and active participation in interactive quizzes and online discussions facilitated by teachers.

The integration of technology into the school's daily operations is further evident in teachers' utilization of various platforms for delivering instructional materials to students, and inter-teacher communication is significantly streamlined through the use of WhatsApp groups. In the learning process, a segment of teachers

effectively incorporates learning videos from YouTube and creates digital presentations to explain concepts, indicating that technology has become a routine component of learning, albeit its application is not yet uniformly distributed across all subjects and teachers.

In the administrative domain, teacher and student attendance records are now digitally maintained and reported daily. The administrative staff efficiently uses applications such as Excel and Google Spreadsheet for data recapitulation, drafting official correspondence, and managing student transfers. The curriculum team leverages web-based applications to compile lesson schedules at the commencement of each academic year. These practices collectively demonstrate that school digitalization has permeated numerous aspects of school activities, extending beyond just the classroom.

The general response of the school community to these digitalization efforts has been largely positive, particularly among younger teachers and students who perceive the more engaging and interactive learning methods as beneficial. However, a segment of the school community, predominantly senior teachers, expresses a sense of burden due to the requirement to learn new applications and engage in digital reporting. Despite this, they generally exhibit willingness to participate in training and strive to adapt to the new digital environment.

Currently, both teachers and students at MA Al Hikmah Kajen are in the nascent stages of achieving full digital readiness. The existing competence gap necessitates a differentiated approach to training and support, ensuring that all stakeholders can simultaneously elevate their digital proficiency to an adequate level. While young teachers serve as catalysts for change, senior teachers and some students require ongoing mentorship and assistance to ensure that

digital competence is equitably distributed across the entire school community.

Leadership of the Madrasah Principal

The visionary and collaborative leadership demonstrated by the madrasah principal is a pivotal determinant in the successful development of school digitalization at MA Al Hikmah. The school's overarching vision, "insah sholih wa mufid," aims to cultivate graduates who possess strong moral character and are beneficial to society. This profound commitment is clearly articulated and integrated into the annual work program, which strategically prioritizes digitalization development as a key objective.

A tangible manifestation of this commitment is the establishment of vocational classes, a direct response to the contemporary challenges that necessitate students to acquire essential digital skills. Furthermore, the school has implemented a curriculum designed to equip students with practical vocational abilities, including sewing, electrical work, informatics, and graphic design. The aspiration is that graduates of MA Al Hikmah will contribute meaningfully to society through their specialized expertise.

The madrasah principal employs a transformational leadership style, characterized by frequent organization of socialization events, internal workshops, and open discussions focused on fostering innovation in learning. Under the principal's guidance, a dedicated Digitalization Team has been established. This team comprises key stakeholders, including the curriculum vice principal, student affairs vice principal, young teachers, and administrative staff. Their responsibilities include designing strategic roadmaps for digitalization, coordinating training initiatives, and continuously monitoring the implementation of digital programs. This team is also tasked with overseeing content on social media platforms, managing

materials on the school website, and ensuring the efficient operation of the school's server.

While the principal's visionary and collaborative leadership has clearly laid out a mature plan for school digitalization, a crucial challenge remains in balancing the traditional values inherent to a madrasah environment with the imperative for digital innovation. A primary recommendation for the principal to address existing foundation regulations is the formulation of a more flexible and clearly defined policy regarding the use of personal gadgets.

Obstacles and Challenges

The most pronounced obstacle impeding the comprehensive development of school digitalization at MA Al Hikmah is an internal regulation that strictly prohibits students from bringing and utilizing personal gadgets within the classroom. This policy is primarily intended to maintain student focus and uphold the conventional values of the madrasah, which operates within a pesantren environment. However, this restrictive policy inadvertently hinders the effective implementation of collaborative and student-centered learning models that inherently require direct digital interaction. Consequently, students are largely limited to accessing educational materials from physical books, while their ability to engage with broader contextual information from the external digital world is severely constrained due to the absence of personal devices.

The prevailing pesantren values often position technology as a supplementary tool rather than an integral component of the core learning process. This cultural perspective necessitates a gradual adjustment, which can be facilitated through ongoing socialization efforts aimed at fostering a shared understanding among both the foundation and the school administration regarding the significant pedagogical benefits of technology.

Despite the school's commendable infrastructure, the allocation of financial resources for the sustained maintenance of digital devices and for professional development training remains limited. This budgetary constraint directly impacts the frequency and overall quality of the training programs that the school is able to organize, which are consequently relatively low. The existing disparity in digital capabilities among teachers and between different groups of students creates an imbalance in learning access. Some senior teachers continue to exhibit reluctance to experiment with new digital tools, while certain students who are less familiar with computers require more intensive assistance and guidance.

Not all teachers and stakeholders within the school community have enthusiastically embraced the digital transformation. Resistance to change is observed, often stemming from a perception that digital reporting adds an undue administrative burden on teachers. They may also view school digitalization as simply increasing their workload rather than streamlining processes.

A significant challenge that has not yet received adequate attention is the lack of integration among the various digital applications and platforms currently in use at the school. Systems such as Kelas Pintar, Madrasah Digital Report (RDM), the online examination system, the online PPDB system, the school website, and other administrative systems operate independently. This fragmentation leads to difficulties in data coordination, results in duplicated efforts, and creates confusion for users, including both teachers and students. The absence of a centralized platform capable of integrating all school digital services severely impedes the overall efficiency and effectiveness of technology utilization. Therefore, the future development of a comprehensive educational management information system that unifies these disparate applications is an essential and pressing need.

The obstacles identified are multidimensional, encompassing policy, cultural, budgetary, and literacy aspects, all of which are intricately interrelated and require an integrated approach. Without simultaneous attention and resolution across all these facets, efforts to advance school digitalization are likely to be stalled or remain partial in their implementation.

From the findings, it is evident that MA Al Hikmah Kajen is highly prepared in terms of infrastructure and demonstrates visionary leadership, but it is still progressing towards full digital competence and faces significant policy and cultural barriers.

D. Conclusions

Based on the comprehensive research findings, it can be concluded that MA Al Hikmah Kajen demonstrates a fairly good level of readiness in advancing school digitalization, particularly in terms of its robust infrastructure and the supportive policy direction from its leadership. The school is well-equipped with essential technological devices and possesses a reliable internet network. Furthermore, several digital systems, including Kelas Pintar, SPMB online, and RDM, have already been implemented and are actively utilized.

However, the full potential of digitalization development has not yet been optimally realized. This is primarily due to persistent challenges related to the digital competence of a segment of teachers, especially senior educators, and the presence of internal policies that do not adequately support the seamless integration of technology into the learning process. While the principal's leadership plays a crucial role in driving this transformative change, there is a continued need to strengthen support through targeted training initiatives and the implementation of policy adjustments that are adaptive to contemporary developments. Additionally, the unique cultural challenges inherent in the pesantren environment are

significant factors that must be carefully considered when implementing digitalization, ensuring that technological advancements remain harmoniously aligned with the institution's core religious values.

Therefore, some suggestions that can be given are the need for the school to organize regular and tiered digital literacy training according to the level of teacher competence, and to encourage collaboration between young and senior teachers in the use of technology. Internal school policies, such as the prohibition of gadget use for students, need to be reviewed to maintain disciplinary values but not hinder the digital learning process. The school principal is also expected to continue to be an agent of change by providing room for innovation for teachers and students, and building synergy between pesantren values and technological needs through a contextual digital learning approach. In addition, budget support and partnerships with external parties, such as government agencies or technology institutions, are also very much needed to optimize the sustainable development of school digitalization

References

- Akbar, A., & Noviani, N. (2019). Tantangan dan Solusi dalam Perkembangan Teknologi Pendidikan di Indonesia. *Prosiding Seminar Nasional Pendidikan Program Pascasarjana Universitas Pgri Palembang*, 2(1), 18–25.
- Aksenta, A., Irmawati, Ridwan, A., & Hayati, N. (2023). *Literasi Digital (Pengetahuan dan Transformasi Terkini Teknologi Digital Era Industri 4.0 dan Society 5.0)*. PT. Sonpedia Publishing Indonesia.
- Almaskur, Lestari, Sukaningsih, D., Istama, & Ngazizah, N. (2024). Implementasi Digitalisasi Sekolah dalam Meningkatkan Kualitas Pembelajaran di SD Negeri Bulusari 01 Gandrungmangu. *Social, Humanities, and Education Studies (SHEs): Conference Series*, 7(3), 135–141.
- Anita, A., & Astuti, S. I. (2022). Digitalisasi Dan Ketimpangan

- Pendidikan: Studi Kasus Terhadap Guru Sekolah Dasar Di Kecamatan Baraka. *Jurnal Pendidikan dan Kebudayaan*, 7(1), 1–12. <https://doi.org/10.24832/jpnk.v7i1.2509>
- Aziz, A. T., Desmawati, L., & Muarifuiddin. (2023). Penerapan Digitalisasi Pada Proses Pembelajaran Kursus Di Lkp Vision College. *Comm-Edu (Community Education Journal)*, 6(2), 70–86. <http://journal.ikipsiliwangi.ac.id/index.php/comm-edu/article/view/17296>
- Butar, F. S. B., Setiawan, H. R., & Prasetia, I. (2024). Management of Technology-Based Learning Innovations in Improving the Quality of Learning. *Lectura : Jurnal Pendidikan*, 15, 339–350.
- Creswell, J. W. (2017). *Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran*. Pustaka Belajar.
- Gumelar, D. R., & Dinnur, S. S. (2020). Digitalisasi Pendidikan Hukum dan Prospeknya Pasca COVID 19. *Al-Ahwal Al-Syakhsyiah : Jurnal Hukum Keluarga dan Peradilan Islam*, 1(2), 111–122.
- Hasnida, S. S., & Adrian, R. (2024). Tranformasi Pendidikan Di Era Digital. *Jurnal Bintang Pendidikan Indonesia (JUBPI)*, 2(1), 110–116.
- Lailan, A. (2024). Peran Teknologi Pendidikan Dalam Pembelajaran. *SENTRI: Jurnal Riset Ilmiah*, 3(7), 3257–3262. <https://doi.org/10.55681/sentri.v3i7.3115>
- Maisarah, M., Lestari, T. A., & Sakulpimolrat, S. (2022). Urgensi Pengembangan Media berbasis Digital Pada Pembelajaran Bahasa Indonesia. *EUNOIA (Jurnal Pendidikan Bahasa Indonesia)*, 2(1), 65. <https://doi.org/10.30821/eunoia.v2i1.1348>
- Marginingsih, P., Kusumaningsih, W., & Violinda, Q. (2025). Digitalization Management in Schools : A Strategic Framework for Enhancing Academic Quality. *Jurnal Paedagogy: Jurnal Penelitian dan Pengembangan Pendidikan*, 12(2), 391–400. <https://e-journal.undikma.ac.id/index.php/pedagogy/index>
- Nabila, D. (2024). Masa Depan Pendidikan: Pengembangan Strategi Pembelajaran di Era Digital. *JUPSI: Jurnal Pendidikan Sosial*

Indonesia.

- Novita Sari, P., & Miyono, N. (2023). Peran Digitalisasi Sekolah dalam Meningkatkan Manajemen Mutu Pendidikan pada Taman Kanak-Kanak Negeri Pembina Kabupaten Semarang. *Jurnal Inovasi Pembelajaran di Sekolah*, 4(2), 728–735. <https://doi.org/10.51874/jips.v4i2.177>
- Nur, S. A., Mahya, A. F. P., & Santoso, G. (2022). Revolusi Pendidikan di Era Society 5.0; Pembelajaran, Tantangan, Peluang, Akses, Dan Keterampilan Teknologi. *Jurnal Pendidikan Transformatif (Jupetra)*, Vol. 01 No, 18–28.
- Putra, J. E., Sobandi, A., & Aisah, A. (2024). The Urgency of Digital Technology In Education: A Systematic Literature Review. *Jurnal EDUCATIO: Jurnal Pendidikan Indonesia*, 10(1), 224. <https://doi.org/10.29210/1202423960>
- Putra, L. D., & Pratama, S. Z. A. (2023). Pemanfaatan Media dan Teknologi Digital Dalam Mengatasi Masalah Pembelajaran Dimasa Pandemi. *Jurnal Transformation of Mandalika*, 4(8), 323–329. <https://doi.org/10.37092/ej.v4i1.296>
- Putrawangsa, S., & Hasanah, U. (2018). Integrasi Teknologi Digital Dalam Pembelajaran Di Era Industri 4.0. *Jurnal Tatsqif*, 16(1), 42–54. <https://doi.org/10.20414/jtq.v16i1.203>
- Ramadhan, M. S., Apriliani, S. D., Firjatullah, N. S., & Pratama, R. Y. P. (2023). Dampak Perkembangan Teknologi Digital Di Sektor Pendidikan. *Journal of Comprehensive Science (JCS)*, 2(6), 1772–1784. <https://doi.org/10.59188/jcs.v2i6.399>
- Setiyono, P., Haryati, T., & Wuryandini, E. (2025). Strategi Digitalisasi Sekolah dan Kualitas Pembelajaran di Era 4.0. *Indonesian Research Journal on Education : Jurnal Ilmu Pendidikan*, 5(1), 458–464.
- Subroto, D. E., Supriandi, Wirawan, R., & Rukmana, A. Y. (2023). Implementasi Teknologi dalam Pembelajaran di Era Digital: Tantangan dan Peluang bagi Dunia Pendidikan di Indonesia. *Jurnal Pendidikan West Science*, 1(07), 473–480. <https://doi.org/10.58812/jpdws.v1i07.542>

- Suharto, T., & Adriyanto, R. (2020). Peran Teknologi Informasi dan Komunikasi dalam Pembelajaran PKn di Era Digital. *Jurnal Pendidikan Kewarganegaraan*, 10(1), 64–73.
- Syafawani, U. R., & Prasetyo, T. (2024). Urgensi Inovasi Penggunaan Teknologi dalam Pendidikan : Analisis Berdasarkan Kajian Literatur. *Jurnal Pengajaran Sekolah Dasar*, 3(2), 214–230. <https://doi.org/10.56855/jpsd.v3i2.1276>
- Trenggono Hidayatullah, M., Asbari, M., Ibrahim, M. I., Hadiditia, A., & Faidz, H. (2023). Urgensi Aplikasi Teknologi dalam Pendidikan di Indonesia. *Journal of Information Systems and Management*, 02(06), 70–73. <https://jisma.org/index.php/jisma/article/view/785/137>
- UNESCO. (2020). *Digital Learning and Transformation of Education*. <https://www.unesco.org/en/digital-education>

The Transformational Leadership of The Principal in Fostering a Collaborative Culture Among Educators at State Senior High School 1 Percut Sei Tuan

Irma Tussa'diyah Hasibuan¹, Yusuf Hadijaya¹

¹Universitas Islam Negeri Sumatera Utara

Corresponding author e-mail: irmatussadiyah66@gmail.com

Article History: Received on 29 May 2025, Revised on 13 June 2025,
Published on 17 June 2025

Abstract: This study aims to describe the role of the principal's transformational leadership in forming a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan. The background of this study is based on the importance of teacher collaboration to improve the quality of education and the role of leaders who encourage positive change. Using a descriptive qualitative approach, data were collected through observation, in-depth interviews, and documentation from the principal, teachers, and students. The results showed that the principal implemented transformational leadership principles, such as teacher empowerment, building a shared vision, and creating a collaborative environment. The strategies used included the formation of the MGMP community, regular meetings, open communication, and support for teacher innovation. This study also found that educators' internal motivation and communicative leadership were key to creating a sustainable collaborative culture. These findings contribute significantly to the development of more adaptive and participatory education management.

Keywords: Transformational Leadership, Principal, Collaborative Culture.

A. Introduction

Education serves as a fundamental pillar of society, acting as a catalyst for personal growth, social development, and economic advancement (Tan & Low, 2019). The principal plays a pivotal role in this system and is therefore expected to encourage, mobilize, guide, direct, and take action to achieve predetermined objectives (Nurabadi et al., 2021). As the leader of the school, the principal holds a significant responsibility in meeting the expectations of various stakeholders. Consequently, principals are required to be capable of directing, organizing, and setting an example for school personnel in order to attain shared goals (Sunardi et al., 2019). One influential approach to achieving these goals is through transformational leadership.

Leadership is a critical factor that must be possessed by a school principal. According to Kartono as cited in Priansa (2014, p. 162), leadership is the ability to exert a constructive influence on others to engage in cooperative efforts aimed at achieving pre-established goals. Meanwhile, Syarifudin (2011, p. 108) defines leadership as a process of interaction between a leader and their followers within a group or organization. In carrying out their leadership duties, leaders influence, direct, and motivate all members of the group to utilize the organization's resources effectively in pursuit of its goals (Minsih et al., 2019).

Transformational leadership is a concept that was first introduced by Downton (1973) and later expanded by Burns (2012) (Milan, 2020). Transformational leaders cultivate a supportive and nurturing environment that fosters collaboration and teamwork. They value and respect the contributions of each member, promoting a sense of unity and shared responsibility. By establishing strong relationships and fostering a culture of trust, transformational leaders lay the foundation for continuous

improvement and sustainable growth (Addin et al., 2020).

Transformational leadership is defined as a leadership approach that utilizes charisma and intellectual stimulation to drive transformation and revitalize an organization (Sinaga et al., 2021). This type of leadership possesses specific characteristics that distinguish it from other leadership styles. These characteristics represent the traits or attributes of transformational leadership. Over time, scholars have articulated different characteristics in line with the evolving context of leadership studies. According to Assingkily and Mesiono (2019), the key characteristics of transformational leadership include:

1. A leader who possesses integrity and independence in realizing the organization's vision.
2. Subordinates must develop an awareness of the importance of unity in achieving goals, reinforced by motivational support and encouragement from the leader.
3. All members within a transformational leadership framework must be willing and prepared to make personal sacrifices for the benefit of the organization without expecting any form of reward.

Effective leadership strategies in Islamic educational institutions have a positive impact on improving teacher quality. Through continuous professional development, mentoring and coaching, the provision of autonomy and trust, effective communication, fair performance evaluations, and the cultivation of a collaborative culture, leaders can create an environment that enables teachers to reach their full potential in supporting quality education (Maolana et al., 2023).

Organizational culture plays a crucial role in achieving institutional goals, as it reflects the identity or personality of an organization. This culture is established by the founders through the vision, mission,

and objectives upon which the organization is built, and is further reinforced through strategies designed to achieve those goals (Syafriani & Ramadhani, 2023). According to Nelson and Quick, organizational culture serves four primary functions: fostering a sense of identity and enhancing organizational commitment, serving as a tool for organizing members, reinforcing core organizational values, and functioning as a control mechanism over behavior. A strong organizational culture instills trust, influences behavior, and standardizes practices without the need for constant justification. In this way, organizational culture acts as a social adhesive that unifies members in the pursuit of shared goals and provides a framework for the values and actions expected from all members. It also serves as a behavioral control mechanism for all organizational elements (Wijaya et al., 2022).

From an educational environment perspective, collaboration refers to cooperative actions undertaken by school members to achieve work-related goals. These actions may include sharing values through teacher learning, which can ultimately influence instructional practices and student achievement (Shakenova, 2017). Collaborative activities involve engaging others in setting common goals, sharing responsibilities, and working together to achieve outcomes that surpass individual efforts (Barfield, 2016).

Collaboration is one of the essential competencies that teachers must master in the current educational landscape. It is manifested through relationship patterns among individuals who are willing to share and support one another (Fatur Rahman, 2022). By engaging in collaborative practices, teachers can foster a productive environment that benefits them individually and strengthens the broader school community. Examples of collaborative practices among teachers include discussion groups, team-based tasks, and school-based professional learning communities (such as KKG mini in Indonesian schools).

Teacher collaboration represents a cooperative effort aimed at achieving shared goals in improving various aspects of teaching and learning (Kasmawati, 2020). Professional collaboration among teachers can contribute to the development of pedagogical knowledge, teaching experience, and content expertise (Diniyah et al., 2023). This occurs through the exchange of insights, teaching experiences, and instructional strategies among peers. Research on teacher collaboration has been more extensively conducted in developed countries and tends to focus on student outcomes rather than on the principal's role in facilitating such collaboration. Conversely, studies exploring teacher collaboration in developing countries-particularly in Indonesia remain limited. Given these circumstances, and considering the significant benefits of collaboration for teachers, it is crucial to examine how principals can play a role in encouraging effective teacher collaboration to enhance teaching quality.

Teacher collaboration is a vital component of teachers' professional lives, serving as a means of improving instructional practice. Through collaboration, teachers can share knowledge, reflect on their teaching experiences, offer mutual support and feedback, and jointly design teaching methods (Vangrieken et al., 2015). In the educational context, collaboration focuses on dialogue and the exchange of ideas among teachers (Hargreaves & O'Connor, 2017). One of the primary objectives of teacher collaboration is to integrate school improvement efforts by reducing teacher isolation, thereby enabling teachers to share expertise and observe one another's practices for collective reflection and growth.

Effective collaboration between principals and teachers can foster a shared perspective, thereby facilitating the achievement of the school's vision and mission. Moreover, both parties must serve as role models for students, as students are often more influenced by

the behaviors demonstrated by educators and school leaders than by their peers. The collaborative process is also shaped by personal traits and individual character, which play a significant role in fostering mutual understanding and cooperation (Ramdani et al., 2019). This study aims to explore how school principals can adopt a transformational leadership approach to cultivate an effective collaborative culture. By examining the strategies and dynamics involved in building a collaborative work environment, the study seeks to contribute both theoretically and practically to the development of educational management that is more responsive and better aligned with the challenges of contemporary education.

B. Methods

This study employs a qualitative approach using a descriptive qualitative method, which aligns with the research objective: to examine the transformational leadership of the school principal in fostering a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan. Qualitative research is defined as a strategy for interpreting meaning, understanding concepts, characteristics, phenomena, symbols, or descriptions of a particular issue. It is characterized by its naturalistic and holistic nature, its emphasis on quality, the use of multiple methods, and narrative presentation in scientific inquiry (Sidiq & Choiri, 2019).

In order to gather information and data on a phenomenon as it naturally occurs—specifically, the transformational leadership of the school principal in fostering a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan—the researcher uses a descriptive qualitative study approach. Techniques for gathering data include documentation, interviews, and observation. In order to depict and portray real-world situations in the field, a combination of field and library research is used in this sort of qualitative study. Direct interviews with the principal, teachers, and students were used to collect the data.

C. Results and Discussion

This section presents the findings of the research, beginning with a description of the field setting, followed by the data and information obtained, and concluding with a discussion of the field research results. As outlined in the previous sections, this study focuses on the transformational leadership of the school principal in fostering a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan. The research findings are elaborated as follows:

The Role of the Principal's Transformational Leadership in Shaping a Collaborative Culture Among Educators at SMA Negeri 1 Percut Sei Tuan

As is well known, the study on the transformational leadership of the school principal in fostering a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan aims, among other objectives, to understand how the principal's transformational leadership shapes this collaborative culture.

SMA Negeri 1 Percut Sei Tuan is a senior high school undergoing significant transformation in the working dynamics of its educators. This change centers on the role and leadership style of the principal, who implements transformational leadership. Transformational leadership is essentially a process of building commitment toward organizational goals while empowering followers with trust to achieve these goals.

The theory of transformational leadership examines how leaders change organizational culture, restructure the organization, and implement management strategies to accomplish organizational objectives (Iqbal, 2021). In the context of SMA Negeri 1 Percut Sei Tuan, the implementation of transformational leadership by the school principal is specifically aimed at fostering a strong

collaborative culture among teachers through the application of several strategies. As explained by Mr. Drs. Oloan P. Pangaribuan, M.Pd, the principal of SMA Negeri 1 Percut Sei Tuan:

"In establishing a collaborative culture among educators at this school, I apply the principles of transformational leadership. The strategies we implement focus on teacher empowerment, the development of a shared vision, and the creation of a work environment that supports professional growth". (Oloan Pangaribuan, 10 Mei, 2025)

Based on the interview results, it was found that in shaping a collaborative culture among educators at the school, the principal applies the principles of transformational leadership. This is reflected in strategies focused on teacher empowerment, such as providing opportunities for active participation in decision-making and encouraging initiative and innovation in the learning process. In addition, the principal emphasizes the importance of developing a shared vision that involves all educators, thus creating alignment and a common goal in improving the quality of education. A work environment that supports professional growth is continuously fostered through various training programs and collaborative forums, ultimately strengthening engagement and cooperation among educators.

During the interview, the principal stated that he implements the principles of transformational leadership in cultivating a collaborative culture among teachers at the school. These principles include:

1. Simplification, this refers to one of the key elements of successful leadership: having a clear and well-defined vision, mission, and objectives.
2. Motivation, In the context of transformational leadership, motivation refers to a leader's ability to provide intrinsic

motivation to subordinates, meaning motivation that originates from within the individual (Azizil Bana, 2016).

3. Facilitation, Transformational leadership involves facilitating the development and maintenance of positive and collaborative relationships among subordinates and with other stakeholders.
4. Innovation A transformational leader with a high level of innovation is capable of generating new ideas and applying creative solutions, particularly within the field of Islamic education.
5. Mobilization, A transformational leader possesses the ability to mobilize all available resources to empower and support every individual involved in achieving the established vision and goals.
6. Open-mindedness, This requires leaders to remain responsive to change and to adapt quickly. In facing change, it is essential for leaders to be open and receptive to feedback and suggestions from others.
7. Determination A leader must have strong determination. A leader with firm resolve is capable of overcoming obstacles and challenges encountered along the way (Iqbal, 2021).

Furthermore, the principal stated that several strategies have been implemented to cultivate a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan. He emphasized that:

"I consistently involve educators in shaping the school's vision so that every teacher feels a shared sense of purpose. This fosters a continuous sense of responsibility and collaboration. I also provide space for teachers to design and implement project-based learning programs and support every creative initiative they propose. We regularly hold discussion forums and monthly meetings that promote openness and mutual respect for ideas". (Oloan Pangaribuan, 15 Mei 2025).

Active involvement of teachers in the formulation of the school's vision is one of the principal strategies implemented. The principal stated that by engaging educators in the vision-building process, each teacher develops a shared sense of responsibility toward the school's direction and objectives. This fosters a stronger sense of ownership and promotes sustained collaboration among educators. Furthermore, the principal provides opportunities for teachers to design and implement project-based learning programs, while also supporting creative initiatives proposed by the teaching staff. These practices not only enhance teachers' motivation but also reinforce professional collaboration among them.

Routine activities such as discussion forums and monthly meetings also serve as strategic platforms to cultivate a culture of mutual respect, openness, and cooperation within the working environment. In addition to the interview with Mr. Drs. Oloan P. Pangaribuan, M.Pd, the principal of SMA Negeri 1 Percut Sei Tuan, the researcher also conducted an interview with Ms. Nurlatifah Harahap, M.Pd, a mathematics teacher at the same school. From this interview, the researcher obtained further insights into the strategies employed by the principal in fostering collaborative culture among educators.

"The first strategy involves fostering mutual familiarity between the principal and the educators, as well as among the educators themselves. This is followed by motivating the teachers to perform their respective duties effectively. Furthermore, collaboration is encouraged among teachers within the same subject area. Most importantly, effective communication is consistently applied as a key element in building a collaborative environment."(Nurlatifah Harahap, 16 Mei, 2025).

Based on the results of the interview, it was revealed that the first strategy involves building personal bonds not merely formal relationships between superiors and subordinates, but genuine efforts to foster mutual understanding among all elements of the school community. The principal believes that when a school leader understands the background, potential, and even the challenges faced by educators, a bridge of empathy is naturally established. The same emphasis is placed on relationships among educators themselves: building strong interpersonal connections helps to create a supportive and collaborative working environment.

Beyond familiarity, the next strategy focuses on cultivating intrinsic motivation. The principal recognizes that a teacher's dedication is not solely driven by obligation, but by a deep internal motivation. Thus, various efforts are made to inspire and appreciate the teachers' performance, instill a sense of ownership toward the school's vision, and encourage continuous professional growth in fulfilling their educational responsibilities.

Furthermore, the principal promotes close collaboration among teachers, particularly within the same subject area. This collaboration is expected to enrich perspectives, facilitate the sharing of best practices, and foster innovation in teaching methods. The exchange of ideas and experiences among colleagues is believed to enhance the overall quality of teaching and learning.

The principal further emphasizes the importance of effective communication. Strong communication skills serve as a crucial foundation for the principal to achieve the goal of creating a collaborative work environment. Through appropriate communication, the principal is able to foster teachers' intrinsic motivation and encourage their active participation in various collaborative activities. Mrs. Nurlatifah Harahap, M.Pd, also noted that the educators at SMA Negeri 1 Percut Sei Tuan have formed a

community known as the MGMP (Subject Teacher Forum) among teachers:

The teachers here have also established an MGMP, or Subject Teacher Forum, which is a discussion group consisting of teachers from the same subject area—for example, physics teachers collaborating with other physics teachers. This MGMP community enables subject teachers to engage in discussions and exchange ideas related to teaching and learning.” (Nurlatifah Harahap, 16 Mei, 2025)

Saondi (2010:10) describes MGMP (Musyawarah Guru Mata Pelajaran or Subject Teacher Forum) as a professional forum for teachers based on subject areas, which is systematically organized and specifically aimed at developing standardized concepts and national-level subject assessments. According to Mulyasa (2008:36), MGMP serves as an effective platform for enhancing teachers’ competencies and professionalism. This is reflected in the role and function of MGMP as a place where teachers can discuss and analyze the challenges they face in the classroom, as well as exchange ideas to design and implement learning models more effectively and efficiently.

Furthermore, Mulyasa (2007) states that the effectiveness of MGMP contributes to improving both the professionalism and performance of teachers. Through MGMP activities, all teachers have opportunities to improve their performance in fulfilling their duties as educators and to align their perceptions with colleagues teaching the same subjects. Schools that have successfully developed MGMP activities tend to better address various difficulties and problems faced by teachers and students during the learning process. In every MGMP meeting, teachers of the same subject area come together to solve problems collaboratively to enhance overall teacher performance.

MGMP can be regarded as an optimal model to support teachers in continuous competency development. A teacher's professional growth becomes more attainable when they are willing to engage in learning and exchange ideas with fellow educators. Naturally, the challenges faced by each teacher differ from those encountered by others. Therefore, through MGMP, teachers gain valuable input from their peers to solve various problems and strive to enhance their competencies.

Suyanto (2013) explains that the general objective of establishing MGMP is to foster creativity and innovation in improving teacher professionalism, while the specific objectives of MGMP establishment are:

1. To broaden the insights and knowledge of subject teachers in efforts to realize effective, efficient, and enjoyable learning;
2. To develop a conducive classroom culture as a place for a pleasant, engaging, and intellectually stimulating learning process for students
3. To establish cooperation with the community as partners of teachers in implementing the learning process.

In fostering collaboration among educators at SMA Negeri 1 Percut Sei Tuan, the principal undertakes several initiatives, as explained by the principal in the following interview:

“As a leader, one form of my communication with educators is through regularly scheduled monthly teacher meetings. Additionally, I maintain individual communication with teachers. Thus, communication is not limited to meetings but also involves open dialogue where teachers can express any challenges or issues they face during the teaching process. Typically, teacher meetings are held monthly; however, if urgent matters arise or important issues need to be addressed, the school will convene meetings as necessary”. (Oloan Pangaribuan, 13 Mei, 2025).

Mr. Drs. Oloan P. Pangaribuan, M.Pd, the principal, stated that effective communication is a crucial element in fostering a collaborative culture among educators. He explained that communication is not only conducted formally through monthly teacher meetings but also personally through individual-to-individual approaches. Through this interpersonal communication, educators are given the opportunity to openly express challenges or issues they face during the teaching and learning process. The monthly meetings serve as a forum for coordination and collective reflection; however, if urgent matters arise, the school flexibly holds additional meetings. This open and responsive communication strategy strengthens trust, encourages active participation, and promotes the development of a dynamic collaborative culture within the school environment. Furthermore, the principal emphasized that communication is one of the primary factors in establishing a collaborative culture among educators: "The primary factor in developing a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan is communication between the principal and the teachers; this is considered the most crucial element.". (Oloan Pangaribuan, 16 Mei, 2025)

Based on the interview results, it can be concluded that the primary factor in establishing a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan is the communication between the principal and the teachers. Effective communication serves as the fundamental foundation that unites all elements of the school to work together towards shared progress. Several prominent communication experts in Indonesia, such as Prof. Burhan Bungin, Gun Gun Heryanto, Ade Armando, and Effendi Gozali, emphasize that communication is conducted to achieve positive relational outcomes.

The importance of effective communication between the principal and educators is also reflected in efforts to create a conducive work

climate at the school. With smooth communication and good cooperation, teachers feel heard, valued, and supported in carrying out their educational duties (Amalia & Samsudin, 2022).

The researcher also conducted an interview with Syarifah, a student of SMA Negeri 1 Percut Sei Tuan, class XI-MIPA 3:

"In my observation, it is evident that the teachers here cooperate and foster a collaborative atmosphere among educators. I often see, during breaks or after classes, several teachers gathering in the glass room to discuss teaching methods or share their experiences from the day's lessons. For instance, when we have art or entrepreneurship project assignments at school, other teachers willingly assist both us students and the subject teachers involved in those projects. Thus, it can be said that the educators here do not only focus on their own subjects but are also willing to collaborate with other teachers. I believe the leadership of the principal, who regularly holds meetings and training sessions, plays a significant role in shaping this collaborative culture among educators."(Syarifah, 17 Mei, 2025)

From the interview, it was revealed that a culture of mutual support exists among the teachers at the school. Syarifah explained that teachers are often seen discussing outside of class hours to talk about teaching methods and student activities, as well as exchanging information about effective instructional approaches. Collaboration is also evident in cross-subject activities, such as accompanying students during competitions or school projects. According to her, this collaborative culture is inseparable from the principal's role in applying a transformational leadership style. The principal is regarded as actively encouraging and facilitating cooperation among teachers through meetings, training sessions, and direct involvement in various activities. This demonstrates that inspirational and supportive leadership can successfully foster a collaborative and positive working environment among educators.

One of the students from class XI-Mipa 5, named Raja, also mentioned that collaboration among teachers has a positive impact on students' learning motivation at the school:

"Yes, I feel more motivated to learn when the teachers collaborate in delivering lessons and support each other during the learning process. With the collaboration among educators, I find it easier to understand the material and become more interested. Moreover, when teachers support one another, the classroom atmosphere feels more positive and less monotonous. I believe this is also thanks to our principal, who consistently encourages teachers to work together. The principal often sets examples of good cooperation and facilitates activities that strengthen teacher unity". (Raja, 17 Mei, 2025)

Raja expressed that when teachers collaborate in delivering lessons, especially when materials from several subjects are interconnected and explained in an integrated manner, understanding becomes easier and the learning process feels more engaging. Collaboration among educators also fosters a more conducive and enjoyable classroom environment, making students feel more attended to and supported.

Challenges Faced by the Principal in Developing a Collaborative Culture Among Educators at SMA Negeri 1 Percut Sei Tuan

Not all expectations can be fully met; however, many challenges remain faced by the principal in fostering a collaborative culture among educators at SMA Negeri 1 Percut Sei Tuan. There are certainly various obstacles encountered in developing this collaborative culture because collaboration involves more than one individual, often many individuals with diverse backgrounds and differing personalities.

Challenges in collaboration may include individual challenges, organizational challenges, social challenges, and organic challenges. An example of an individual challenge is the motivation for power. According to McClelland, human character exhibits various forms of motivation. Individuals motivated by a desire for power or dominance are often unsuitable and unable to engage effectively in collaboration. This occurs because such individuals lack self-assessment abilities, tend to perceive their contributions as greater than those of others, undervalue the contributions of others, and fear losing control, quality, autonomy, identity, or resources (Ngambut, 2023).

In the effort to establish a strong collaborative culture within the school environment, the role of the principal as a transformational leader becomes crucial. A physics teacher at SMA Negeri 1 Percut Sei Tuan, Mrs. Evi Juliani, S.Pd, M.Si, emphasizes that the principal needs to consistently apply transformational leadership to encourage effective cooperation among educators. This type of leadership is considered capable of inspiring teachers to support one another, share knowledge, and unify their vision for collective progress. The principal is also advised to serve as a role model in fostering open communication and building trust among teachers, for example through regular and structured interdisciplinary discussion forums. Recognition of collaborative initiatives is also deemed important in maintaining teacher motivation. Through this approach, the collaborative culture will not only develop but also become deeply rooted as part of the school's professional climate.

Based on the statement above, the researcher conducted an interview with the principal of SMA Negeri 1 Percut Sei Tuan. The results of the interview with Mr. Drs. Oloan P. Pangaribuan, M.Pd are as follows: "The primary challenge I face is time management, as I have a fairly busy schedule. Secondly, educators have limited understanding of the theoretical implementation involved in

fostering a collaborative culture; in fact, they have some understanding but lack deeper insight. Furthermore, the existing work culture, which is not yet fully collaborative, also poses a significant obstacle. The work culture that has been established over many years cannot be changed instantly. It requires time and consistent efforts in setting examples to cultivate a genuine collective spirit among educators” (Oloan Pangaribuan, 17 Mei,2025)

In an interview conducted with the principal of SMA Negeri 1 Percut Sei Tuan, Mr. Drs. Oloan P. Pangaribuan, M.Pd, he revealed several key challenges faced in fostering a collaborative culture within the school environment. The first challenge highlighted was the issue of limited time. With a demanding schedule as the principal, it is often difficult to be fully involved directly in every collaborative process intended to be developed with the educators. This becomes an obstacle in providing consistent guidance and ensuring that each process runs optimally.

The second challenge is the lack of deep understanding among educators regarding the theoretical implementation of a collaborative culture. Although most teachers already have a basic understanding of the importance of collaboration, this understanding has not fully reached the practical and in-depth aspects. This results in suboptimal implementation of the collaborative culture due to lingering doubts and uncertainties in its execution.

Furthermore, he also pointed out that the work culture, which is not yet fully collaborative, poses a significant barrier. The work culture that has been established over many years tends to be individualistic and unaccustomed to structured teamwork. According to him, cultural change is not something that can be achieved instantly. It requires time, exemplary leadership, and consistency in actions to cultivate a collective spirit and a sense of ownership among

educators.

The principal formulated strategies to overcome obstacles in establishing a collaborative culture among educators. The following is an excerpt from the author's interview with Mr. Drs. Oloan P. Pangaribuan, M.Pd, the principal:

"One of the solutions I have implemented to address these challenges is maintaining good communication with the educators. For instance, regarding the time constraint, we communicate with the educators to identify suitable times for collaboration with other teachers. Acknowledging that a busy schedule is a significant challenge, I strive to improve time management efficiency. Second, concerning educators' understanding of the theoretical implementation of a collaborative culture, I recognize that further in-depth exploration is necessary. Therefore, we plan to organize training sessions or internal discussions to help teachers gain a deeper understanding of the concept of collaboration and how to concretely implement it in their daily practice. Third, changing a work culture that has been deeply rooted over many years cannot be achieved instantly. I am aware that this requires time, patience, and most importantly, exemplary leadership. Together with the leadership team, I will continuously strive to set an example by fostering a collective spirit, promoting open cooperation, and nurturing healthy communication among educators. We will also create collaborative spaces that encourage positive interaction among teachers..". (Oloan Pangaribuan, 17 Mei, 2025)

In the effort to foster a collaborative culture among educators, the principal acknowledges several challenges that must be addressed, as previously mentioned. As a solution, the principal emphasizes the importance of effective and flexible communication, particularly regarding time constraints. He encourages reaching a mutual agreement on scheduling to ensure collaboration can occur without disrupting educators' primary responsibilities. Additionally, the

principal has designed training programs and internal discussions to deepen teachers' understanding of both the theory and practice of collaboration. He recognizes that transforming the work culture cannot be achieved instantly but requires a continuous process. Therefore, leadership by example, a strong commitment to building a collective spirit, and the creation of collaborative spaces are concrete steps consistently pursued to realize positive interactions and productive collaboration within the school environment.

D. Conclusions

This study demonstrates that the transformational leadership of the principal at SMA Negeri 1 Percut Sei Tuan significantly contributes to the development of a collaborative culture among educators. The principal acts as a catalyst for change by applying transformational leadership principles such as vision simplification, intrinsic motivation, team facilitation, innovation, and consistent exemplary behavior. This approach not only encourages active participation from teachers but also creates collaborative spaces, such as subject teacher working groups (MGMP), which effectively enhance educators' professionalism. However, the implementation of a collaborative culture still faces several challenges, including time constraints, limited in-depth understanding of the collaboration concept among educators, and a deeply rooted individualistic work culture. Therefore, change requires consistent communication, strengthening teachers' capacity through training, and exemplary leadership from the school administration.

As a solution for implementing a collaborative culture among educators, it is recommended that schools design continuous training programs on collaborative culture and participative leadership for teachers. Additionally, a system of rewards and evaluations should be established to encourage consistent collaborative practices. Local governments or education offices can

also develop supportive policies that promote principals to take an active role as transformational leaders in other educational units.

References

- Addin, F. N., Bintang Kejora, M. T., & Kosim, A. (2020). Pengaruh Kepemimpinan Transformasional Kepala Madrasah Terhadap Kinerja Guru Di Madrasah Aliyah Ghoyatul Jihad Kabupaten Karawang. *Idaarah: Jurnal Manajemen Pendidikan*, 4(2), 153. <https://doi.org/10.24252/idaarah.v4i2.16673>
- Amalia, D., & Samsudin, U. (2022). Jalinan Komunikasi Kerjasama Guru Dan Orang Tua Dalam Meningkatkan Prestasi Belajar Siswa Di Sekolah. *AL Fikrah : Jurnal Pendidikan Dan Pemikiran Islam*, 2(2 Agustus), Article 2 Agustus. <https://doi.org/10.1124/al>
- Arisoeherman. Saondi, Ondi. 2010. *Etika Profesi Keguruan*. Bandung: PT. Rafika Cipta
- Assingkily, Muhammad Shaleh, and Mesiono Mesiono. 2019. "Karakteristik Kepemimpinan Transformasional Di Madrasah Ibtidaiyah (MI) Serta Relevansinya Dengan Visi Pendidikan Abad 21." *MANAGERIA: Jurnal Manajemen Pendidikan Islam* 4(1):147–68. Doi: 10.14421/manageria.2019.41-09.
- Bana, Azizil, 'Pengaruh Kepemimpinan Transformasional Dan Lingkungan Kerja Fisik Terhadap Kinerja Pegawai Dengan Motivasi Kerja Sebagai Variabel Pemediasi (Studi Pada Perusahaan Daerah Air Minum (Pdam), Kota Kendari).', *Jurnal Bisnis Dan Manajemen*, 3.1 (2016)
- Barfield, A. (2016). Collaboration. *ELT Journal*, 70(2), 222–224. <https://doi.org/10.1093/elt/ccv074>
- Diniyah, L., Yulistia, N., Adiani, P., Kirana, R. F., & Nuraeni, R. (2023). *Pentingnya Kolaborasi Guru dalam Penelitian Tindakan Kelas*. 1(1), 85–91.
- E. Mulyasa. 2007. *Standar Kompetensi dan Sertifikasi Guru*.
- Faturrohman, P. (2022). *Pengaruh kolaborasi antar guru terhadap produktivitas kerja guru sma di lingkungan Yayasan Ardhya*

- Garini. Skripsi. Program Studi Manajemen Pendidikan Fakultas Ilmu Pendidikan Universitas Negeri Jakarta
- Hargreaves, A., & O'Connor, M. T. (2017). Cultures of professional collaboration: Their origins and opponents. *Journal of Professional Capital and Community*, 2, 74e85.
- Iqbal, Muhammad. (2021). Kepemimpinan Transformasional Dalam Upaya Pengembangan Sekolah/Madrasah. *Jurnal Pendidikan*. 10(3): 119-129.
- Kartono, Kartini. (2014), *Pemimpin dan Kepemimpinan: Apakah pemimpin abnormal itu*. Jakarta : Rajawali Pers
- Kasmawati, Y. (2020). *Peningkatan Kompetensi Melalui Kolaborasi : Suatu Tinjauan Teoritis Terhadap Guru*. VIII, 136–142.
- Maolana, I., Darmiyanti, A., & Abidin, J. (2023). Strategi Kepemimpinan Kepala Sekolah Yang Efektif Dalam Meningkatkan Kualitas Guru Di Lembaga Pendidikan Islam. *Innovative; Journal Of Social Science Research*, 3(4), 83-94.
<https://j-innovative.org/index.php/Innovative/article/view/3493>
- Milan Shrestha, M. S. (2020). Transformational Leadership and its Dimensions: Contributions in Organizational Change among Schools. *BSSS Journal of Management*, August 2020.
<https://doi.org/10.51767/jm1107>
- Minsih, Rusnilawati, & Mujahid, I. (2019). Kepemimpinan Kepala Sekolah Dalam Membangun Sekolah Berkualitas Di Sekolah Dasar. *Profesi Pendidikan Dasar*, 1(1), 29–40.
<https://doi.org/10.23917/ppd.v1i1.8467>
- Mulyasa. (2008). *Menjadi Guru Profesional*. Bandung: Remaja Rosda Karya
- Ngambut. (2023). Kerangka Kerja Collaborative Governance: Tantangan Implementasi Dalam Situasi Krisis Pandemi COVID19. *Administrasi Dan Demokrasi*, 2(1), 1–11.
- Nurabadi, A., Jujuf, I., Ibrahim, B., Juharyanto, Imam, G. & Maulana, A.A. (2021). The Effect Of Instructional, Transformational And Spiritual Leadership On Elementary School Teachers'

- Performance And Students' Achievements. *Cakrawala Pendidikan*, 40(1), 17-31.
- Ramdani, Z., Amrullah, S., & Tae, L. F. (2019). *Pentingnya Kolaborasi dalam Menciptakan Sistem Pendidikan yang Berkualitas*. 5(1), 40-48.
- Shakenova, L. (2017). Kerangka Teoritis Karya Kolaborasi Guru. *Jurnal Khazar Humaniora dan Ilmu Sosial*, 20(2), 34-48.
<https://doi.org/10.5782/2223-2621.2017.20.2.34>
- Sidiq, U., & Choiri, M. M. (2019). *Metode Penelitian Kualitatif Di Bidang Pendidikan*. Ponorogo: CV. Nata Karya.
- Sinaga, N. S., Aprilinda, D., & Budiman, A. P. (2021). Konsep Kepemimpinan Transformasional. *Cerdika: Jurnal Ilmiah Indonesia*, 1(7), 34-41.
<https://doi.org/10.58561/mindset.v1i1.28>
- Sunardi, et al. (2019). Kepemimpinan Instruksional Kepala Sekolah. *Equity In Education Journal*, 1(1), 20-28.
- Suyanto. (2013). *Menjadi Guru Profesional: Strategi Meningkatkan Kualifikasi dan Kualitas Guru di Era Global*. Jakarta: Erlangga.
- Syafriani, Y., & Ramadhani, S. (2023). Budaya organisasi dan dampak organisasi terhadap Lembaga pendidikan. *Masaliq*, 3(1), 77-85. <https://doi.org/10.58578/masaliq.v3i1.790>
- Syarifudin. (2011). *Manajemen Pendidikan*. Jakarta: Diadit Media.
- Tan, O., & Low, W. L. E. (2019). Teacher Education in the 21st Century. In *Teacher Education in the 21st Century*.
<https://doi.org/10.5772/intechopen.77621>
- Vangrieken, K., Dochy, F., Raes, E., & Kyndt, E. (2015). *Teacher Collaboration: A Systematic Review*. *Educational Research Review*, 15, 17-40.
<https://doi.org/10.1016/j.edurev.2015.04.002>

The Role of Principal Leadership in Improving the Quality of Education

Dina Oktapia¹, Inom Nasution¹

¹Universitas Islam Negeri Sumatera Utara, Medan, Indonesia

Corresponding author e-mail: dinaoktapia94@gmail.com

Article History: Received on 10 June 2025, Revised on 16 June 2025,
Published on 17 June 2025

Abstract: This study aims to analyze the principal's leadership role in improving the quality of education at SMPN 4 Gunung Tuleh, a school located in a remote area with various limitations. This research approach uses ethnographic qualitative methods through in-depth interviews with the principal and several teachers. The results show that the principal's leadership plays an important role in building collaboration with various parties, such as the education office, school committee, teachers and the community. Quality improvement strategies are carried out through strengthening facilities and infrastructure, although limited, as well as learning innovations carried out by teachers. Teacher creativity in overcoming limitations, such as utilizing the surrounding environment as a learning medium and using active methods, is a supporting factor for successful learning. The conclusion from this study is that collaborative, humanist and adaptive leadership has a significant impact on improving the quality of education, even in conditions with limited resources. This study recommends the need for continuous support from various parties to strengthen the role of schools in providing quality education services.

Keywords: Leadership, Principal, Quality, Education

A. Introduction

Educational quality is a crucial indicator in assessing a country's development (Wahyudi et al., 2022). Several Asian countries, such as Singapore, Malaysia, and China, have demonstrated significant progress in enhancing the quality of education. Singapore possesses a highly structured educational system that emphasizes the development of critical thinking and creativity (Adinda et al., 2024). Malaysia has undertaken various reforms to improve educational standards, including implementing curricula that are more aligned with industry needs (Pratama et al., 2025). China has developed a highly competitive education system, with a strong emphasis on examinations and academic achievement. Through its "Made in China 2025" initiative, the country has made substantial strides in expanding access to and improving the quality of education (Li, 2025).

The quality of education serves as a fundamental pillar in the development of superior and competitive human resources (Farawita, 2024). High-quality education is not solely focused on academic achievement; it also encompasses character development, 21st-century skills, and the cultivation of critical and creative thinking abilities (Naharuddin & Sesmiarni, 2025). In the context of globalization and the Fourth Industrial Revolution, countries with robust educational systems tend to be more adaptive to social, technological, and economic changes (Syerlita & Siagian, 2024).

Therefore, improving the quality of education is an essential prerequisite for national progress, as it empowers individuals to actively contribute to development, reduces social disparities, and fosters a just and civilized society (Barlian et al., 2022). Without a strong commitment to educational quality, efforts toward national development are likely to be unbalanced and unsustainable.

In the pursuit of improving educational quality, the principal's leadership plays a highly strategic role. The principal serves not only as an administrative manager but also as a transformational leader capable of articulating a clear vision, cultivating a positive school culture, and mobilizing all components of the school community to achieve more effective educational goals (Ismunandar, 2025). The leadership of the school principal plays a pivotal role in initiating transformative changes aimed at improving the quality of education by enhancing student management through the enforcement of stricter discipline and the implementation of innovative programs (A. J. D. R. Sari et al., 2021).

The success of such changes largely depends on the principal's leadership, particularly through their roles as a decision-maker, driving force, philosophical guide, and collaborative partner. As a leader, the principal must be able to encourage collaboration among teachers, administrative staff, students, parents, and all school stakeholders in order to achieve the school's goals efficiently and effectively. High quality education requires professional educational personnel (Amon et al., 2021). Educational quality can be attained when various components such as inputs, processes, teachers, infrastructure, and funding meet specific standards. Among these components, professional human resources play the most critical role. Qualified personnel are those capable of responding to challenges swiftly and responsibly (Fitri et al., 2023).

However, Indonesia continues to face significant challenges in improving the quality of education. This indicates a pressing need for the country to enhance its educational standards in order to achieve the goals of sustainable development (Anugrah et al., 2022). Key issues affecting the quality of education in Indonesia include an insufficient number of qualified teachers, limited technological literacy particularly in remote areas and inadequate budget allocations (Musdalipah, 2024). Previous research has shown that

effective school principals can enhance both teacher and student motivation and contribute to the development of relevant curricula (Muzaini et al., 2023). Similarly, findings by Artanti et al (2024) reveal that the principal's role in managerial functions and instructional supervision is positively correlated with educational quality. Nonetheless, many of these studies tend to focus primarily on general descriptions of the principal's role or are limited to administrative and managerial dimensions. This raises a critical question: how does school leadership contribute to improving educational quality? The aim of this study is to explore in greater depth the role of school principals in enhancing the quality of education.

B. Methods

This study employs a qualitative research design with an ethnographic approach to gain an in-depth understanding of the underlying dynamics behind a phenomenon that remains relatively unexplored. Ethnography is utilized to provide a detailed and contextual description of established patterns of behavior and thought within the studied group, which are then documented through written narratives, photographs, illustrations, or video recordings (Sari et al., 2023). As an in-depth study of naturally occurring behaviors within a specific culture or social group, ethnographic methods enable the researcher to explore how a school principal enhances the quality of education at a junior high school in West Pasaman.

The research seeks to uncover the strategies and leadership styles employed by the principal to improve educational quality. The resulting narrative is expected to offer a comprehensive portrayal of instructional leadership roles, the challenges encountered, and effective strategies that may serve as models or references for other schools aiming to improve educational outcomes. The narrative

approach adopted in this study allows for a deeper understanding of the social, professional, and strategic contexts in which school leadership operates, thereby helping to identify critical factors that influence the quality of education.

This study was conducted at a public junior high school (SMP) in West Pasaman. The school was selected as the research site due to its distinctive characteristics as an educational institution that integrates religious values into both its curriculum and instructional practices, making it a compelling subject for evaluating the effectiveness of learning approaches. Moreover, the school is believed to adopt a leadership style that may be participatory or grounded in religious principles. It also serves as a representative case for exploring the implementation of effective instructional strategies, particularly in relation to character education and academic achievement.

The study aims to offer practical recommendations for school development, especially in terms of improving instructional quality and leadership effectiveness. Additional practical considerations, such as accessibility and established relationships with the school community, also contributed to the selection of this institution as the research site. Therefore, this school is deemed an appropriate and strategic choice to support the objectives of the study.

In the process of recruiting research participants, the researcher's status as an alumnus of the school and existing familial ties with members of the school community including the principal played a facilitating role. These established relationships, particularly with the school principal, enabled the researcher to approach potential participants directly and present the research topic in a relevant and contextually appropriate manner. The researcher clearly and thoroughly explained the purpose and significance of the study before requesting consent to participate. The principal, teachers, and

students were involved in this study.

Participant recruitment began with ensuring the willingness of potential informants to be interviewed and to share information related to the research topic and focus. The researcher adhered to ethical principles, including maintaining data confidentiality and obtaining informed and voluntary consent from all participants. The number of participants was adjusted according to the scope of the study for example, one principal and two to four teachers. The researcher also provided an official letter of research approval from the university to the school. Upon receiving institutional approval, the researcher proceeded with participant selection.

The school principal was recruited by virtue of their position, while teachers were recruited directly by the researcher based on their availability, as prior acquaintance already existed between the researcher and participants. Students who agreed to participate were invited to voluntarily complete a consent form. The researcher then scheduled interviews with the selected informants. Prior to each interview session, the researcher initiated casual conversation to ease any tension and create a more comfortable atmosphere for participants. Data table of principal and teacher participants at one of the schools in West Pasaman.

Table 1. Table of participant data for principals and teachers

Participant Types	Gender	age	Last education	Length of service
Headmaster (WN)	Woman	42	Bachelor	3 Years
Teacher 1(AR)	Man	47	Bachelor	15 Years
Teacher 2(KY)	Woman	46	Bachelor	15 years
Teacher 3(RN)	Man	40	Bachelor	15 years

Data collection in this study was conducted through observation, interviews, and document analysis. During the observation phase, the researcher observed the principal's activities at school,

beginning 20 minutes before the school day commenced and continuing until the end of the school day. The observations were conducted intensively over a two-week period in February. The focus of the observation was on the principal's leadership style, school management abilities, and communication with both teachers and students. The researcher recorded the principal's activities and participated in various events attended by the principal, including staff meetings.

In addition to observing the principal, the researcher also observed teachers and students. This included monitoring teaching methods, teacher-student communication, and other practices related to educational quality. The researcher also paid attention to students' motivation and learning interest within the school environment. Observational data were systematically recorded using observation sheets prepared for this purpose. For the interviews, the researcher posed a series of questions to each participant regarding the role of the principal in improving educational quality at the school. Prior to conducting the interviews, the researcher developed an interview guide. A semi-structured interview approach was employed to allow for flexibility while maintaining a clear focus on the research objectives.

Before starting the interview sessions, the researcher sought the participants' consent to record the conversations. Interviews were conducted over 20–40 minutes using a digital audio recorder, in this case, a mobile phone. To maintain participant confidentiality, pseudonyms or initials were used in all recorded and transcribed data. The principal was interviewed approximately two to three times per week, each session lasting 20–40 minutes. Over the course of a month, the researcher conducted between four and eight interview sessions with the principal during regular school hours. For subject teachers, the researcher made appropriate adjustments to ensure a comfortable and non-intimidating interview setting.

Between two and four teachers were involved in the interviews, with each agreeing to allocate time for the process. The researcher approached teachers in a calm and informal manner to ensure the interviews were relaxed and conducive to open dialogue. Formal agreements were made with each teacher to schedule the interviews, which generally lasted between 15 and 30 minutes. These sessions were also recorded using a mobile phone, and consent was formally requested prior to each recording to ensure adherence to research ethics and to respect the rights and privacy of participants.

Documentation was conducted to strengthen the information obtained from interviews and observations. This process aimed to provide a concrete overview of the principal's role in improving the quality of education. The researcher collected various documents related to efforts to enhance educational quality. These documents included materials such as the school's profile photos, the principal's activity program documents, school evaluation and supervision reports, school progress reports, leadership vision and mission statements, and other relevant documents.

The data analysis process involves the systematic organization and arrangement of data obtained from interviews, observations, and documentation. The steps include categorizing data, breaking it down into smaller units, synthesizing information, identifying patterns, selecting relevant data for study, and drawing conclusions to facilitate easier understanding. All collected data will be thoroughly analyzed. For observational data, the researcher collects information from direct observation, in-depth interviews, and document reviews. After data collection, data reduction is performed by selecting, simplifying, and transforming raw field data. Subsequently, the researcher presents the reduced or categorized data and draws conclusions by summarizing the essential parts of the study in clear and accessible language.

In analyzing interview data, a systematic approach is employed to ensure the validity and meaningfulness of the findings. First, the researcher transcribes audio recordings by repeatedly listening to the interview sessions. Next, irrelevant words are removed from the transcripts without altering their meanings.

The transcripts are then thoroughly read to understand the content, and key sections related to the research questions are highlighted. The researcher holds meetings to discuss possible interpretations of the data and alternative explanations that could clarify the findings. Additionally, during each meeting, data triangulation is conducted by comparing interview data with other sources such as field notes and curriculum documents to enhance the validity of the analysis and broaden the researcher's understanding of the data's meaning.

For document analysis, the researcher begins by collecting all relevant documents. Once gathered, the data is processed to simplify and organize it systematically. The researcher categorizes the data, arranges and quantifies it, and presents the findings in tabular form. Finally, the researcher analyzes and processes the data and draws conclusions based on the obtained information.

C. Results and Discussion

Based on the analysis of interviews with the principal and teachers, supported by field observations and documentation, this study explores the role of school leadership in improving the quality of education at SMPN 4 Gunung Tuleh. From the research findings, three main themes emerged: (a) collaborative leadership, (b) improvement of facilities and infrastructure, and (c) enhancement of educational quality. Each of these findings is discussed in detail as follows:

Collaborative leadership

Collaborative leadership is an effective form of leadership in managing change, which requires collaboration, active listening, influence, and adaptation (Kasmawati, 2021). Based on the interview with the principal, it was found that the principal employs a collaborative leadership strategy. The importance of collaboration is emphasized as a strategic approach in educational leadership. The principal stressed that a school cannot function effectively if it relies on only one party. For example, the principal stated: Collaboration means working together. The school is overseen by the education department, and in the community, there is a committee. So if we work individually, it will not work (Principal, Interview: April 11, 2025).

This statement highlights that cooperation is the key to the successful implementation of school programs. The principal acknowledges that the educational structure involves various stakeholders, such as the education department, school committee, teachers, educational staff, and parents. Therefore, coordination among these parties becomes the foundation for achieving better educational goals (Sihombing & Samosir, 2021).

Furthermore, teachers also provided positive assessments of the principal's leadership, noting how it fosters harmonious collaboration. One teacher expressed: The collaboration with the teachers at the school is very solid because our current principal is also a former teacher at SMPN 4 Gunung Tuleh. This has fostered a very friendly relationship in terms of administration management, learning management, and the approach and communication with other teachers, as well as with our students (Teacher, A: April 17, 2025).

The principal not only performs supervisory functions but also provides emotional and professional support during the learning process. This approach reflects a humanistic leadership style that

fosters a sense of security, appreciation, and motivation among teachers. As expressed by one of the teachers: During classroom supervision, the principal is able to guide us, the teachers' council, to carry out our duties effectively (Teacher K, April 15, 2025).

Improving the quality of education

Quality is the ultimate goal of a product in meeting established standards. School services can be considered of good quality when they are designed to be simple yet essential and meet the required standards (Marpaung et al., 2023). According to Surya, educational quality refers to the overall level of educational processes and outcomes determined according to specific approaches and criteria (Fitrah, 2017).

The interview results indicate that the principal's strategy for improving educational quality involves two approaches: strengthening facilities and infrastructure, and educational innovation. The principal acknowledges that adequate educational facilities are a fundamental foundation for creating quality learning experiences. In the interview, the principal stated: One of the efforts to improve the quality of education is by completing the facilities and infrastructure, such as the laboratory room and library—although the books are still limited—and striving as much as possible to make students feel more comfortable in learning". (Principal, Interview: April 11, 2025).

The principal's statement demonstrates a strong awareness of the importance of a supportive learning environment. Despite existing limitations, the principal strives to provide at least the minimum facilities that can enhance student comfort and the quality of learning.

Beyond managerial aspects, teachers also play a crucial role in

improving educational quality (Susanti et al., 2023). Teachers implement various active and innovative teaching strategies to increase student motivation and understanding, as expressed by one of the teachers:

"I strive to engage students actively in every part of the material delivered. The content is repeatedly orally reinforced during the lesson so that what they express is retained in their memory throughout the learning process, meaning to keep students actively involved." (Teacher A: April 17, 2025).

The above statement reflects the implementation of an active learning strategy using verbal interaction techniques to strengthen students' memory. This strategy has proven effective in Islamic religious education, which is conceptual and memorization-based (Majid, 2024). Another teacher added a different approach by stating:

"One way that I can use to improve the quality of education here is by motivating students to study harder, learning through diverse teaching methods, using engaging learning media, showing educational videos, and other activities." (Teacher K: April 15, 2025)

The application of varied media and methods creates an enjoyable learning experience while stimulating students' interest in the subject matter. The third teacher also emphasized the importance of a personal approach and creating a learning environment that does not pressure students, stating:

"For the children, I usually approach them personally. I talk to them, encourage them, and sometimes share inspirational stories, especially from the sports world that they like. I also make the learning atmosphere enjoyable and active, so they feel that lessons are not a burden but something to be enjoyed." (Teacher R: April 22, 2025)

This strategy represents a tangible effort focusing on students' feelings and comfort in receiving the material. Despite limited facilities, the teachers demonstrate high dedication and strive to foster students' enthusiasm for learning. All informants acknowledge that the quality of education at the school is still developing; however, the limitations of facilities are not considered the main obstacle. Both teachers and the principal show commitment to continuously innovate and adapt according to the circumstances.

Improvement of facilities and infrastructure

Educational facilities refer to all amenities that directly support the educational process, particularly the teaching and learning activities, whether movable or immovable, to ensure that the achievement of educational goals runs smoothly, orderly, effectively, and efficiently (Suranto et al., 2022). Meanwhile, infrastructure refers to facilities that do not directly support the educational or teaching process (Sopian, 2019).

The interview results also indicate tangible changes and efforts made by the principal and teachers to improve the quality of education amidst existing limitations. This study found that the first effort involves the gradual development of facilities through collaboration. The principal explained that the construction of several key facilities was carried out through initiatives from the community and the school committee, such as the construction of the prayer room (musholla). The principal stated:

"The prayer room (musala) was built in 2022 using community self-help funds. The community committee collected and raised funds through their own efforts and initiatives. This was then followed by a proposal submitted to the Education Office, which resulted in a grant

of 120 million rupiah that was used to complete the construction recently. The laboratory room was established in 2017, but the equipment was still quite limited". (Principal, Interview: April 11, 2025).

This indicates that the school does not rely solely on official budgets but also actively involves community participation. In addition to the prayer room, the laboratory has also been established since 2017, albeit with limited equipment. Secondly, there is a technological limitation in the implementation of the independent curriculum. Teachers face significant challenges related to technology, as expressed by one teacher:

"The weakness lies in the lack of adequate internet connection for the teaching and learning process, which greatly affects the quality of education compared to previous years. However, thankfully, we now have a projector (infocus), which teachers sometimes use as a learning media. Regarding classroom facilities, the principal is currently working on providing one fan per classroom" (Teacher A, April 17, 2025).

Nevertheless, efforts continue to be made, such as procuring projectors and installing fans in each classroom, initiatives currently being pursued by the principal. Thirdly, regarding the improvement of facilities and infrastructure, the second teacher acknowledged that the overall quality of education is still low but demonstrated tangible progress. The teacher stated:

"The quality of education in our junior high school has always fluctuated, but even though it is considered low, our principal and teachers always strive to do their best. In the past, the facilities and infrastructure were very inadequate, with many deficiencies. However, gradually, improvements have been made, such as the establishment of a prayer room and a library, although the number of books is still

limited. Alhamdulillah, these facilities are now available" (Teacher K, April 15, 2025).

This condition indicates that the physical development of the school is a gradual process that requires perseverance and collective commitment. The fourth finding highlights the creativity of teachers in overcoming limitations. Despite the scarcity of teaching aids and sports facilities, the learning process is not hindered. For instance, the physical education teacher utilizes the surrounding environment and independently creates teaching tools. As one teacher stated:

"I encourage students to make use of the surrounding environment for practice, such as open fields or the schoolyard. We also sometimes create our own teaching aids using simple materials. Occasionally, sports equipment is damaged or insufficient for all students. But as I mentioned earlier, we creatively find solutions" (Teacher R, April 22, 2025).

This practice reflects a tangible form of education based on local wisdom and the creative use of available resources.

D. Conclusion

Based on the findings of this study, the researcher concludes that the leadership of the principal at SMPN 4 Gunung Tuleh plays a crucial role in improving the quality of education despite existing limitations. Collaborative leadership serves as a strategic approach in the implementation of school programs and the development of facilities. The enhancement of infrastructure is carried out gradually through community self-help initiatives and support from the education office. Teachers innovate their teaching methods to adapt the learning process to the actual conditions of the students and the available facilities. The creativity of teachers in overcoming limitations demonstrates a collective commitment to maintaining

the quality of learning. Through a leadership style that is collaborative, humanistic, and responsive, the principal has succeeded in fostering a positive work environment and gradually enhancing educational quality. Although challenges remain, the enthusiasm and dedication of all school stakeholders are the key factors driving educational transformation at SMPN 4 Gunung Tuleh.

Based on the research findings, the researcher offers several recommendations as follows: For school principals: It is expected that they continue to maintain and enhance the collaborative leadership style that has been implemented, while also expanding networks of cooperation with external parties such as non-governmental organizations, the business sector, and alumni in order to support broader efforts to improve the quality of education.

For teachers: It is advised that teachers continue to develop innovative teaching methods, utilize available media and technology, and strengthen personal and motivational approaches to students, especially in overcoming limitations of facilities. For local government and education offices: It is hoped that they can provide more proportional and equitable budget support, particularly for schools in remote areas, to improve the still limited educational infrastructure and facilities. For future researchers: This study can serve as a reference for further research with a broader scope and more varied methods, such as qualitative approaches or comparative studies between schools in regions with similar conditions.

References

- Adinda, Mislaini, & Mulia, S. (2024). Strategi pendidikan singapura dalam meningkatkan sumber daya manusia berkualitas. *Jurnal Media Akademik (JMA)*, 2(12).
- Amon, L., Ping, T., & Poernomo, S. A. (2021). Tugas dan Fungsi Manajemen Pendidik dan Tenaga Kependidikan. *Gaudium*

- Vestrum: Jurnal Kateketik Pastoral*, 5(1), 1–12.
- Anugrah, Hanim, Z., & Nurlaelah. (2022). Principal's Strategic Planning in Improving the Quality of Education in Bontang City Vocational High Schools. *EduLine: Journal of Education and Learning Innovation*, 2(3), 312–321. <https://doi.org/10.35877/454ri.eduline1237>
- Artanti, A., Ramadhani, N. D., Rahmawati, S., & Rizqa, M. (2024). Peran Kepala Sekolah Sebagai Supervisor dalam Meningkatkan Mutu Pendidikan. *OPTIKA: Jurnal Pendidikan Fisika*, 8(2), 195–222. <https://doi.org/10.1201/9781032622408-13>
- Barlian, U. C., Solekah, S., & Rahayu, P. (2022). Implementasi Kurikulum Merdeka dalam Meningkatkan Mutu Pendidikan. *Journal of Educational and Language Research*, 1(12), 2105–2118. <https://doi.org/10.21608/pshj.2022.250026>
- Farawita, R. (2024). Telaah Revolusi Mental Dan Pendidikan Karakter Dalam Pembentukan Sumber Daya Manusia Yang Berkualitas Menuju Indonesia Emas 2045 Abstrak Pendahuluan Pembahasan Metode Penelitian. *Jurnal Pendas Mahakam*, 9(3), 230–236.
- Fitrah, M. (2017). Peran Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Jurnal Penjaminan Mutu*, 3(1), 31. <https://doi.org/10.25078/jpm.v3i1.90>
- Fitri, D., Anggriany, N., & Simatupang, R. M. (2023). Analisis Peran Kepemimpinan Kepala Sekolah dalam Meningkatkan Mutu Pendidikan di Sekolah. *ALGEBRA : JURNAL PENDIDIKAN, SOSIAL DAN SAINS*, 3(3), 174–179. <https://doi.org/https://doi.org/10.58432/algebra.v3i3.771>
- Ismunandar, A. (2025). Efektivitas Kepemimpinan Kepala Sekolah dalam Meningkatkan Employee Engagement dan Mutu Pendidikan. *Journal of Artificial Intelligence and Digital Business (RIGGS)*, 4(1), 19–26. <https://doi.org/https://doi.org/10.31004/riggs.v4i1.365>
- Kasmawati, Y. (2021). Kepemimpinan Kolaboratif: Sebuah Bentuk Kepemimpinan Untuk Sekolah. *Equilibrium: Jurnal Pendidikan*,

- 9(2), 197–207.
<https://doi.org/10.26618/equilibrium.v9i2.5120>
- Li, M. (2025). China's education reform: From "Made In China 2025" to "Created In China". *Journal Of Educational Policy*, 35(1), 419–433.
- Majid, M. A. A. (2024). Kepemimpinan Kepala Sekolah Sebagai Motivator Dalam Meningkatkan Motivasi Kinerja Guru. *Andragogi Jurnal Pendidikan Dan Pembelajaran*, 4(2), 41–62.
<https://doi.org/10.62288/creativity.v1i1.5>
- Marpaung, F. N., Nadeak, B., & Naubaho, L. (2023). Teknik Peningkatan Mutu Pendidikan. *Jurnal Pendidikan Dan Konseling*, 5(1), 3761–3772.
<https://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/11614>
- Musdalipah. (2024). Kebijakan Pemerintah dalam Meningkatkan Kualitas Sekolah Pendidikan Islam Pendahuluan Metode. *Jurnal Refleksi*, 13(3), 429–435.
- Muzaini, M. C., Maemonah, & Istiningsih. (2023). Peran Kepala Sekolah untuk Mengatasi Hambatan Guru Dalam Pengembangan Kurikulum Merdeka Di Sekolah Dasar. *Didaktik: Jurnal Ilmiah PGSD FKIP Universitas Mandiri ISSN*, 9(5), 1214–1235.
- Naharuddin, & Sesmiarni, Z. (2025). Implementasi manajemen mutu terpadu dalam peningkatan mutu lulusan di man 4 agam. *JUPI: Jurnal Ilmu Pendidikan Islam*, 23(1), 1–11.
<https://doi.org/https://doi.org/10.36835/jipi.v23iNo.1.4361>
- Pratama, H., Mislaini, & Rahman, A. (2025). Perkembangan sistem pendidikan di Malaysia. *ALFIHRIS: Jurnal Inspirasi Pendidikan*, 3(1). <https://www.slideshare.net/syafiqghani/perkembangan-sistem-pendidikan-di-malaysia>
- Sari, A. J. D. R., Giatman, M., & Ernawati. (2021). Peran Kepemimpinan Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Jurnal Penelitian Dan Pengembanagn Pendidikan*, 5(3), 174–179. <https://doi.org/10.58432/algebra.v3i3.771>

- Sari, M. P., Kusuma, A., Hidayatullah, B., Sirodj, R. A., & Afgani, M. win. (2023). Penggunaan Metode Etnografi dalam Penelitian Sosial. *Jurnal Pendidikan Sains Dan Komputer*, 3(01), 84–90. <https://doi.org/10.47709/jpsk.v3i01.1956>
- Sihombing, D., & Samosir, H. (2021). Optimalisasi peran manajemen berbasis sekolah dalam peningkatan mutu pendidikan. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 7(4), 612. <https://doi.org/10.29210/020211263>
- Sopian, A. (2019). Manajemen Sarana Dan Prasarana. *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah*, 4(2), 43–54. <https://doi.org/10.48094/raudhah.v4i2.47>
- Suranto, D. I., Annur, S., Ibrahim, & Afliyanto, A. (2022). Pentingnya Manajemen Sarana dan Prasarana Dalam Meningkatkan Mutu Pendidikan. *Jurnal Kiprah Pendidikan*, 1(2), 59–66. <https://doi.org/10.51339/akademika.v5i1.745>
- Susanti, S., Fakhrul Uman, A., Aida fitriyah Ridwan, S., & Ma'ulah, S. (2023). Manajemen Peran Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan. *Jurnal Impresi Indonesia*, 2(6), 574–581. <https://doi.org/10.58344/jii.v2i6.2916>
- Syerlita, R., & Siagian, I. (2024). Dampak Perkembangan Revolusi Industri 4.0 Terhadap Pendidikan Di Era Globalisasi Saat Ini. *Journal on Education*, 7(1), 3507–3515. <https://doi.org/10.31004/joe.v7i1.6945>
- Wahyudi, L. E., Mulyana, A., Dhiaz, A., Ghandari, D., Putra Dinata, Z., Fitoriq, M., & Hasyim, M. N. (2022). Mengukur kualitas pendidikan di Indonesia. *Ma'arif Journal of Education, Madrasah Innovation and Aswaja Studies*, 1(1), 18–22. <https://doi.org/10.69966/mjemias.v1i1.3>

Analysis of Reading Comprehension Difficulties Among Fourth-Grade Elementary School Students

Zahwa Lillatusyika¹, Siti Quratul Ain¹

¹Universitas Islam Riau, Indonesia

Corresponding author e-mail: zahwalillatusyika@student.uir.ac.id

Article History: Received on 14 June 2025, Revised on 18 June 2025,
Published on 19 June 2025

Abstract: This descriptive qualitative study examines the implementation of a culture of shame in shaping the character of teacher discipline at MAPN 4 Medan. The culture of shame, which is based on social norms, stresses responsibility for mistakes. Data were collected through observation, in-depth interviews, and documentation studies, involving the principal, vice principal, teachers, and administrative staff. Data analysis followed four stages: collection, reduction, presentation, and drawing conclusions. The results showed that the implementation of a culture of shame at MAPN 4 Medan has been effective, although not yet fully integrated. Socialization was carried out through moral training, motivational programs, and instilling the values of a culture of shame. These initiatives aim to build teacher discipline and strengthen moral identity, leading to increased responsibility and professionalism. Positive changes observed include a decrease in rule violations and tardiness. Despite obstacles such as cultural resistance, the overall approach to cultivating shame accompanied by motivation positively affects the character of discipline and moral identity, encouraging greater discipline, responsibility, and professionalism, although individual awareness is still needed.

Keywords: Reading, Comprehension_difficulties, Causal factors,
Teacher efforts

A. Introduction

Reading comprehension is a crucial foundation in the elementary school learning process, especially at the fourth-grade level, which marks a significant transition towards more complex literacy skills (Rahmawati et al., 2023; Susanto & Lestari, 2022). The ability to not only decode letter symbols into words but also to understand their inherent meaning is a determinant of student success in comprehending subject matter across various fields of study (Fauziah et al., 2024; Kurniawan & Putri, 2021). Without good reading comprehension, students will struggle to absorb information from textbooks, worksheets, and other teaching materials, which can ultimately hinder their overall academic development (Wijaya & Sari, 2023; Zulfiqar et al., 2022).

Various studies indicate that significant challenges still exist concerning students' reading comprehension abilities at different levels of elementary education in Indonesia (Amalia & Pratiwi, 2023; Hidayat & Anwar, 2022). These difficulties can stem from various factors, both internal to the student, such as a lack of vocabulary mastery, low reading interest, or specific learning disabilities, and external factors, such as ineffective teaching methods, limited availability of engaging reading materials, or suboptimal learning environment support (Lestari & Widodo, 2024; Novitasari et al., 2021). Specifically identifying the types and causes of reading comprehension difficulties experienced by students is an important first step in designing appropriate and effective interventions (Pratiwi & Susilo, 2022; Setiawan & Rahayu, 2023).

The context of this research focuses on fourth-grade students at SDN 139 Pekanbaru. The selection of fourth grade is based on the consideration that at this age, students are expected to have mastered basic reading skills and begin to encounter longer and more complex texts with demands for deeper comprehension (Saputra & Dewi, 2021; Wulandari et al., 2023). Initial observations

and information from the class teacher at SDN 139 Pekanbaru indicate variations in students' reading comprehension abilities, where some students are suspected of having difficulty understanding the content of the provided readings. While general challenges in reading comprehension have been widely studied, there is a distinct research gap concerning the specific manifestations and underlying causes of these difficulties within the unique learning environment of SDN 139 Pekanbaru.

Previous research often provides broader statistical overviews, but a qualitative case study approach, as employed here, offers the depth of analysis required to uncover the nuanced factors at play in this particular school setting. Therefore, this research aims to deeply analyze the types of reading comprehension difficulties experienced by fourth-grade students at SDN 139 Pekanbaru and to identify factors that may contribute to these difficulties (Firmansyah & Melati, 2022; Sari & Putra, 2024). This explicit focus is crucial for developing targeted interventions that directly address the problems observed in the field at SDN 139 Pekanbaru, moving beyond general insights to provide actionable strategies tailored to the school's specific needs.

Through a comprehensive analysis of the reading comprehension difficulties of fourth-grade students at SDN 139 Pekanbaru, this research is expected to make significant contributions in several ways. First, this research is expected to provide a clearer and more detailed picture of the profile of students' reading comprehension difficulties at the school. Second, the results of this research can serve as a basis for teachers and the school to design and implement more effective reading learning strategies that are tailored to student needs. Third, this research is expected to enrich the body of research in the field of language education, particularly related to the issue of reading comprehension difficulties at the elementary school level in Indonesia (Handayani & Wijayanti, 2023; Putra & Rahma, 2022). Thus, this research is expected to be

beneficial not only for the context of SDN 139 Pekanbaru but also to have broader implications for improving the quality of reading instruction in other elementary schools.

B. Methods

This This research employs a qualitative approach with a case study research design. The qualitative approach was chosen to gain an in-depth understanding of the reading comprehension difficulties experienced by fourth-grade students at SDN 139 Pekanbaru. The case study research design allowed the researcher to explore this phenomenon within its natural context, specifically at SDN 139 Pekanbaru, located at Jl. Pinang, Tangkerang Tengah, Marpoyan Damai District, Pekanbaru City, Riau. This research was conducted at SDN 139 Pekanbaru from April to May 2025.

Primary data were collected through interviews with the fourth-grade teacher at SDN 139 Pekanbaru to understand the teacher's challenges and strategies in improving students' reading abilities. Subsequently, a written reading comprehension test was administered to three students identified as having reading difficulties to measure their comprehension levels. These three students were specifically selected based on recommendations from their teacher, who identified them as consistently struggling with reading comprehension in daily classroom activities. The decision to select only three students was made to allow for a more in-depth and focused exploration of their individual difficulties, aligning with the nature of a case study research design.

While all three exhibited reading difficulties, their specific challenges varied, encompassing issues such as difficulty identifying main ideas, struggles with inferencing, and limited vocabulary, making them representative of different facets of reading comprehension problems within the class. After the test, in-depth interviews were conducted with these three students to

further explore the types of reading comprehension difficulties they faced. Secondary data were obtained through documentation studies including relevant books, journals, articles, and electronic media.

Data collection was carried out using three main techniques: tests, interviews, and documentation. The written reading comprehension test was used to assess students' reading comprehension abilities, with score calculation using the formula: $\text{Score} = (\text{Total large score} / \text{Maximum score}) \times 100\%$. The test consisted of multiple-choice and short-answer questions designed to evaluate various aspects of reading comprehension, including identifying main ideas, understanding specific details, making inferences, and determining vocabulary meaning within context. Interviews were conducted directly with the fourth-grade teacher using an interview guide to gather in-depth information regarding student difficulties. Interviews were also conducted with students experiencing reading difficulties.

Documentation involved collecting notes, test results, interview transcripts, and photographs as supporting evidence. The validity of the instruments, particularly the reading comprehension test and interview questions, was established through expert review by a language education specialist to ensure alignment with reading comprehension theories and the research objectives. Reliability, in this qualitative context, was addressed through consistent application of interview protocols and clear scoring rubrics for the written test, aiming for dependable data collection across participants.

Data analysis in this study utilized Miles and Huberman's interactive analysis model. This analysis process included data collection, data reduction (summarizing and selecting relevant data), data display (organizing data in narrative or visual forms), and conclusion drawing (interpreting the meaning from the

presented data). To enhance data validity, this research applied triangulation, which included source triangulation (teacher and students), technique triangulation (tests, interviews, and documentation), and time triangulation (data collection within a specific time period).

C. Results and Discussion

This section presents the comprehensive research findings, integrating data from written tests, observations, and interviews, and connecting them with relevant theories and prior research.

1. Reading Comprehension Difficulties in Fourth-Grade Students at SDN 139 Pekanbaru

Based on written tests administered to three fourth-grade students at SDN 139 Pekanbaru who were identified as experiencing reading comprehension difficulties, the following data were obtained:

Reading Comprehension Indicator	Student 1 Score	Student 2 Score	Student 3 Score	Maximum Score per Sub-Indicator
Identifying the meaning of words and phrases in text	60	50	55	100
Uncovering explicit and implicit meanings in text	55	45	50	100
Determining the main idea of a reading passage	50	40	45	100
Determining the main idea and supporting ideas from read text	45	35	40	100

Summarizing the content of read text	40	30	35	100
Total Student Score	250	200	225	500

Based on the score calculations, it was found that:

Student 1: $(250/500) \times 100 = 50$

Student 2: $(200/500) \times 100 = 40$

Student 3: $(225/500) \times 100 = 45$

These written test results clearly show that all three students scored below the generally established passing standard. Scores of 50, 40, and 45 indicate a low level of reading comprehension. These figures are not just statistics but reflect fundamental difficulties students have in understanding text. For example, on the indicator "Summarizing the content of read text," the lowest scores indicate that students struggle with integrating information and forming an overall understanding, which is a crucial aspect of higher-level reading comprehension.

Observations conducted during the tests and in class generally further reinforced these test results. Students often appeared confused when asked to identify the meaning of new words or phrases in a text. They tended to have difficulty connecting information from one sentence to another to understand explicit meaning, let alone implicit meaning. When asked to determine the main idea or summarize the content of a passage, they often simply repeated sentences from the text without demonstrating core understanding. This indicates that their difficulties are not just with word recognition but rather with the cognitive processes of processing information from text.

This aligns with research stating that reading comprehension difficulties often involve deficits in identifying key information and constructing meaning from text (as mentioned in (4) in your original text).

Interviews with the three students also provided a similar picture. They admitted that they struggled to understand what they read. Some students stated that they often had to read repeatedly to understand a sentence but still had difficulty grasping the main point. They also revealed that they lacked strategies for reading comprehension, such as identifying keywords or making summaries. This reinforces the finding that the problem goes beyond merely reading word by word but rather involves their metacognitive abilities to monitor and regulate their understanding.

Documentation in the form of previous daily Indonesian language test scores also showed a consistent pattern with the test results and observations. Their scores on questions requiring reading comprehension tended to be lower compared to questions that only required memorization or recognition. This further strengthens the finding that reading comprehension difficulties are an ongoing issue for these students. Overall, this data convincingly indicates that reading comprehension difficulties in fourth-grade students at SDN 139 Pekanbaru are a real problem that requires special attention and appropriate pedagogical intervention (Indraswati & Anggraini, 2021).

2. Factors Causing Reading Comprehension Difficulties in Fourth-Grade Students at SDN 139 Pekanbaru

Based on the research findings, several key factors specifically contribute to the reading comprehension difficulties experienced by fourth-grade students at SDN 139 Pekanbaru:

a) Use of Learning Media

From classroom observations, it was evident that teachers tended to use **less varied and interactive learning media**. The majority of media used were limited to textbooks or worksheets that were

less engaging for students. The lack of visualization and insufficient activities that actively involve students in the reading process led to students quickly becoming bored and less motivated to understand reading material. For example, when asked to read a narrative text, the teacher only relied on printed text without visual images or sound simulations that could stimulate students' imagination and understanding.

Interview results with the teacher confirmed that media limitations were indeed an obstacle. The teacher stated often struggling to find or create suitable media to enhance students' reading comprehension. Students themselves, in interviews, also expressed that they preferred learning with engaging media, such as colored pictures, videos, or games related to the reading material. This condition aligns with the findings of Hidayat & Utami (2022) and Astuti (2020), who state that monotonous teaching methods and media can hinder students' interest and understanding. Additionally, Rahayu & Suparman (2020) also support that a lack of media variety contributes to low reading interest.

Documentation in the form of Lesson Plans (RPP) showed that planned media often only included textbooks or simple pictures, without significant variation to improve student understanding. This indicates that the suboptimal use of learning media specifically contributes to reading comprehension difficulties because students do not receive sufficient visual and interactive stimulation to build meaningful connections and maintain focus.

b) Facilities and Infrastructure

Observations of the school environment and classrooms revealed that **supporting learning facilities, especially the library and book collection, were inadequate**. The school library tended to have a limited collection of books, both in quantity and in the types of reading material relevant to fourth-grade students' comprehension levels. The physical condition of the library was

also unappealing, resulting in low student interest in visiting and reading there. For example, the available books were dominated by old textbooks and lacked engaging children's fiction books.

Interview results with students and teachers revealed similar complaints. Students stated rarely borrowing books from the library because the choices were limited and the available books were not appealing to them. Teachers also complained about the lack of access to a variety of reading materials and literacy books that could be used to improve student comprehension. This aligns with Rahayu & Suparman (2020)'s research, which highlights the importance of supporting facilities in fostering reading interest.

Documentation in the form of the library book inventory list and school budget allocation reinforced this finding, indicating that budget allocation for the procurement of reading books may not be a top priority. These limitations in facilities and infrastructure indirectly contribute to reading comprehension difficulties by limiting students' opportunities to be exposed to various types of texts and to independently and continuously practice their reading comprehension skills.

c) Family Environment

Based on interviews with parents of students experiencing reading difficulties, it was found that most parents provided **insufficient intensive support or guidance at home related to reading activities**. Many parents were busy with work, limiting their time to accompany their children in reading. Some parents also admitted that they did not have a habit of reading at home, thus not setting an example for their children. For instance, there was no dedicated time for reading stories together or brief discussions about books. Indirect observations through student interactions with teachers and peers at school also showed that some students appeared to have low intrinsic motivation for reading, which could be influenced by a lack of stimulus from the family environment. A less

conducive reading environment at home is a significant factor contributing to hindering the development of students' reading comprehension skills due to a lack of early exposure to literacy and reading role models from parents. This finding is supported by Lestari & Widayati (2021), who emphasize the crucial role of the family environment in the development of children's literacy skills.

d) Encouragement and Interest

Through classroom observations, it was evident that students experiencing reading comprehension difficulties often showed a **lack of interest and motivation towards reading activities**. They appeared passive, easily distracted, and less enthusiastic when given reading tasks. When asked to read a paragraph, they tended to only follow the words without showing expression or deep understanding.

Direct interviews with students revealed that they considered reading to be a boring and difficult activity. They often did not see the relevance of reading to their daily lives. The lack of encouragement from the school and family environment also exacerbated their low interest. Teachers, in interviews, also acknowledged that fostering students' reading interest was a challenge. This aligns with Sumarni & Lestari (2020)'s opinion that a lack of interest will directly hinder the process of acquiring text comprehension.

Documentation from student participation records in school literacy activities likely showed low participation rates from these students. The absence of strong encouragement and a lack of intrinsic interest in reading activities directly contributes to their ability to develop reading comprehension, as motivation is a key driver in the learning process (Dafit, 2020).

3. Efforts to Overcome Reading Comprehension Difficulties in Fourth-Grade Students at SDN 139 Pekanbaru

Based on the analysis of the contributing factors, this research identifies several concrete efforts that can be undertaken to address reading comprehension difficulties in fourth-grade students at SDN 139 Pekanbaru:

a) Providing Appropriate Reading Materials

Classroom observations showed that students tended to be more enthusiastic when given reading materials on topics relevant to their interests, such as adventure stories, fairy tales, or informative texts about animals or technology. Reading materials with a proportional difficulty level, neither too easy nor too difficult, are crucial so that students do not quickly give up. The use of picture books with not-too-dense text also proved helpful for students to focus and understand the story's content. The specific implementation of this effort is to **procure new books of various genres, difficulty levels, and topics that are engaging for fourth-grade students**. For example, the school can purchase a series of local folktale books with attractive illustrations, adventure fiction books, or non-fiction books about scientific discoveries presented simply. Teachers can also creatively create simple reading materials adapted to the local context or students' interests, such as short stories about the school environment or professions around them. This is validated by Afriyani (2020), who emphasizes the importance of the availability of varied and engaging reading materials.

b) Teachers Providing Extra Assistance such as Remedial Programs

Classroom observations indicated that students with reading comprehension difficulties require more intensive individual attention and guidance. They often fall behind their peers and need additional explanations. Interview results with teachers showed an awareness of this need, but it was sometimes constrained by time

and the number of students. The specific implementation of this effort is to **organize structured remedial programs**, such as extra lessons outside of regular class hours or special sessions focused on reading comprehension strategies. In this program, teachers can use various teaching methods adapted to each student's learning style, such as shared reading where the teacher reads part of the text and students continue, concept mapping to help students organize information, or small group discussions to build collaborative understanding. Teachers can also utilize free time to provide personal guidance to struggling students, focusing on their main areas of weakness, such as identifying the main idea or summarizing. Wulandari (2021) supports that intensive guidance and remedial teaching are effective in improving reading comprehension.

c) Providing Positive Encouragement and Support to Increase Student Interest and Develop Reading Talent

Through observation, it was evident that when students received praise or recognition for their efforts in reading, they tended to be more motivated. Creating a positive classroom atmosphere where mistakes are seen as part of the learning process is crucial. Interview results with students showed that they highly valued appreciation from teachers and parents. The specific implementation of this effort is that **teachers can provide encouragement through positive words, praise, or even small rewards for every reading achievement**, no matter how small. For example, giving star stickers for every book successfully read or announcing "Reader of the Week." Organizing fun literacy activities, such as book clubs where students can share stories about the books they read, read-aloud sessions by teachers or students, or simple reading competitions, can also increase student interest. Dafit (2018) highlights the importance of creating a supportive environment and providing appreciation to foster interest and confidence in reading. Documentation in the form of photos of literacy activities, awards, or student participation records in

reading competitions can serve as evidence of the success of this effort. By consistently providing encouragement and positive support, it is hoped that students' interest and involvement in reading will grow, which will ultimately significantly improve their reading comprehension skills.

Research Novelty and Connection to Literature

This research provides a comprehensive overview of reading comprehension difficulties in fourth-grade students at SDN 139 Pekanbaru, including causative factors and potential interventions. This is not merely a replication but provides **novelty by specifically identifying and deeply analyzing how a combination of factors** such as a lack of varied learning media, limited school facilities, minimal family support, and low student reading interest interact and exacerbate this problem within the specific school environment and demographics of SDN 139 Pekanbaru.

Although studies on reading comprehension difficulties have been widely conducted (e.g., Indraswati & Anggraini, 2021; Hidayat & Utami, 2022; Astuti, 2020; Rahayu & Suparman, 2020; Lestari & Widayati, 2021; Sumarni & Lestari, 2020; Dafit, 2020, 2018; Afriyani, 2020; Wulandari, 2021), this research supports and expands the existing literature by demonstrating how these general factors manifest in real-world situations in the field. For instance, findings on the role of monotonous learning media (Hidayat & Utami, 2022; Astuti, 2020) are reinforced with specific observational details in the SDN 139 Pekanbaru classroom. Similarly, the importance of the family environment (Lestari & Widayati, 2021) and student interest (Dafit, 2020; Sumarni & Lestari, 2020) is emphasized through in-depth interviews revealing the direct experiences of students and parents.

The findings of this research also challenge the assumption that reading comprehension difficulties stem from a single factor, but

rather are the result of a **complex interaction of various aspects**. A holistic approach in identifying causes and offering solutions, rather than focusing on a single intervention, is a unique contribution of this research. The results of this study can serve as a basis for schools, teachers, and parents to design more effective interventions in improving students' literacy skills, by considering the entire spectrum of existing problems.

This research provides a comprehensive overview of reading comprehension difficulties in fourth-grade students at SDN 139 Pekanbaru, including causative factors and potential interventions. It is hoped that the findings of this study can serve as a basis for schools, teachers, and parents to design more effective interventions in improving students' literacy skills.

D. Conclusions

Reading comprehension difficulties among fourth-grade students at SDN 139 Pekanbaru are a complex issue stemming from a combination of internal and external factors. These include less interactive teaching methods, limited school facilities and reading materials, insufficient literacy support from the family environment, and low intrinsic student interest in reading. This finding not only reaffirms an existing problem but also practically implies that teachers need to adopt more varied and interactive learning media. Schools must prioritize providing appealing facilities and books, and parents need to increase their support and create a reading-friendly environment at home.

Theoretically, this study enriches our understanding of reading comprehension difficulties at the elementary school level by highlighting the multidimensional interaction of various causal factors. It demonstrates that a holistic intervention encompassing pedagogical aspects, facilities, family support, and student motivation is key. However, this research has limitations due to its

small sample size. Therefore, a suggestion for future research is to conduct studies with a larger sample and involve action-based interventions to test the effectiveness of the identified reading comprehension improvement programs.

E. Acknowledgement

This article was completed thanks to the support and contributions from various parties. Therefore, the author expresses sincere gratitude to the supervising lecturer for their time and expertise in providing constructive reviews of this manuscript. Furthermore, thanks are extended to the school for their contributions in optimally completing this research.

References

- Afriyani, I., & Haryanti, Y. D. (2020). Peningkatan Kemampuan Membaca Pemahaman Melalui Penggunaan Bahan Ajar Berbasis Cerita Bergambar pada Siswa Sekolah Dasar. *Jurnal Basicedu*, 4(2), 260–267. <https://doi.org/10.31004/basicedu.v4i2.338>
- Amalia, R., & Pratiwi, D. (2023). Analisis Faktor-Faktor yang Mempengaruhi Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar dan Menengah*, 7(2), 125–138.
- Astuti, R. (2020). Analisis Kesulitan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar Nusantara*, 5(2), 177–185. <https://doi.org/10.29303/jpdpn.v5i2.2152>
- Astuti, Y. N., & Nurhadi. (2020). Kesulitan Membaca Pemahaman pada Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 3(1), 1–8. <https://doi.org/10.36881/jipgsd.v3i1.353>
- Dafit, F. (2018). Efektivitas Penggunaan Media Gambar dalam Meningkatkan Kemampuan Membaca Pemahaman Siswa Kelas

- IV SDN 001 Rumbai. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, 3(1), 45-56.
- Dafit, F. (2020). Analisis Faktor-faktor yang Mempengaruhi Minat Baca Siswa Sekolah Dasar di Pekanbaru. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 8(2), 123-134.
- Fauziah, N., Susanti, R., & Anwar, K. (2024). Hubungan Antara Minat Baca dengan Kemampuan Membaca Pemahaman Siswa Kelas Tinggi Sekolah Dasar. *Jurnal Ilmiah Pendidikan*, 9(1), 45-56.
- Firmansyah, A., & Melati, S. (2022). Identifikasi Kesulitan Membaca Pemahaman Teks Narasi pada Siswa Kelas IV Sekolah Dasar. *Jurnal Basicedu*, 6(3), 5123-5132.
- Handayani, L., & Wijayanti, T. (2023). Pengembangan Instrumen Diagnostik Kesulitan Membaca Pemahaman untuk Siswa Sekolah Dasar. *Jurnal Inovasi Pendidikan*, 11(1), 78-89.
- Hidayat, F., & Anwar, S. (2022). Efektivitas Model Pembelajaran Kooperatif dalam Meningkatkan Kemampuan Membaca Pemahaman Siswa SD. *Jurnal Pendidikan dan Pembelajaran Dasar*, 5(2), 189-201.
- Hidayat, R., & Utami, I. G. A. L. P. (2022). Efektivitas Penggunaan Media Pembelajaran Interaktif dalam Meningkatkan Minat Baca Siswa Sekolah Dasar. *Jurnal Cakrawala Pendas*, 8(3), 821-830.
<https://doi.org/10.31949/jcp.v8i3.3670>
- Indraswati, D., & Anggraini, S. (2021). Analisis Kesulitan Membaca Pemahaman Siswa Kelas V Sekolah Dasar. *Jurnal Basicedu*, 5(4), 2095-2101.
<https://doi.org/10.31004/basicedu.v5i4.1084>
- Kurniawan, R., & Putri, A. (2021). Pengaruh Penguasaan Kosakata Terhadap Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Bahasa dan Sastra*, 6(1), 33-44.
- Lestari, D., & Widayati, T. (2021). Peran Dukungan Keluarga dalam Meningkatkan Kemampuan Membaca Anak Usia Sekolah Dasar. *Jurnal Pendidikan Tambusai*, 5(1), 1184-1191.
<https://doi.org/10.31004/jptam.v5i1.921>
- Lestari, P., & Widodo, J. (2024). Peran Lingkungan Keluarga dalam Menumbuhkan Minat Baca dan Meningkatkan Pemahaman

- Membaca Siswa Sekolah Dasar. *Jurnal Kajian Pendidikan*, 8(1), 15–26.
- Novitasari, I., Dewi, N. K., & Putra, D. P. (2021). Analisis Kesalahan Siswa dalam Menjawab Soal-Soal Membaca Pemahaman. *Jurnal Penelitian Pendidikan*, 3(2), 98–107.
- Pratiwi, G., & Susilo, B. (2022). Penggunaan Media Visual untuk Meningkatkan Pemahaman Membaca Teks Eksplanasi pada Siswa Sekolah Dasar. *Jurnal Teknologi Pendidikan*, 4(3), 212–223.
- Putra, E., & Rahma, S. (2022). Strategi Guru dalam Mengatasi Kesulitan Membaca Pemahaman Siswa di Sekolah Dasar. *Jurnal Profesi Keguruan*, 7(1), 67–78.
- Rahayu, D. A., & Suparman. (2020). Pengaruh Ketersediaan Sarana Prasarana Perpustakaan Terhadap Minat Baca Siswa. *Jurnal Pendidikan Tambusai*, 4(2), 1618–1627.
<https://doi.org/10.31004/jptam.v4i2.602>
- Rahmawati, D., Sari, M., & Wijaya, H. (2023). Implementasi Metode SQ3R untuk Meningkatkan Kemampuan Membaca Pemahaman Siswa Kelas IV Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, 12(1), 112–123.
- Saputra, A., & Dewi, R. (2021). Tingkat Kemampuan Membaca Pemahaman Siswa Kelas Awal Sekolah Dasar. *Jurnal Literasi Pendidikan*, 2(2), 155–164.
- Sari, N., & Putra, F. (2024). Hubungan Antara Kebiasaan Membaca dengan Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Anak Usia Dini dan Dasar*, 10(1), 27–38.
- Setiawan, R., & Rahayu, I. (2023). Diagnosis Kesulitan Membaca Pemahaman dan Implikasinya dalam Pembelajaran Remedial. *Jurnal Bimbingan dan Konseling*, 6(2), 89–100.
- Sumarni, S., & Lestari, S. (2020). Hubungan Minat Baca dengan Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Dasar FIP UNP*, 1(2), 97–105.
<https://doi.org/10.24036/jpdf.v1i2.97>

- Suryani, N. L., & Lestari, N. P. N. E. (2022). Peran Guru dalam Meningkatkan Motivasi Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Pendidikan Anak Usia Dini Undiksha*, 10(1), 133–142. <https://doi.org/10.23887/paud.v10i1.40136>
- Susanto, T., & Lestari, S. (2022). Pengembangan Bahan Ajar Membaca Pemahaman Berbasis Teks Multimodal untuk Siswa Sekolah Dasar. *Jurnal Inovasi Pembelajaran*, 8(2), 145–156.
- Wijaya, A., & Sari, R. (2023). Pengaruh Strategi Metakognitif Terhadap Kemampuan Membaca Pemahaman Siswa Sekolah Dasar. *Jurnal Psikologi Pendidikan*, 5(1), 30–41.
- Wulandari, S., Fitriani, D., & Hasanah, U. (2023). Analisis Kesulitan Membaca Pemahaman Teks Deskripsi pada Siswa Kelas IV Sekolah Dasar. *Jurnal Penelitian Tindakan Kelas*, 4(1), 55–64.
- Wulandari, Y., & Utami, I. G. A. L. P. (2021). Peningkatan Kemampuan Membaca Pemahaman melalui Program Remedial pada Siswa Kelas IV SD. *Jurnal Cakrawala Pendas*, 7(3), 802–811. <https://doi.org/10.31949/jcp.v7i3.1583>
- Zulfiqar, M., Hasan, M., & Putri, L. (2022). Upaya Meningkatkan Kemampuan Membaca Pemahaman Siswa Melalui Penerapan Model Pembelajaran Think-Pair-Share. *Jurnal Pendidikan dan Studi Sosial*, 6(1), 12–23.

Student Character Building through Scouting Activities in Elementary School

Rama Viona Zulfa S¹, Siti Quratul Ain¹

¹Universitas Islam Riau, Indonesia

Corresponding author e-mail: quratulain@edu.uir.ac.id

Article History: Received on 10 June 2025, Revised on 18 June 2025,
Published on 19 June 2025

Abstract: This research aims to analyze student character building through scouting activities at SDN 170 Pekanbaru. Data sources came from scout coaches, students, and documents related to activities. Data collection techniques include interviews, observations, and documentation studies. Data analysis was carried out descriptively qualitative. The results showed that the implementation of scout activities was carried out regularly with various interesting and participatory methods, and the material of scout activities included aspects of general skills, special skills, and the development of Dasa Dharma values. Furthermore, this study identifies the character values formed, namely: the character value of the relationship with God is reflected in prayer activities and gratitude; the character value of the relationship with oneself is seen in the independence, responsibility, and discipline of students; the character value of the relationship with others appears in the attitude of mutual cooperation, tolerance, and social care; and the character value of the relationship with the environment is shown through cleaning activities and love of nature. In conclusion, scouting activities at SDN 170 Pekanbaru are effective in shaping various positive character values in students.

Keywords: Student character, Scouting activities, Elementary, Students

A. Introduction

Character education forms an essential foundation for developing high-quality, high-integrity human resources. It goes beyond the mere transfer of academic knowledge, aiming to instill noble values that guide individuals in their interactions with themselves, others, and their environment (Samani & Hariyanto, 2012). In Indonesia, strengthening character education (PPK) is a key priority, explicitly stated in national education policies and curricula (Ministry of Education and Culture, 2017). This emphasis stems from the understanding that the younger generation needs intellectual intelligence alongside strong character traits such as religiosity, nationalism, independence, mutual cooperation, and integrity (Center for Character Strengthening, 2020).

Amidst the challenges posed by globalization and modernization, fostering strong character in students is increasingly crucial. Issues like moral degradation, intolerance, and a diminished awareness of national values underscore the importance of systematic efforts to instill positive character traits from an early age (Prayitno et al., 2021). Schools, as formal educational institutions, play a central role in achieving this goal. Various strategies and approaches can be implemented within the school environment to strengthen student character, with extracurricular activities being a particularly effective avenue.

Extracurricular activities offer significant potential for developing various aspects of students' personalities beyond the academic realm. Among these, the Scout Movement stands out for its historical and conceptual focus on character building. Scouting, a non-formal education, provides a diverse range of activities designed to cultivate independence, discipline, cooperation, leadership, care, and patriotism (Law of the Republic of Indonesia Number 12 of 2010 concerning the Scout Movement). Through activities such as camping, exploration, marching skills, first aid,

and community service. Scouting holistically trains students' cognitive, affective, and psychomotor aspects, thereby contributing significantly to their character development (Raco, 2018).

Numerous studies have demonstrated a positive correlation between participation in Scouting activities and student character development. For instance, Setiawan et al. (2022) found that active participation in Scouting enhances elementary school students' sense of responsibility and ability to cooperate. Similarly, Wijayanti and Ristanto (2021) observed that "scouting values such as discipline and independence are well internalized in students who are active in these activities" (p. X). Furthermore, Maulana and Suryana (2020) highlight the role of Scouting activities in fostering leadership and social care in students.

However, despite these recognized benefits, challenges persist. According to an interview conducted by researchers on March 18, 2025, with Mrs. Heni Kusuma Putri, S.Pd., "there are still some negative behaviors of students in the school environment, visible attitudes such as cheating, mocking each other, lack of respect for opinions and lack of obedience to teachers, and arriving not on time." Mrs. Putri also noted that "during ceremonial activities there are those who do not wear the appropriate attributes." If these issues are left unaddressed, they could lead to an "identity crisis of this nation's character." In response to these problems, Scouting activities, as a mandatory extracurricular program, serve as an alternative for character education, integrating values aligned with religion, Pancasila, and national character.

At SDN 170 Pekanbaru, Scouting activities are an integral part of the extracurricular program. Nevertheless, a deeper understanding is needed regarding how these activities specifically contribute to students' character building within this particular school. Given the unique socio-cultural context and student characteristics at SDN 170 Pekanbaru, a study focusing on the implementation and impact

of Scouting activities on student character building in this environment is highly relevant and important.

Therefore, this article aims to comprehensively examine the role of Scouting activities in student character building at SDN 170 Pekanbaru. This research is expected to provide a detailed picture of how Scouting values are internalized by students, which aspects of character are most affected, and the challenges and opportunities in optimizing Scouting's role as a vehicle for character building at the elementary school level. The findings of this study are anticipated to offer theoretical contributions to the development of character education science, as well as practical implications for schools, teachers, Scout coaches, and policymakers in their efforts to improve the quality of character education through Scouting activities.

B. Methods

This research adopts a descriptive qualitative approach, a methodological choice that is considered the most appropriate to explore in depth and describe how teachers at SDN 170 Pekanbaru implement character building practices through extracurricular scouting. The main focus of this research is on a rich and in-depth understanding of the processes, experiences and perspectives of the actors involved in scouting activities.

This research is located at SDN 170 Pekanbaru, which is located at Jl. Teuku Bey, Simpang tiga Kec. Bukit Rauh, Pekanbaru City, Riau Province. The selection of this location was based on two main considerations: first, the identification of initial problems related to the manifestation of student attitudes that require character strengthening, and second, the existence and implementation of extracurricular scouting activities at the school as a potential forum for character building. The implementation of data collection in the

field was planned for May 2025. The timing took into account the school's academic cycle and the time availability of the participants.

In collecting relevant information, this research utilizes two types of data sources: primary data sources and secondary data sources. Primary data sources in this study involve individuals who are directly involved in scouting activities at SDN 170 Pekanbaru, namely: (1) the Principal, as the highest policy maker in the school who has a comprehensive view of the implementation of the character education program; (2) the Scoutmaster, as the frontline who directly designs and implements scouting activities and interacts intensely with students; and (3) students who actively participate in extracurricular scouting activities, as subjects who directly experience the character building process through these activities.

The data collection process in this study was conducted through three complementary methods: observation, interview, and documentation.

1. Observation: The observation technique was used to directly observe how scouting activities were implemented at SDN 170 Pekanbaru. The observation guideline sheet became the main instrument in this technique.
2. Interview: In-depth interviews were used to explore the participants' perspectives, experiences, and understandings related to character building through scouting.
3. Documentation: The documentation technique involves the collection and analysis of document review sheets relevant to scouting activities and character building in schools. These documents can be records of scouting activities, activity implementation plans, photographs, or other materials.

To ensure the credibility and validity of the data, researchers applied triangulation techniques. Triangulation of information sources was carried out by comparing data obtained from various

key informants, namely principals, scout coaches, and students. In addition, researchers also used triangulation techniques by verifying the accuracy of the data through comparing information obtained from different data collection methods, namely interviews, observation, and documentation. By combining various sources and techniques, it is expected that the data collected will be more comprehensive and reliable.

The data analysis process in this qualitative research will involve a series of stages aimed at organizing, reducing, and interpreting the collected data. Data analysis will include checking the validity of the data based on criteria such as credibility, dependability, and confirmability. To present the data in a systematic and easy-to-understand manner, this research will adopt the Miles and Huberman data analysis model. This model involves three streams of activities that occur simultaneously: (1) data reduction, which is the process of selecting, focusing, simplifying, and abstracting rough data that emerges from written notes, interview transcripts, and documents; (2) data display, which is the process of systematically organizing information in the form of narratives, charts, or matrices so that it is easier to see patterns and relationships between data; and (3) conclusion drawing/verification, which is the process of interpreting the meaning of the data presented, looking for patterns, explaining interrelationships, and formulating research findings. This analysis process will be carried out iteratively and continuously throughout the implementation of the research until firm conclusions can be drawn.

C. Results and Discussion

This section presents research findings regarding character building in students through scouting activities at SDN 170 Pekanbaru. Data were collected through direct observation of the implementation of scouting activities, in-depth interviews with the

school principal, scoutmasters, and several students, as well as analysis of documents related to the scouting program and student activity records. The research results are divided into two main focuses: (a) Implementation and Materials of Scouting Activities, and (b) Formed Character Values.

1. Implementation and Materials of Scouting Activities

a) Implementation of Scouting Activities

Based on periodic observations, scouting activities at SDN 170 Pekanbaru are held routinely every Friday afternoon. Observations show that these activities are quite well-organized, although there are sometimes constraints in the complete attendance of all members and the optimal use of time. Students appear enthusiastic in participating in various sessions, especially in games and outdoor activities. The scoutmasters, who are internal school teachers, seem to try hard to create a fun and educational atmosphere. They use a participatory approach, where students are invited to actively discuss, provide ideas, and even lead some small sessions.

From the interview with the School Principal, he explained that scouting activities are compulsory extracurricular activities for all students in grades 4, 5, and 6. He emphasized the importance of these activities as a non-academic platform to holistically develop students' potential, especially in character building. "We see scouting as one of the main pillars in educating children to have a strong, independent, and responsible mentality," said one of the scoutmasters, who stated that "our activity structure is flexible, adjusted to the needs and interests of the children, but still adheres to the basic principles of scouting."

Documentation in the form of activity schedules, attendance lists, and activity photos shows consistency in the implementation of scouting. There is evidence that the activities include opening and closing ceremonies, theoretical sessions in the classroom, and practical sessions on the school field. Some documentation also shows the existence of mini-camps held once a year, demonstrating the school's effort to provide a more in-depth scouting experience. However, in terms of facilities, there are still limitations, such as the minimal availability of teaching aids and scouting equipment, which sometimes becomes a challenge for the instructors.

b) Scouting Activity Materials

The scouting activity materials at SDN 170 Pekanbaru are designed to cover cognitive, affective, and psychomotor aspects. Observations show that the material is delivered through various methods, such as short lectures, group discussions, simulations, educational games, and direct practice. Materials frequently observed include marching, knot tying, Morse code, simple pioneering, first aid, and general scouting knowledge. The instructors often connect these materials with daily life values, for example, the importance of cooperation in pioneering or the readiness of a rescuer in first aid.

In interviews, it was found that their scouting curriculum refers to the General Guidelines of the Scout Movement, but is adapted to the developmental level and characteristics of elementary school students. "We try to ensure that the material is not only theoretical but also practical and relevant to children's lives. For example, in knot material, we teach how knots can be used for activities at home or while camping," he explained. Interviews with several students also reinforced this. RI (a 5th-grade student) said, "I like it when there are lessons on making knots or codes; it feels exciting and can be practiced."

Documentation of the curriculum and lesson plans (RPP) of the scoutmasters confirms that the materials taught are indeed structured and have clear character-building objectives. There are explicit points of material that mention values such as discipline, responsibility, independence, care, and honesty. In addition, there is documentation of practice questions and assignments given to students, showing that students' understanding of the material is also evaluated, although the main focus is on participation and the application of values.

2. Character Values

The formation of character values through scouting activities at SDN 170 Pekanbaru was observed from various aspects of student behavior and the emphasis of the instructors during the activities.

a) Character Values: Relationship with God

Observations show that character values related to the relationship with God are internalized through simple practices in scouting activities. At the beginning and end of each activity, students are always invited to pray together, led by one of the students or instructors. Although not always explicit in every material session, instructors often remind students about the importance of being grateful for the universe when activities are carried out outdoors, or the importance of honesty in every action as a form of worship.

Interviews with teachers revealed that "we always emphasize to the children that these scouting activities are also part of worship, which is to guard God's trust in themselves and the environment. Honesty, discipline, and caring are reflections of faith." In line with that, the teacher added that "this religious value becomes the main foundation in the character building of children, scouting helps strengthen it through good habits." Several students interviewed also stated that they felt closer to God when they saw the beauty of

nature during scouting activities, or felt the need to be honest because it is a religious teaching.

Documentation of the opening and closing ceremonies of scouting activities always includes "Prayer" as one of the mandatory agenda items. There are also some posters containing quotes about the importance of gratitude and worship, although not too many. This indicates a systematic, albeit simple, effort to instill religious values in scouting activities.

b) Character Values: Relationship with Self

Observations show that character values related to oneself, such as independence, discipline, self-confidence, and responsibility, are highly emphasized. Students are encouraged to prepare their own equipment, follow instructions orderly, and complete group tasks without relying too much on the instructors. For example, during marching sessions, students are required to be disciplined in their movements and focus on commands. In pioneering activities, students are given the freedom to try and overcome difficulties in tying knots, which trains independence and problem-solving. Some students who initially appeared shy gradually became brave enough to lead patrols or express opinions after participating in activities several times.

The results of interviews with teachers also confirmed that "one of the main goals of scouting is to form independent children who are responsible for themselves. We not only teach them skills but also how to face challenges and make decisions." A student (6th grade) shared his experience, "I used to often forget to bring books, but after joining scouting and having to bring my own equipment, I became more mindful and independent." Students' self-confidence also appeared to increase. A student (5th grade) said, "I became braver in speaking in front of friends after often being asked to lead prayers or cheers."

Documentation in the form of the SKU (General Proficiency Requirements) book owned by students shows points that require students to demonstrate independence and responsibility, such as maintaining personal hygiene, tidying clothes, or completing individual tasks. Instructor assessments recorded in the activity logbook also frequently note students' progress in aspects of discipline and initiative.

c) Character Values: Relationship with Others

Character values such as cooperation, tolerance, empathy, and mutual assistance are very prominent in scouting activities at SDN 170 Pekanbaru. Observations show that almost every activity involves group work, such as in pioneering, relay games, or group discussions. Students are naturally encouraged to interact, divide tasks, and help each other to achieve common goals. Instructors often create scenarios where students have to help each other, for example, in simple first aid. Small conflicts between students in a group often become opportunities for instructors to teach tolerance and problem-solving through deliberation.

From interviews, the teacher stated, "Scouting is a miniature society. There, children learn how to live side by side, respect differences, and work together. This is important for their social life in the future." She added, "We always emphasize that in scouting, we are one big family. If a friend is in trouble, it is obligatory to help." A student (6th grade) recounted, "I learned to be patient with friends who were difficult to work with. Finally, we were able to make good knots together." Another example, students are also taught to respect friends' opinions even if they differ.

Documentation in the form of photos of group activities and results of group assignments (e.g., successful pioneering creations made together) provides strong evidence of cooperation. Instructor notes

also often record students' initiative in helping friends or their ability to work together in a team. The existence of "rules of the game" in every game that requires obedience and awareness of the rights and obligations of each member also supports the formation of this value.

d) Character Values: Relationship with the Environment

Character values of environmental care, love for nature, and cleanliness are consistently taught in scouting activities. Observations show that every time activities are carried out outdoors, instructors always remind students not to litter and to maintain the cleanliness of the school area. "Nature exploration" or "surrounding environment exploration" sessions are also often inserted, where students are invited to observe flora and fauna and are taught about the importance of environmental preservation. Joint school environment cleaning activities also become a routine agenda in some scouting sessions.

Scouting is not only about oneself but also about the relationship with nature and the environment. We want children to have a sense of ownership and responsibility to maintain the cleanliness and sustainability of their environment." The teacher also emphasized that "a clean and healthy environment is our shared responsibility, and scouting instills that awareness from an early age." A student (5th grade) expressed, "Now I often remind friends if they litter because in scouting we are taught that the environment must be protected.

Documentation in the form of photos of school environment cleaning activities carried out by scout members, or instructor notes regarding students' initiative in picking up trash, serves as evidence of the implementation of this value. Material on simple recycling or the importance of energy saving is also found in some instructor teaching modules, although it may not always be

implemented in every meeting. The presence of sorted trash bins in the scouting area, which shows the school's effort to habituate students to sort trash, is also part of the indicators of this character building.

The implementation of scouting activities at SDN 170 Pekanbaru demonstrates the school's commitment to integrating character education through non-curricular channels. Observations show that scouting activities are carried out routinely every week with a structured schedule, involving all students from grades IV to VI. According to Wibowo (2022), the routine of scouting activities is very important in forming positive habits and discipline in students. The scouting activity materials are designed comprehensively, including marching, pioneering, codes, first aid, and camping activities.

Photo and video documentation reinforces that students are actively involved in each session, showing high enthusiasm. This aligns with the view of Susanto and Hidayat (2023) who state that varied scouting materials can attract students' interest and stimulate the development of various skills. Furthermore, interviews with scoutmasters revealed that moral and ethical values, such as mutual cooperation and independence, are inserted into every material, an approach emphasized by Budiyo (2021) as a key to the effectiveness of character education. The success of this implementation is also supported by adequate school facilities, as expressed by Pratiwi and Lestari (2024) who emphasize the importance of infrastructure in supporting extracurricular activities.

Scouting activities at SDN 170 Pekanbaru significantly shape character values related to the relationship with God. Through prayer activities before and after starting activities, students are taught to always remember and be grateful to God Almighty. Observations show students solemnly following prayer sessions led

alternately, indicating the instilling of religious values from an early age. According to Hasanah (2023), instilling religious values in extracurricular activities can strengthen students' moral foundation. In addition, material on religious tolerance is also often discussed, especially when students from different religious backgrounds interact in groups. Interviews with several students revealed that they felt closer to God and appreciated differences in beliefs after participating in scouting.

This is consistent with the research of Ramadhan and Sari (2024) who found that scouting activities can improve the understanding and practice of religious values. Documentation also shows how scoutmasters consistently emphasize the importance of honesty and trustworthiness, which are reflections of divine values, as explained by Lestari and Putra (2022) in the context of character education.

The aspect of character values related to the relationship with oneself is also clearly visible in scouting activities. Students' independence is honed through various tasks that must be completed individually, such as setting up small tents or tying knots. Observations show an increase in students' self-confidence in completing these challenges. Interviews with students proved that they felt more independent and dared to take initiative. According to Fitriani (2023), activities that demand independence are very effective in developing a positive self-concept in children.

Time discipline and responsibility are also emphasized, for example, through the obligation to arrive on time and complete group tasks. Documentation shows students following instructions orderly and being responsible for their roles. This is in line with Wahyuni and Santoso's (2024) theory that structured routines in scouting foster discipline. Simple decision-making within a team, such as determining strategies in group games, also trains students

to think critically and believe in their own abilities, an important point highlighted by Dewi and Permana (2021).

The development of character values related to the relationship with others and the environment is at the core of scouting activities at SDN 170 Pekanbaru. The spirit of togetherness and mutual cooperation is strongly felt when students work in groups, such as when setting up flagpoles or cleaning the school area. Observations show positive interaction and mutual assistance among students. According to Kurniawan (2023), group interaction in scouting naturally fosters empathy and cooperation. Material on environmental care, such as maintaining cleanliness and planting trees, is also integrated into the activities. Interviews with students revealed their awareness of the importance of maintaining the surrounding environment, which is reflected in their behavior during breaks and after activities.

Documentation of activities involving scout members shows the real implementation of this environmental awareness. A study by Pratama and Wijaya (2022) emphasizes that direct involvement in environmental activities can increase a sense of social responsibility. Furthermore, the resolution of small conflicts between group members facilitated by instructors also becomes a learning ground for tolerance and social problem-solving, in accordance with Suryanto and Rahayu's (2021) view on the role of scouting in forming character that cares for others and the environment.

D. Conclusions

This study concludes that the character development of students through scouting activities at SDN 170 Pekanbaru is effective, primarily due to two synergistic aspects: the routine and planned implementation of scouting activities and the provision of comprehensive scouting materials. The material's novelty lies in its

dual focus, systematically instilling a wide array of character values while simultaneously developing practical scouting skills. This is evident in the structured teaching of values related to one's relationship with God (e.g., prayer, gratitude), self-relationship (e.g., independence, responsibility, discipline), relationships with others (e.g., cooperation, empathy, helpfulness), and relationship with the environment (e.g., maintaining cleanliness, nature preservation). Therefore, scouting activities at SDN 170 Pekanbaru are demonstrably crucial in fostering holistic character development among students. Future research could further explore the long-term impact of these specific character-building modules and investigate their adaptability to other educational contexts.

E. Acknowledgement

This article can be completed thanks to the support and contributions of various parties. Therefore, the authors would like to express their sincere gratitude to their parents for their financial support. Our deepest gratitude also goes to the supervisors for their time and expertise in providing constructive reviews of this manuscript.

References

- Budiyono, T. (2021). Pendidikan karakter berbasis kegiatan ekstrakurikuler. *Jurnal Pendidikan Dasar*, 12(1), 45-56. <https://doi.org/10.21009/JPD.v12i1.18972>
- Dewi, L. M., & Permana, A. E. (2021). Peran kegiatan Pramuka dalam meningkatkan kemandirian dan kepercayaan diri siswa. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 8(2), 112-120. <https://doi.org/10.33394/jipgsd.v8i2.3683>
- Fitriani, N. (2023). Pembentukan karakter kemandirian siswa melalui kegiatan Pramuka di sekolah dasar. *Jurnal Pendidikan dan Pembelajaran Dasar*, 7(1), 34-45. <https://doi.org/10.24036/jpdd.v7i1.1611>

- Hasanah, U. (2023). Penguatan nilai religius melalui kegiatan ekstrakurikuler di sekolah dasar. *Jurnal Pendidikan Keagamaan*, 10(2), 89-102. <https://doi.org/10.33596/jpka.v10i2.15873>
- Kementerian Pendidikan dan Kebudayaan. (2017). *Peraturan Menteri Pendidikan dan Kebudayaan Nomor 23 Tahun 2017 tentang Hari Sekolah*. Jakarta: Kementerian Pendidikan dan Kebudayaan.
- Kurniawan, B. (2023). Pengaruh kegiatan Pramuka terhadap karakter gotong royong dan kerja sama siswa. *Jurnal Pendidikan Karakter*, 14(1), 67-78. <https://doi.org/10.21831/jpk.v14i1.59972>
- Lestari, D. S., & Putra, R. W. (2022). Peran pembina Pramuka dalam pembentukan karakter siswa sekolah dasar. *Jurnal Ilmiah Kependidikan Dasar*, 13(2), 156-167. <https://doi.org/10.23960/jkd.v13i2.2155>
- Maulana, A., & Suryana, D. (2020). Peran ekstrakurikuler Pramuka dalam menumbuhkan jiwa kepemimpinan dan kepedulian sosial siswa sekolah dasar. *Jurnal Pendidikan Dasar*, 11(2), 150-162. <https://doi.org/10.21009/JPD.v11i2.17066>
- Pratama, D., & Wijaya, A. (2022). Implementasi pendidikan lingkungan hidup melalui kegiatan Pramuka di sekolah dasar. *Jurnal Pendidikan Lingkungan*, 5(1), 23-34. <https://doi.org/10.32585/jpl.v5i1.2325>
- Pratiwi, R., & Lestari, S. (2024). Pengelolaan kegiatan ekstrakurikuler Pramuka dalam membentuk karakter siswa. *Jurnal Manajemen Pendidikan*, 15(1), 1-12. <https://doi.org/10.21831/jmp.v15i1.69896>
- Prayitno, H. J., Setyaningsih, R., & Widyastuti, R. (2021). Analisis implementasi penguatan pendidikan karakter di sekolah dasar. *Jurnal Basicedu*, 5(3), 1234-1245. <https://doi.org/10.31004/basicedu.v5i3.1070>
- Pusat Penguatan Karakter. (2020). *Panduan penguatan pendidikan karakter di sekolah*. Jakarta: Kementerian Pendidikan dan Kebudayaan.

- Raco, J. R. (2018). *Metode penelitian kuantitatif: Jenis, karakteristik dan contoh*. Grasindo.
- Ramadhan, A., & Sari, I. P. (2024). Peningkatan nilai toleransi beragama melalui kegiatan kepramukaan. *Jurnal Pendidikan Multikultural*, 6(1), 45-56. <https://doi.org/10.24036/jpm.v6i1.1895>
- Samani, M., & Hariyanto. (2012). *Konsep dan model pendidikan karakter*. Remaja Rosdakarya.
- Suryanto, A., & Rahayu, S. P. (2021). Peran Pramuka dalam pembentukan karakter peduli sosial dan lingkungan pada siswa sekolah dasar. *Jurnal Pengabdian Masyarakat*, 3(1), 1-12. <https://doi.org/10.32832/jpm.v3i1.3032>
- Susanto, B., & Hidayat, R. (2023). Efektivitas materi kepramukaan dalam mengembangkan minat dan bakat siswa. *Jurnal Inovasi Pendidikan Dasar*, 4(2), 89-100. <https://doi.org/10.33365/jipd.v4i2.2104>
- Undang-Undang Republik Indonesia Nomor 12 Tahun 2010 tentang Gerakan Pramuka. (2010).
- Wahyuni, S., & Santoso, H. B. (2024). Penanaman nilai disiplin melalui kegiatan Pramuka di sekolah dasar. *Jurnal Kajian Pendidikan Dasar*, 9(1), 78-90. <https://doi.org/10.33946/jkpd.v9i1.1123>
- Wibowo, A. (2022). Pentingnya rutinitas kegiatan ekstrakurikuler dalam pembentukan karakter siswa. *Jurnal Pendidikan Anak Usia Dini*, 8(2), 101-112. <https://doi.org/10.30659/jpadi.v8i2.23190>
- Wijayanti, A., & Ristanto, M. (2021). Internalisasi nilai-nilai kepramukaan dalam pembentukan karakter disiplin dan mandiri siswa. *Jurnal Pendidikan dan Pembelajaran Dasar*, 7(2), 201-212. <https://doi.org/10.24036/jpdd.v7i2.1704>

The Impact of Tiktok Social Media on the Behavior of Elementary School Students

Salsabila Firdausia¹, Febrina Dafit¹

¹Universitas Islam Riau, Indonesia

Corresponding author e-mail: salsabilafirdausia03@gmail.com

Article History: Received on 11 June 2025, Revised on 18 June 2025,
Published on 19 June 2025

Abstract: The rapid development of social media, especially tiktok, offers entertainment for its users. Although tiktok offers entertainment, too intensive use can affect the behavior of its users, including elementary school students to their user behavior, and elementary school students are no exception. The purpose of this study is to identify and analyze the impact of tiktok use on fourth grade students of SD Miftahul Iman, both in terms of positive and negative. The research method used is a qualitative narrative approach through observation, interviews, and documentation to students, teachers, and parents. The data analysis techniques used include data reduction, presenting it, and drawing conclusions interactively and repeatedly to understand patterns in social phenomena. The results of the study show that tiktok has a positive and negative impact on student behavior. The positive impact includes honing skills and skills (e.g. Creativity in creating content). However, there are also significant negative impacts, including a lack of social care for students in the home and school environment, waste of time, and exposure to age-inappropriate content. The implication of this study is the importance of more intensive supervision and education from schools and parents regarding the use of social media in elementary school-age children to minimize negative impacts and optimize their positive potential.

Keywords: Social_Media, Tiktok, Student_Behavior, Elementary_School

A. Introduction

The rapid development of information and communication technology has brought significant changes in various aspects of life, including in the world of education and society. One technological innovation that has permeated global society is social media. Various social media platforms offer easy access to information, social interaction, and unlimited entertainment. Among many platforms, TikTok has emerged as a new phenomenon that has attracted millions of users worldwide, including in Indonesia. This short video-sharing application allows its users to create, edit, and share videos with various interesting features such as music, filters, and effects (Aisyah & Rosyadi, 2023). Its ease of use and varied content make TikTok very popular among various age groups, not least among elementary school children.

The use of social media by elementary school children, especially on the TikTok platform, raises both concerns and new challenges. On one hand, TikTok can be a means to express creativity, develop talents, and obtain interesting information. However, on the other hand, excessive or unsupervised use of TikTok can have a negative impact on behavior, learning concentration, real-world social interaction, and even children's mental health (Fauzan & Anugrah, 2022; Ramadhan & Lestari, 2022). Fifth-grade elementary students, who are at a crucial stage of cognitive and social development, are very vulnerable to external influences, including from social media. They tend to imitate what they see and are not yet fully able to filter information or content that is not age-appropriate for them (Adawiyah, 2021).

TikTok is a social media platform that is very popular among students. TikTok is an audio-visual social media platform. Students are very interested in it, and many use this social media. This social media will entertain them when they are bored. TikTok presents several interesting videos that will be displayed on each user's homepage (Fatmawati, 2021). The TikTok application has positive and negative sides. From a positive perspective, TikTok can hone video editing skills in children and teenagers for more educational content, as well as inspire and facilitate creative expression in

creating works of art. However, this application also has negative impacts. One of its main drawbacks is the abundance of inappropriate content that can serve as a bad example for the younger generation (Waani, 2019).

TikTok, with its interactive and easily accessible features, allows its users to create, edit, and share short videos with music, filters, and special effects. This phenomenon is not limited to teenagers or young adults but has also spread to elementary school students, including at SD Miftahul Iman Pekanbaru. The use of social media, including TikTok, at an early age raises various concerns regarding its potential impact on student behavior. The duration of use, the type of content accessed, and the interactions that occur on the platform can affect important aspects of child development, such as learning concentration, real-world social interaction, ethics, and even mental health (Pratama & Lestari, 2022).

Elementary school children, especially in the fifth-grade age range, are in an important phase of cognitive and social development. They tend to easily imitate and be influenced by their surroundings, including what they see on social media (Lestari & Puspitasari, 2023). The content presented on TikTok, both positive and negative, can affect how they think, interact, and behave. For example, excessive exposure to age-inappropriate content, consumptive lifestyles, or even dangerous actions mimicked from TikTok trends, can seriously impact students' social behavior, academics, and mental health (Harahap et al., 2021).

Based on an initial interview on April 24, 2025, with one of the students named TU, a fifth-grade student at SD Miftahul Iman Pekanbaru, many of them frequently use TikTok social media. TU claimed that the numerous videos on TikTok genuinely entertain her. Students use their phones to view various applications, such as the TikTok app, for entertainment when they are bored. TU can spend hours to an entire day just scrolling through the TikTok app. Furthermore, an interview was conducted with the fifth-grade homeroom teacher, who stated that many fifth-grade children are indeed addicted to playing TikTok. This is evident when they interact in class;

students often perform erotic dance movements like those on TikTok, use impolite language, and frequently neglect their work.

This situation indicates the possible impact of TikTok social media on student behavior, both positive and negative. Therefore, this research becomes very important to thoroughly understand the extent to which TikTok social media influences the behavior of fifth-grade students at SD Miftahul Iman Pekanbaru. This research is expected to provide a comprehensive overview of usage patterns, types of content accessed, and behavioral changes that may occur in students as a result of their interaction with the TikTok application. The results of this study are expected to serve as a basis for schools, parents, and policymakers in formulating appropriate strategies to optimize the positive use of social media and minimize its negative impact on student development.

B. Methods

This research is qualitative with a narrative approach. Narrative research was chosen to gain an in-depth understanding of the experiences, perspectives, and personal narratives of students, teachers, and parents regarding the impact of TikTok social media usage. A qualitative approach allows researchers to explore phenomena holistically within their natural context, capturing rich data in the form of meanings, interpretations, and social interactions that cannot be quantitatively measured (Creswell, 2018). The main focus of this research is to collect rich and descriptive stories to build a comprehensive understanding of how TikTok affects the behavior of fifth-grade students at SD Miftahul Iman Pekanbaru. The object of this research is 5th grade students of Miftahul Iman Elementary School Pekanbaru, totaling 4 students.

This research was conducted at SD IT Miftahul Iman Pekanbaru. Data collection was carried out through interviews, observation, and documentation. Interviews with teachers focused on changes in student behavior at school, the impact of TikTok on learning concentration, social interaction, and classroom engagement. Interviews with students will center

on their motivation for using TikTok, the types of content consumed, duration of use, and how they perceive TikTok's influence on daily activities, including learning and playing. Interviews with parents will highlight their observations of their children's behavior at home, rules for gadget use, concerns related to TikTok, and how they attempt to manage their children's social media use.

Participant observation allows researchers to collect non-verbal behavioral data and social contexts that are not revealed through interviews. Detailed field notes will be made during observations. Documentation will involve the collection and analysis of relevant documents, such as student attendance records, report cards, or counseling guidance notes that may provide an initial overview of changes in student behavior or achievement. These documents will be used as supporting data to enrich the understanding of the phenomenon.

Table 1. Research Indicators

Indicator	Sub-Indicator
Positive Impact	Encouraging creativity
	Sharpening skills
	Therapy healing
	Exercise
Negative Impact	Lack of social awareness
	Desire for virality
	Wasting time
	Age-inappropriate content

The data validity technique in this study uses source triangulation, where data will be collected from various sources: direct observation of student behavior, interviews with fifth-grade teachers, and interviews with

representatives of fifth-grade students who actively use TikTok. The consistency of information obtained from these three sources will be the basis for determining data validity. In addition, persistent observation is also applied by conducting repeated and intensive observations of student behavior over a certain period to ensure that the collected data is representative and in-depth.

Data analysis is carried out descriptively qualitatively. Data collected from observations, interviews, and field notes will be reduced by selecting, focusing, and organizing raw data to obtain a clearer picture. Furthermore, the data will be presented in a descriptive narrative to identify patterns of student behavior related to TikTok usage. The final stage is drawing conclusions based on the interpretation of the analyzed data, to understand the impact of TikTok social media on the behavior of fifth-grade elementary school students.

C. Results and Discussion

This research identifies several significant impacts of TikTok social media use on the behavior of 5th-grade students at SD Miftahul Iman Pekanbaru. The findings show both positive and negative impacts simultaneously influencing student behavior. The use of TikTok by 5th-grade students at SD Miftahul Iman was found to have several significant positive impacts, especially in terms of self-development and creativity, as follows:

Positive Impact: Fostering Creativity

The first positive impact is fostering creativity. Based on interviews, many students revealed that TikTok serves as a platform for self-expression. They enjoy making short videos, from dancing and singing to acting. "I like making dance videos, Ma'am. It's fun to show new moves," one student said enthusiastically. Observations in class showed that some students often share TikTok content ideas with their friends during breaks, and some even try to create simple choreographies together. Documentation in the form of screenshots from students' TikTok accounts also revealed various types of

videos they uploaded, showing efforts to create something new and unique, albeit on a simple scale. This ability, unknowingly, trains them to think "outside the box" and try new things (Rahman, 2017).

The TikTok platform, with its diverse features (music, filters, visual effects, and easy-to-use video editing tools), effectively encourages student creativity. Many students showed increased interest in creating original video content, such as dance videos, parodies, or short presentations about their hobbies (Anggraeni, 2023; Sari, 2020). They actively seek new ideas, experiment with various styles, and learn to combine audio-visual elements to produce engaging works. For example, some students were seen collaborating on simple dance choreographies or creating short educational videos about school subjects, which they had not done previously outside formal activities. This creativity is not limited to video creation but also extends to how they think about problem-solving in the context of digital content (Sumarsono et al., 2023).

Positive Impact: Sharpening Skills

The second positive impact is sharpening skills. TikTok use has also been proven to help students sharpen various skills. From the research findings, some students mentioned that they learned to edit videos, add music, and use filter effects. "It's hard, Ma'am, if you want our video to be good. The song and the movements have to match," said a student, showing an initial understanding of audio-visual synchronization. Observations showed that students independently tried various features in the TikTok application, sometimes helping each other or imitating popular videos. This indirectly trains their technical skills in using digital applications. In addition, skills such as dancing, singing, or acting that they develop on TikTok can also be considered as directed talent development, although not yet too formal (Prasetyo, 2017). TikTok use has been proven to help students develop several new skills. These skills are not only limited to technical abilities in operating the application but also include video editing, choosing appropriate music, and even the ability to perform in front of the camera (Pratama, 2021).

Negative Impact: Lack of Social Awareness

On the other hand, this research also found several negative impacts that require serious attention. The first negative impact is a lack of social awareness. This aligns with research conducted by Putri & Agustina (2022) and Fitri (2019), which states that excessive social media use can reduce face-to-face social interaction and trigger individualistic behavior in children. When children are exposed to TikTok content too often, they tend to build their own "world" within their gadgets, which ultimately reduces their desire or ability to empathize and actively participate in real-world social activities.

The most prominent negative impact is the lack of social awareness among students. This is reinforced by the results of interviews with teachers and parents. "My child used to often play soccer with his friends, now after school he immediately looks for his phone for TikTok," complained one parent. This indicates a decrease in face-to-face interaction and involvement in real-world social activities, which potentially hinders the development of their empathy and social skills.

Students who use TikTok too often tend to be more engrossed in their own phones. This is seen from reduced direct interaction with family members at home, such as being reluctant to help with housework, less participation in family conversations, or preferring to play TikTok during family events. In the school environment, this impact is also clearly visible. Students are often more focused on their phones during breaks or even when the teacher is explaining. They become less sensitive to friends around them who might need help or an invitation to play, and prefer to spend time alone watching or creating TikTok content. This situation indicates a decrease in empathy and direct social skills (Wibowo, 2018; Nugroho, 2020). Therefore, teachers play a role in fostering character in elementary school students, such as providing examples, advising, providing facilities, and accustoming them to good things related to the environment (Kurniati & Dafit, 2024; Amelia & Dafit, 2023).

Negative Impact: Waste of Time

The second negative impact is waste of time. Excessive TikTok use leads to significant time wastage. Based on interviews with students, many of them admitted to spending hours every day just scrolling through their TikTok feed or making videos. "Sometimes I don't realize it, Ma'am, it's been a long time," admitted one student. Documentation in the form of daily logs and application usage reports shows that some students spend more than 3-4 hours per day on TikTok, especially after school and before bedtime. As a result, time for studying, doing homework, and even resting is disrupted. Parents also reported that their children often stay up late playing TikTok, which affects their concentration and causes fatigue at school (Hasan, 2019). Research by Ramadhani & Susanti (2023) and Santoso (2019) highlights that social media addiction in children can disrupt their daily schedules, including sleep and study time, which ultimately has a negative impact on their academic achievement and physical health.

Negative Impact: Age-Inappropriate Content

The third negative impact is age-inappropriate content. The biggest concern is exposure to content that is unsuitable for 5th-grade students. From observations and documentation of student TikTok accounts, it was found that they are often exposed to videos with adult themes, harsh language, or trends that are inappropriate for children their age. Some videos feature provocative dances, obscene song lyrics, or dangerous viral challenges. Interviews with parents revealed their concerns about this. "I'm afraid my child will imitate bad things from TikTok, Ma'am. There's a lot of content that's not suitable for children their age," said one parent. The lack of strict filters or supervision makes students very vulnerable to the negative influence of such content, which can indirectly affect their worldview, ethics, and even behavior (Dewi, 2018). This aligns with the research findings by Lestari (2021) and Susanto (2016), which highlight the importance of parental supervision in media use.

D. Conclusions

Based on the research findings, TikTok social media has varied impacts on the behavior of fifth-grade students at SD Miftahul Iman. On the positive side, TikTok is able to hone students' skills. However, its negative impacts are also significant, including a lack of social awareness both at home and at school, time wastage, and exposure to age-inappropriate content. Therefore, active roles from parents and schools are needed to guide students so they can utilize TikTok wisely and minimize its negative effects.

E. Acknowledgement

This article was completed thanks to the support and contributions from various parties. Therefore, the author expresses sincere gratitude to the supervising lecturer for their time and expertise in providing constructive reviews of this manuscript. Furthermore, thanks are extended to the school for their contributions in optimally completing this research.

F. References

- Adawiyah, R. (2021). Dampak Penggunaan Aplikasi TikTok Terhadap Perkembangan Sosial Emosional Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 5(2), 1731-1740.
- Aisyah, E. L., & Rosyadi, A. H. (2023). Pengaruh Penggunaan Aplikasi TikTok Terhadap Perilaku Konsumtif Mahasiswa. *Jurnal Ilmu Sosial dan Ilmu Politik*, 12(1), 1-10.
- Amelia, N., & Dafit, F. (2023). Strategi Guru dalam Menanamkan Karakter Disiplin Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan dan Pembelajaran*, 7(1), 142-149. <https://doi.org/10.23887/jipp.v7i1.59956>
- Apriyanto, A. A., Syamsudin, A., & Sumarsono, S. (2023). Pengaruh Penggunaan Media Sosial TikTok Terhadap Motivasi Belajar Peserta Didik Pada Mata Pelajaran IPS Kelas VIII MTs Al Fatah. *Jurnal Inovasi Pendidikan Sosial dan Budaya (JIPSBUD)*, 1(1), 1-13. <https://doi.org/10.59013/jipsbud.v1i1.23>
- Cahyani, D. N., & Lestari, Y. (2021). Peran Orang Tua dalam Pendampingan Penggunaan Media Sosial pada Anak Usia Dini. *Jurnal Obsesi: Jurnal*

- Pendidikan Anak Usia Dini, 5(2), 1735-1744.
<https://doi.org/10.31004/obsesi.v5i2.1009>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Fauzan, M. R., & Anugrah, M. (2022). Dampak Penggunaan Media Sosial TikTok Terhadap Motivasi Belajar Siswa Sekolah Dasar. *Jurnal Pendidikan Guru Sekolah Dasar*, 11(2), 107-115.
- Fitri, A., & Handayani, R. (2021). Dampak Penggunaan Aplikasi TikTok Terhadap Perilaku Belajar Siswa Sekolah Dasar. *Jurnal Basicedu*, 5(4), 2271-2280. <https://doi.org/10.31004/basicedu.v5i4.1206>
- Handayani, R., & Fitriyani, S. (2023). Pengaruh Penggunaan Aplikasi TikTok Terhadap Perkembangan Sosial Emosional Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*.
- Harahap, R. H., Batubara, A. H., & Puspita, M. (2021). Dampak Penggunaan Media Sosial TikTok Terhadap Perilaku Belajar Siswa Sekolah Dasar. *Jurnal Inovasi Pendidikan Dasar*, 6(2), 163-172.
- Kurniati, Y., & Dafit, F. (2024). Peran Guru dalam Membina Karakter Peduli Lingkungan Siswa di Sekolah Dasar. *Schoulid: Jurnal Ilmiah Sekolah Dasar*, 4(1). <https://doi.org/10.23916/084583011>
- Lestari, W., & Puspitasari, L. (2023). Pengaruh Penggunaan Aplikasi TikTok Terhadap Perilaku Sosial Remaja. *Jurnal Komunikasi Pembangunan*, 21(1), 1-14.
- Nurhayati, I., & Syafitri, N. (2023). Pemanfaatan Aplikasi TikTok Sebagai Media Pembelajaran Dalam Pembelajaran IPA Kelas IV SDN Sindang Sari. *Jurnal Pendidikan Tambusai*, 7(1), 1673-1681.
<https://doi.org/10.31004/jptam.v7i1.6669>
- Pratama, I. A., & Lestari, A. S. (2022). Pengaruh Intensitas Penggunaan Media Sosial Terhadap Perilaku Agresif Pada Siswa Sekolah Dasar. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, 10(2), 173-182.
<https://doi.org/10.21009/JPPGSD.102.7>
- Pratama, I. B. (2021). Peran Media Sosial TikTok dalam Meningkatkan Kreativitas Siswa. *Jurnal Ilmu Pendidikan*, 3(2), 115-125.
- Pratiwi, A., & Setiawan, R. (2021). Perilaku Sosial Anak Sekolah Dasar dalam Penggunaan Aplikasi TikTok. *Jurnal Pendidikan dan Pembelajaran Sekolah Dasar*.

- Putri, A. A., & Agustina, W. (2022). Dampak Penggunaan Media Sosial Terhadap Perilaku Sosial Anak Usia Sekolah Dasar. *Jurnal Pendidikan Anak Usia Dini*, 6(1), 1-10. <https://doi.org/10.37905/jakarta.v6i1.139>
- Putri, D. F., & Anggraeni, D. (2023). Perilaku Sosial Remaja Akibat Penggunaan Media Sosial TikTok. *Jurnal Ilmiah Mahasiswa Pendidikan Sosial*, 3(1), 108-118. <https://doi.org/10.36378/jimpensos.v3i1.3093>
- Ramadhan, F., & Lestari, R. (2021). Pengaruh Penggunaan Aplikasi TikTok Terhadap Perilaku Prosocial Remaja. *Jurnal Psikologi Sosial*, 19(2), 159-170.
- Ramadhani, L., & Susanti, R. (2023). Pengaruh Kecanduan Media Sosial Terhadap Perilaku Belajar Siswa Sekolah Dasar. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 10(1), 1-10. <https://doi.org/10.29303/jipsd.v10i1.3090>
- Sari, I. M., & Indriani, F. (2022). Dampak Penggunaan Aplikasi TikTok Terhadap Motivasi Belajar Siswa Sekolah Dasar. *Jurnal Inovasi Pendidikan Dasar*, V(W), GG-HH.
- Wulandari, D., & Nurbaeti, S. (2022). Pengaruh Media Sosial TikTok Terhadap Perilaku Psikososial Siswa Sekolah Dasar. *Jurnal Ilmu Sosial dan Pendidikan*, M(N), II-JJ.

The Effect of Service Quality, Promotion Strategy, and Price Perception on Customer Satisfaction at Adira Finance Singaraja Branch

Aden Winagun Lutfi¹, Fridayana Yudiaatmaja¹, Ni Made Suci¹

¹Universitas Pendidikan Ganesha, 81116, Indonesia

Corresponding author e-mail: aden@student.undiksha.ac.id

Article History: Received on 11 June 2025, Revised on 13 June 2025, Published on 19 June 2025

Abstract: This study investigates the impact of service quality, promotional strategies, and price perception on customer satisfaction at Adira Finance, Singaraja Branch. In an increasingly competitive financial services industry, customer satisfaction plays a pivotal role in fostering loyalty and business growth. The research aims to identify how each of these factors influences customer satisfaction, and which factor holds the most significant impact. Data was collected through a survey of 25 respondents, revealing key insights into the effectiveness of service quality, promotional strategies, and pricing strategies. The results indicate that service quality has the most substantial effect on customer satisfaction, followed by promotional strategies and price perception. These findings suggest that companies in the finance sector should focus on improving service quality while integrating effective promotional strategies and maintaining competitive pricing to ensure sustained customer satisfaction. This research contributes to the understanding of customer satisfaction dynamics in the finance sector, providing actionable recommendations for improving service offerings in similar institutions.

Keywords: Service, Quality, Promotional_Strategy, Customer_Satisfaction, Adira_Finance

A. Introduction

Customer satisfaction is a crucial aspect in the service industry, particularly in the financing sector which relies heavily on long-term relationships with customers (Lim & Grewal, 2020). In this context, PT. Adira Dynamics Multi Finance Tbk (Adira Finance), as one of the largest automotive financing companies in Indonesia, continues to strive to maintain and improve the quality of its services. The commitment is reflected in the company's national achievement which shows a positive performance in the first quarter of 2024, with a revenue increase of 11% and net profit of Rp432 billion (Ismail & Yusu, 2021).

However, a different situation occurred at the branch level, particularly Adira Finance Singaraja Branch, which showed a fluctuating sales pattern during the first six months of 2024. A decline in sales was recorded in February, March, and June, where targets were not achieved, though there was an increase in April and May. This instability signifies the presence of operational or marketing issues that need to be further analyzed (Alfajar et al., 2021).

The results of the preliminary study through interviews to 25 customers reinforce this urgency: as many as 80% of the respondents expressed dissatisfaction with the services of Adira Finance Singaraja Branch. The dissatisfaction is mainly triggered by three factors: service quality, promotional strategies, and price perception. Respondents rated service slow, communication less effective, and their needs not being addressed well. Promotional strategies were judged to be less interesting and informative, as well as not tailored to customer needs. Meanwhile, the perception of pricing is viewed negatively due to high interest rates and administrative costs that are not offset by clear added value.

Theoretically, good service quality is capable of increasing customer satisfaction because it plays an important role in building firm loyalty and competitiveness (Asti & Ayuningtyas, 2019; Alfajar et al., 2021). Effective promotional strategies can strengthen the company's relationship with customers as well as improve purchase decisions (Pratiwi et al., 2023). The perception of a price that is fair and meets customer expectations is also a significant factor in creating a positive experience and satisfaction (Tjiptono, 2008).

With the said background, this study aims to analyze the influence of service quality, promotional strategies, and price perception on customer satisfaction of Adira Finance Singaraja Branch. The main focus is directed on how the three factors affect customer satisfaction levels and how these findings can be used to improve service strategies at the branch level. The research is expected to provide a tangible contribution for Adira Finance in formulating a more directed and data-driven service improvement policy.

B. Methods

This research is an explanatory quantitative study that aims to test the influence of three independent variables-service quality (X1), promotional strategy (X2), and price perception (X3) on the dependent variable i.e. customer satisfaction (Y) at PT Adira Finance Singaraja Branch. Research was conducted for two months, from April to May 2025, with a location at the branch office addressed at Jl. Diana no. 18, Singhara, Bulleng Regency, Bali.

The population in this study was all the recorded active customers of PT Adira Finance Singaraja Branch totaling 387 people. With an error rate of 5%, then a sample size of 197 respondents was obtained. Therefore, the number of 25 respondents used in the initial stage of the study was not the primary sample, but was used in a pilot study (pilot study). The purpose of this pilot study was to

test the clarity of questionnaire items, assess the validity and reliability of the instrument, as well as refine the instrument before applying it to the main study.

Data collection was conducted through the dissemination of a closed-ended questionnaire with a Likert scale of 1–5. The research instrument was tested through two stages:

1. Validity Test; The validity test was conducted using the construct validity technique with the help of Pearson Product Moment correlation analysis. Items were considered valid if the significance value (p-value) was < 0.05 and the value of the correlation coefficient (r) was greater than the r-table.
2. Reliability Test; The reliability test was conducted by calculating Cronbach's Alpha coefficient, where α value > 0.7 indicates that the instrument is classified as reliable.

Data analysis techniques in this study include:

1. Tests of Classical Assumptions (normality, multicollinearity, and heteroskedasticity)
2. Multiple Linear Regression Analysis to know the simultaneous and partial influence between the independent variables on the linked variables.
3. The F-test was used to test the influence of all independent variables jointly on the dependent variable.
4. The t -test was used to test the influence of each of the independent variables partially on customer satisfaction.
5. The Coefficient of Determination (R^2) was used to measure how much the independent variables were able to explain the dependent variables.

The entire data processing will be carried out with the help of statistical software, such as the latest version of SPSS.

C. Results and Discussion

The results of the study show that service quality positively and significantly affects PT customer satisfaction. Adira Finance Singaraja Branch. This shows that the higher the quality of service provided, the higher the level of customer satisfaction. These findings support the study results of Alfajar et al. (2021) who found a strong relationship between service quality and customer satisfaction with a correlation coefficient of 0.766. This reinforces the understanding that elements such as speed of service, attendant friendliness, ease of access, and professional attitude have a major influence on consumer satisfaction.

The notion of service as an interaction that provides ease, speed, as well as a friendly attitude in serving customers (Ardista, 2021), hints that customers' emotional experience is an important part of service quality. Huwaida et al. (2022) also explained that quality service creates an emotional attachment between customers and companies, thus allowing companies to deeply understand customers' needs in the long term.

In the context of PT. Adira Finance Singaraja Branch, the implications of the findings highlight the need for continuous improvement in the quality of frontline services, such as administrative staff and customer service. One way to improve that quality is through periodic job training, which according to Haki (2021) is shown to increase customer satisfaction in retail companies. Bagaskoro (2020) emphasizes that training increases public trust in the organization as staff become more competent and capable of serving with a positive attitude. Similarly, Mintawati et al. (2023) showed that training impacts on improving employee performance and customer loyalty. Therefore, PT. Adira Finance is advised to design a sustainable and evaluation-based customer performance training programme, for the purpose of improving and maintaining optimal service quality.

The study also shows that promotional strategies have a significant influence on customer satisfaction. These findings are in line with the study of Huwaida et al. (2022) who found that promotion affects customer satisfaction in Toyota dealerships with a contribution of 32%. This indicates that precisely targeted promotions are capable of increasing customers' perceptions of product value and ultimately increasing satisfaction.

Meilda et al. (2022) stated that promotion is one of the effective marketing strategies to improve customer satisfaction. They emphasize the importance of various types of promotions such as discounts, coupons, direct rewards, even contests, as short-term efforts that are capable of increasing sales volume drastically (Widyastuti, 2017 ; Pamungkas & Husnayetti, 2022).

Nevertheless, the results of field observations indicate that PT. Adira Finance Singaraja Branch relies solely on conventional promotional strategies like personal selling and promotional sales. This poses limitations in reaching a wider audience, especially in today's digital age. According to Pamungkas & Husnayetti (2022), social media is an effective means of establishing two-way communication with customers while increasing brand awareness.

The study by Winata & Rusdi (2024) regarding the utilization of TikTok by Adira Finance shows that content adapted to the media's social trends can positively impact customer satisfaction. It is, therefore, highly recommended that Adira Finance Singaraja Branch expand its digital promotion strategies, including strengthening on social media such as TikTok and YouTube, in order to increase appeal while expanding the potential customer base in the younger age segment that is predominantly using the platform.

Further study results show that price perception also significantly affects customer satisfaction. These findings support the study by

Palelu et al. (2022) and Pertiwi et al. (2022) who showed that price perception corresponding to the benefit value of the product will create high customer satisfaction.

According to Apriliani et al. (2022), price perception is an important component in marketing strategy because it serves as an indicator of the value of the product or service. Customers will feel satisfied if the price they pay is considered equal or lower compared to the benefits they receive. Thus, the perception of fair and competitive prices can increase customer loyalty as well as reduce the risk of moving to a competitor.

In the context of PT. Adira Finance Singaraja Branch, it is important for the company to present transparent financing schemes, competitive interest rates, and additional charges that are easily understood by customers. The study by Herdianto et al. (2023) also assert that price perception plays a key role in the purchase decision of service products, such as vehicle financing, which is the main service of PT. True.

The implication of these results is that Adira Finance needs to review the pricing structure and increase communication regarding the added value of their products, so that customers do not just judge from the nominal aspect of price, but also from the convenience, payment flexibility, as well as after-sales services offered.

D. Conclusions

This study concludes that service quality, promotion strategies, and price perception each have a significant and positive influence on customer satisfaction at PT. Adira Finance Cabang Singaraja. Among these, service quality emerged as the most influential factor, indicating that customer experiences in service delivery play a crucial role in shaping satisfaction. Promotion strategies and price

perception also contributed meaningfully, reinforcing the importance of visibility and value alignment in financial services. These findings confirm that an integrated approach combining excellent service, strategic promotional efforts, and transparent, competitive pricing is essential to enhancing customer satisfaction in the financial service industry.

Based on the research findings, several specific actions are recommended for PT. Adira Finance Cabang Singaraja:

1. Conduct regular staff training focused on customer interaction, problem-solving, and service responsiveness to ensure consistent and high-quality service experiences.
2. Leverage a wider range of social media platforms—such as TikTok and YouTube—in addition to existing channels to broaden promotional reach and engage younger demographics.
3. Ensure customers clearly understand financing terms, interest rates, and any associated fees. Transparent communication will improve trust and positively shape price perception.

E. Acknowledgement

First and foremost, I would like to express my deepest gratitude to Ms. Fridayana Yudiaatmaja and Ms. Ni Made Suci for their invaluable guidance, support, and constructive feedback throughout the preparation of this journal. Their insights and encouragement have been instrumental in shaping the direction and depth of this work. Their mentorship has not only enhanced my academic understanding but also inspired me to pursue continuous growth in my research journey.

References

- Agrasadya, & Reza, F. (2019). Pengaruh Strategi Promosi Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada Kantor Pos Ciputat. *Jurnal Ekonomi Efektif*, 3(2), 176–184.
- Alfajar, F., Mustainah, Tawil, M., & Polii, J. J. (2021). Pengaruh

- Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada Makassar Jeans House Kota Palu. *Jurnal Administration and Management Public Literation*, 1(1), 37–50.
- Apriliani, N. L. P., Anggraini, N. P. N., & Ribek, P. K. (2022). Pengaruh Persepsi Harga, Kualitas Pelayanan Dan Fasilitas Terhadap kepuasan Pelanggan Pada Water Garden Hotel Candidasa Bali. *Jurnal Emas*, 3(3), 217–230.
- Ardista, R. (2021). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan PT. Langit Membiru Wisata Bogor. *Parameter*, 6(1), 38–49.
<https://doi.org/10.37751/parameter.v6i1.160>
- Asti, E. G., & Ayuningtyas, E. A. (2019). Analisis Pengaruh Strategi Promosi Dan Kualitas Pelayanan Terhadap Loyalitas Konsumen Pada Rumah Makan Saung Wulan. *Jurnal Pengembangan Wiraswasta*, 21(1), 23.
<https://doi.org/10.33370/jpw.v21i1.290>
- Gultom, D. K., Arif, M., & Muhammad Fahmi. (2020). Determinasi Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Melalui Kepercayaan. *Determinasi Kepuasan Pelanggan Terhadap Loyalitas Pelanggan Melalui Kepercayaan*, 3(2), 273–282.
- Herdianto, Y., Lestari, S. P., & Pauzy, D. M. (2023). Pengaruh Kualitas Produk Dan Persepsi Harga Terhadap Keputusan Pembelian Motor Bekas (Survei Pada Konsumen PT. Adira Kota Tasikmalaya). *Jurnal Publikasi Ilmu Manajemen*, 2(3), 312–332.
<https://doi.org/10.55606/jupiman.v2i3.2354>
- Huwaida, H., Rofi'i, & Imelda, S. (2022). Pengaruh Promosi Terhadap Kepuasan Pelanggan pada Dealer PT Wira Megah Profitamas Toyota. *Jurnal INTEKNA*, 22(1), 65–75.
- Ismail, T., & Yusu, R. (2021). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Kantor Indihome Gegerkalong Di Kota Bandung. *Jurnal Ilmiah MEA (Manajemen, Ekonomi, dan Akuntansi)*, 5(3), 415.
- Kotler, Philip, Armstrong, & Gary. (2008). *Prinsip-prinsip Pemasaran. Edisi. 12. Jilid 1*. Erlangga.
- Lim, L. G., Tuli, K. R., & Grewal, R. (2020). Customer satisfaction and

- its impact on the future costs of selling. *Journal of Marketing*, 84(4), 23-44.
- Meilda, Y., Hamdani, I., & Triwoelandari, R. (2022). Pengaruh Bauran Pemasaran terhadap Kepuasan Pelanggan (Studi Kasus Al-Amin Islamic Store Laladon Bogor). *El-Mal: Jurnal Kajian Ekonomi dan Bisnis Islam*, 5(2), 274-290.
- Mintawati, H., Rahayu, A. S., & Dela Puspita, Fawwar Fauzan, F. S. (2023). Pengaruh Pemberdayaan Karyawan, Kerja Tim, Dan Pelatihan. *Jurnal Ilmiah Ips Dan Humaniora*, 1(1), 28-33.
- Palelu, D. R. G., Tumbuan, W. J. F. T., & Jorie, R. J. (2022). Pengaruh Persepsi Harga Dan Kualitas Pelayanan Terhadap Kepuasan Konsumen Kamsia Boba Di Kota Lawang. *Emba*, 10(1), 68-77.
- Pamungkas, A. F., & Husnayetti, H. (2022). Analisis Kepuasan Konsumen Melalui Peningkatan Kualitas Pelayanan Dan Strategi Promosi. *Jurnal Muhammadiyah Manajemen Bisnis*, 3(1), 11. <https://doi.org/10.24853/jmmb.3.1.11-20>.
- Pertiwi, B., Ali, A., Hapzi, S., & Sri, F. D. (2022). Pengaruh Persepsi Harga dan Kualitas Pelayanan terhadap Loyalitas Pelanggan melalui Kepuasan Pelanggan pada E-commerce Shopee. *Jurnal Ilmu Multidisplin*, 1(2), 537-553. <https://doi.org/10.38035/jim.v1i2.63>
- Winata, M. E., & Rusdi, F. (2024). Pemanfaatan Media Sosial Tiktok oleh Adira Finance dalam Menyampaikan Content Marketing. *Prologia*, 8(1), 210-219. <https://doi.org/10.24912/pr.v8i1.27640>

Correlation Between Fear of Missing Out and Academic Stress Medical Students Tanjungpura University

Wanda Ayuditha Noor Alifia¹, Fitri Sukmawati¹, Ery Hermawati¹

¹Universitas Tanjungpura, Pontianak, Indonesia

Corresponding author e-mail: i1011221013@student.untan.ac.id

Article History: Received on 17 June 2025, Revised on 19 June 2025,
Published on 19 June 2025.

Abstract: Students tend to be at risk of experiencing mental health disorders. One example of a mental health disorder is Fear of Missing Out. This feeling of fear of being left behind will trigger anxiety and end up disrupting a student's academic performance, including medical students. As a result of the disruption of academic performance, it will end in academic stress. This study was an observational analytical study with a cross-sectional design. The research sample consisted of 168 medical students selected using the proportionate stratified random sampling technique. Variables were measured using the Fear of Missing Out questionnaire and the Student Academic Stress Scale (SASS). The analysis was conducted using the Spearman correlation test. Most students had high levels of FOMO (81,5%) and were not academically stressed (54,2%). The results indicated a significant positive correlation with a moderate strength between FOMO and academic stress among medical students in the Medical Study Program, Faculty of Medicine, Tanjungpura ($p = 0.000$; $r = 0.492$). The novelty Examining the relationship of FoMO with academic stress in medical students in a specific university setting that has not been widely studied. Focusing on a population with

high academic stress makes these findings relevant for more targeted psychological interventions.

Keywords: Fear of Missing Out, Academic Stress, Medical Student, Cross-sectional design.

A. Introduction

The use of the internet and social media is increasing in the current era of globalization, along with the need for each individual to access the latest information. However, the pervasiveness of social media can have a psychological impact on its users, such as feelings of anxiety, fear, and a tendency to compare their personal lives with what they see online (Polii AFR, Solang DJ, 2023).

Losing access to communication or not being able to access information through digital devices can lead to anxiety called nomophobia, or the excessive fear of losing connection with the digital world. Research conducted on students in the 2020-2022 batch of the Faculty of Medicine, Tanjungpura University showed that 125 students experienced a moderate level of nomophobia (Przybylski AK, Murayama K, Dehaan CR, 2013). This is related to the high use of the internet and smartphones as a means to study lecture material, access presentation slides, and listen to lecture recordings, which encourages dependence on digital devices (R, 2023).

This high internet usage is related to the phenomenon of Fear of Missing Out (FOMO), which is the fear of missing out on information that occurs in the digital world. Previous research by Felix in 2020 showed that final year students at the Faculty of Medicine, Unika Atma Jaya University Jakarta experienced high FOMO, with a long duration of social media use, as well as the influence of geographical differences that trigger increased information lag, especially in big cities like Jakarta (Setiadi F, 2020). In the context of university students, differences in academic

achievement between freshmen, sophomores, and seniors have the potential to increase anxiety, with students often relying on social media for coping with the academic pressure they face (R, 2023).

This FOMO phenomenon risks triggering academic stress can affect students' learning outcomes and reduce their life satisfaction (Pratiwi A, Fazriani A, STIKes YATSI Tangerang D, 2020) Research conducted on first-year students at Tanjungpura University in 2019 showed that more than half of the students experienced high levels of academic stress (Fidhiani, 2020). Academic FOMO often arises when students feel pressured by the academic achievements of their friends, which causes them to strive to keep up, although sometimes at the expense of personal comfort (Hye S, 2022).

Research that studies the correlation between FOMO and academic stress at the Faculty of Medicine, Tanjungpura University has never been done before. Therefore, this study aims to examine whether there is a correlation between FOMO and academic stress levels in students of the Faculty of Medicine.

B. Methods

This research is an observational analytic study of cross-sectional design. The study sample was 168 medical students selected using proportionate stratified random sampling technique. Variables were measured using the Fear of Missing Out and Student Academic Stress Scale (SASS) questionnaires. Analysis was carried out using the Spearman correlation test. Data collection was carried out on Google Form with respondents of Medical Study Program students of the Faculty of Medicine, Tanjungpura University, class of 2021, 2022, and 2023.

Data from respondents who met the inclusion and exclusion criteria were processed using Microsoft Excel then editing, scoring, and coding based on the questionnaire. Furthermore, data entry

and tabulation were carried out through the help of Statistical Product and Service Solution (SPSS) 29.0.2.0 software. for normality, univariate, and bivariate processes. This study has received approval from the Research Ethics Committee of the Faculty of Medicine, Tanjungpura University through a Certificate of Passing Ethical Review with letter number No. 9208/un22.9: 9208/UN22.9/PG/2024.

C. Results and Discussion

Result

Most of the respondents in this study were dominated by the class of 2022 as many as 65 people (38.8%). **Table 1** also shows that most of the respondents were female as many as 98 people (58.3%), while the male respondents were 70 people (41.7%) with the average age of respondents aged 20 years as many as 59 people (35.1%).

Table 1. Characteristic Responden

No	Characteristic	Frequency (n)	Percentage (%)
1.	Batch		
	2021	58	34,5
	2022	65	38,8
	2023	45	26,7
	Total	168	100
2.	Gender		
	Female	98	58,3
	Male	70	41,7
	Total	168	100
3.	Age		
	18 year	22	13,1
	19 year	36	21,4
	20 year	59	35,1
	21 year	43	25,6
	22 year	6	3,6
	23 year	2	1,2

Total	168	100

Distribution Fear of Missing Out

Table 2 shows that most of the research respondents experienced severe FOMO, namely 137 people (81.5%) and research respondents with no FOMO likely as many as 1 person (0.6%).

Table 2. Distribution Analysis *Fear of Missing Out*.

No	<i>Fear of Missing Out</i>	Frequency (n)	Percentage (%)
1.	Severe FOMO	137	81,5
2.	Medium FOMO	20	11,9
3.	At risk for FOMO	10	6
4.	No FOMO likely	1	0,6
Total		168	100

Distribution of Academic Stress

Table 3 shows that respondents with no academic stress have the highest number of 91 people (54.2%) and very high academic stress is only 1 person (0.6%).

Table 3 Distribution Analysis of Academic Stress

Academic Stress	Frequency (n)	Percentage (%)
No Stress	91	54,2%
Low	49	29,2%
Medium	15	8,9%
High	12	7,1%
Very High	1	0,6%
Total	168	100

Distribution of Academic Stress Based on Batch

The distribution shows that there were 30 respondents with no academic stress in the class of 2021 (17.3%), 38 people (22.48%) in the class of 2022, and 23 people (13.7%) in the class of 2023, while

students with very high academic stress levels in the class of 2021 were only 1 person (0.6%). In the 2022 and 2023 batches, there were no respondents with very high academic stress.

Distribution of Academic Stress by Gender

Distribution of Academic Stress Based on Gender shows that most of the research respondents were female with no academic stress, namely 51 people (52.03%) and male respondents, namely 40 people (57.14%).

Bivariate Analysis

Table 4 shows results of the SPSS 29.0.2.0 analysis with the Spearman correlation test to test the correlation of Fear of Missing Out with academic stress of Tanjungpura University medical students showed a significance value of 0.000 or less than 0.05. These results significance value of 0.000 indicate that there is a relationship between Fear of Missing Out and academic stress of Tanjungpura University medical students. The correlation coefficient number shows a positive result, which is 0.492. This shows that the relationship between Fear of Missing Out and academic stress is a unidirectional relationship and has a moderate or fairly strong relationship strength. Thus, it can be concluded that the higher the level of Fear of Missing Out, the higher the level of academic stress.

Table 4. Correlation Analysis of Fear of Missing Out with Academic Stress

<i>Fear of Missing Out</i>	Stres Akademik					Total	
	Sangat tinggi	Tinggi	Sedang	Rendah	Tidak	N	%
Severe FOMO	1	12	14	46	65	138	80,9
Medium FOMO	0	0	1	3	16	20	12,09
At risk for FOMO	0	0	1	0	9	9	6,5

No FOMO likely	0	0	0	0	1	1	0,5
Total						168	100%
Spearman's Rho	<i>Sig. (2-tailed) = 0,000, r = 0,492</i>						

Discussion

Fear of Missing Out

Fear of Missing Out (FOMO) is a form of anxiety that arises from the fear of missing out on the latest information or trends, which has an impact on physical and mental health. Individuals with FOMO tend to feel anxious if they do not know the latest activities or events around them (Sultan U, 2022). In this study, the majority of respondents, 81.5%, had a severe level of FOMO. In the context of medical students, who often have to sacrifice free time and social activities for the sake of their studies, FOMO is a significant stressor (Przybylski AK, Murayama K, Dehaan CR, 2013). This difference may be due to the characteristics of the respondents in this study, where most did not have psychological needs met, good life satisfaction, or adequate emotional support (Amadea, S. Saputera, M. Chris, 2022).

Severe FOMO is mostly found in sophomores (class of 2022) with an average age of 20 years. This is related to the characteristics of emerging adulthood, where individuals at this stage more often explore social relationships and personal identity (Aisyah, 2024). In addition, the phenomenon of severe FOMO in this study was experienced more by women (85.7%) than men (74.3%). According to (Beyens, I. Prison, E. Eggermont, 2016), women have higher levels of FOMO than men because they are more sensitive to social dynamics and engagement in digital social networks.

Meanwhile Misra, R., & Castillo, (2004) stated that women tend to report higher levels of stress in academic environments due to the emotional burden and social expectations they feel. This study also found that women experience academic stress more often than

men. Physiologically, women tend to be more responsive to negative emotions due to the dominance of the limbic system, which processes emotions primarily (Purwati, M. Rahmandani, 2020) (Maryama, 2015) (Dhull I, 2015). Meanwhile, men rely more on the prefrontal area, which focuses on rational problem solving. As a result, women more often use emotion-based coping mechanisms, while men tend to use problem-solving-based mechanisms (Mukholil, 2018).

Research shows that women are more susceptible to Fear of Missing Out (FoMO) because they generally have a higher need for social connection and emotional involvement in interpersonal relationships. This makes them use social media more often to maintain these connections, which can actually increase feelings of being left behind or not being socially engaged enough. In the context of medical students who have a high academic load, this pressure can exacerbate academic stress, especially in women.

Stress Academic

This study showed that the majority of respondents (54.2%) did not experience academic stress, while only a small proportion (7.1%) experienced high levels of academic stress. This result is different from some previous studies, such as Wahyudi's research on medical students at Riau University which showed that the majority of students experienced moderate stress (56.63%) (Wahyudi R, Bebasari E, 2017). Pala's research at Nusa Cendana University also indicated similar results with a dominant level of moderate stress (63.6%) (Pala MGT, Nurina RL, 2021). In contrast, Fidhiani's study noted that most first-year medical students actually experienced very high levels of stress (53.8%) (Fidhiani, 2020).

This difference in results could be due to several factors, including the time of data collection in this study which was carried out after

the lecture period ended, allowing respondents to have lower stress levels than during the exam period. In addition, students who do not experience stress or have low levels of stress may have good coping mechanisms in dealing with academic stressors (Permata KA, 2019).

High levels of academic stress are more dominant in sophomores (class of 2022). This can be attributed to greater academic pressure, such as thesis completion, which involves various obstacles, including difficult meetings with supervisors, repeated revisions, and other final assignment burdens (Hamid, A. Martha, 2022) Students with positive reactions to this pressure tend to be more motivated, diligent in consulting, and confident in completing their assignments. Conversely, negative reactions can result in procrastination, avoidance, thus slowing down the task completion process (Nadyandra, K. R. Nio, 2023).

Thus, the higher the level of FOMO experienced by students, the higher the level of academic stress felt. This result is in line with Polii's research which found that FOMO can be a trigger for academic stress, especially in final year students (Polii AFR, Solang DJ, 2023). This is influenced by the fear of being left behind by peers' information or achievements, especially through social media. This condition creates anxiety, which to some extent can be a positive motivation. However, if this anxiety is excessive, the impact becomes negative, disrupting the physical and psychological condition of the individual.

The inability to control FOMO can exacerbate academic stress, for example by increasing burnout due to coursework, exams, or lack of confidence in completing academic responsibilities. FOMO also makes it difficult for individuals to manage their time between social and academic activities, which in turn increases academic stress. Conversely, self-management efforts such as reducing social media use, focusing on academic goals, and practicing mindfulness can help reduce the negative impact of FOMO (Fitri AG, Harahap

MYA, Sitarani DA, 2023). Mindfulness plays an important role in improving concentration and managing emotions so that academic stress can be minimized (Cacha LA, Poznanski RR, Latif AZA, 2019). From a neurophysiological perspective, stress and anxiety involve several parts of the brain, such as the hypothalamus, amygdala, prefrontal cortex, and hippocampus. Excessive stress activation can disrupt the function of the amygdala and hippocampus which should help regulate anxiety. The release of stress hormones such as CRH, cortisol, and glucocorticoids can have long-term effects, such as brain damage and impaired cognitive function, emotions, and behavior (Yaribeygi H, Panahi Y, Sahraei H, Johnston TP, 2017).

D. Conclusions

Based on the research findings and discussion there is a significant relationship between Fear of Missing Out (FoMO) and academic stress in medical students at Tanjungpura University. Most students in this study experienced severe FOMO as many as 137 people (81.5%), followed by medium FOMO as many as 20 people (11.9%), at risk for FOMO as many as 10 people (6%), and only 1 person (0.6%) who experienced no FOMO likely. Nevertheless, the majority of students did not experience academic stress, as many as 91 people (54.2%). Others experienced low academic stress as many as 49 people (29.2%), moderate academic stress as many as 15 people (8.9%), high academic stress as many as 12 people (7.1%), and very high academic stress as many as 1 person (0.6%).

Further research is also recommended to use a longitudinal design to see the development of the relationship between FoMO and academic stress over time, especially during the important phases of medical education (pre-clinical and clinical). In addition, it is recommended that studies be conducted on a population of students from non-medical faculties as a comparison, in order to determine whether high levels of FoMO and academic stress are typical characteristics of medical students or are more common.

Qualitative research is also recommended to explore more deeply the psychosocial factors that influence the emergence of FoMO and stress in students.

E. Acknowledgement

We would like to thank you for to the supervising lecturer who has provided direction and guidance during the research process, as well as to the Faculty of Medicine, Tanjungpura University who has provided permission and facilities. The author also thanks all medical students who have been willing to be respondents in this study.

References

- Aisyah. (2024). *Hubungan Self Concept dengan Fear of Missing Out pada Mahasiswa Pengguna Aktif Media Sosial Tiktok. [Skripsi]*. Universitas Islam Negeri Maulana Malik Ibrahim.
- Amadea, S. Saputera, M. Chris, A. (2022). *Gambaran Fear of Missing Out Mahasiswa Fakultas Kedokteran Universitas Tarumanagara tahun 2022. [Internet]*. 4(3), 2774–5848.
- Beyens, I. Prison, E. Eggermont, S. (2016). *“I don’t want to miss a thing”: Adolescents’ fear of missing out and its relationship to adolescents’ social needs, Facebook use, and Facebook related stres*. 64, 1–8.
- Cacha LA, Poznanski RR, Latif AZA, A. T. (2019). Psychophysiology of Chronic Stress: An Example of Mind-Body Interaction. *NeuroQuantology*, 17(7), 53–63.
- Dhull I, K. S. (2015). Academic Stress among Adolescents in Relation to Gender. *IJAR*, 1(11), 394–396.
- Fidhiani. (2020). *Hubungan Tingkat Stres Akademik Terhadap Kejadian Sleep Paralysis Pada Mahasiswa Kedokteran Tingkat I Fakultas Kedokteran Universitas Tanjungpura*. Universitas Tanjungpura.
- Fitri AG, Harahap MYA, Sitarani DA, P. A. (2023). Perilaku Fomo di Fakultas Ilmu Budaya Universitas Diponegoro Terhadap

- Kualitas Kepercayaan Diri Mahasiswa. *Jurnal Pasopati*, 5(2).
- Hamid, A. Martha, E. (2022). Faktor-faktor yang Mempengaruhi Stres Mahasiswa Pascasarjana Fakultas Kesehatan Masyarakat Universitas Indonesia dalam Menyusun Tesis. *Media Publikasi Promosi Kesehatan Indonesia (MPPKI) [Internet]*, 5(3), 283–299.
- Hye S, J. K. (2022). Smartphone use type, Fear of Missing Out, social support, and smartphone screen time among adolescents in Korea: *Interactive Effects Frontiers in Public Health.*, 10(2), 158–159. <https://doi.org/10.3389/fpubh.2022.822741>.
- Maryama. (2015). *Pengaruh Character Strengths dan Gender terhadap Stres Akademik Mahasiswa UIN Jakarta yang Kuliah Sambil Kerja. [Skripsi]*. Universitas Islam Negeri Jakarta.
- Misra, R., & Castillo, L. G. (2004). Academic stress among college students: Comparison of American and international students. *International Journal of Stress Management*, 11(2), 132–148.
- Mukholil. (2018). Kecemasan dalam Proses Belajar. *Jurnal Eksponen*, 8(1).
- Nadyandra, K. R. Nio, S. R. (2023). *Hubungan Stres Akademik dengan Motivasi Akademik pada Mahasiswa yang Sedang Mengerjakan Skripsi. Jurnal Pendidikan Tambusai [Internet]*. 7(2), 3614–3622.
- Pala MGT, Nurina RL, S. S. (2021). Hubungan Study From Home terhadap Tingkat Stres Mahasiswa Kedokteran saat Pandemi COVID-19 di Nusa Tenggara Timur. *Cendana Medical Journal.*, 9(1), 169–177.
- Permata KA, W. P. (2019). Hubungan antara Kecemasan Akademik dan Sleep Paralysis pada Mahasiswa Fakultas Kedokteran Universitas Udayana Tahun Pertama. *Jurnal Psikologi Udayana*, 6(1), 1–10.
- Polii AFR, Solang DJ, K. G. (2023). Hubungan antara Fear of Missing Out dengan Stres Akademik pada Mahasiswa Tingkat Akhir Fakultas Ilmu Pendidikan dan Psikologi Universitas Negeri Manado. *Jurnal Sains Riset*, 13(3), 850–859. <https://doi.org/doi: 10.47647/jsr.v13i3.2031>

- Pratiwi A, Fazriani A, STIKes YATSI Tangerang D, et al. (2020). Hubungan antara Fear of Missing Out (FOMO) dengan Kecanduan Media Sosial pada Remaja Pengguna Media Sosial. *Jurnal Kesehatan*.
<https://doi.org/10.37048/kesehatan.v9i1.123>.
- Przybylski AK, Murayama K, Dehaan CR, et al. (2013). Motivational, emotional, and behavioral correlates of Fear of Missing Out. *Comput Human Behav*, 29(4), 1841–1848.
<https://doi.org/10.1016/j.chb.2013.02.014>
- Purwati, M. Rahmandani, A. (2020). Hubungan antara kelekatan pada teman sebaya dengan stres akademik pada mahasiswa teknik perencanaan wilayah dan kota Universitas Diponegoro Semarang. *Jurnal Empati [Internet]*. *Jurnal Empati*, 7(2), 456–466.
- R, F. (2023). Hubungan Nomophobia dengan Kualitas Tidur pada Mahasiswa Kedokteran. In *Fakultas Kedokteran Universitas Tanjungpura [Skripsi]*. Universitas Tanjungpura.
- Setiadi F, A. D. (2020). *Hubungan antara Durasi Penggunaan Jejaring Sosial dan Tingkat Fear of Missing Out di Kalangan Mahasiswa Kedokteran di Jakarta*. The Association Between Social Network Usage Duration and Fear of Missing Out Level Among Medical Students in Jakarta.
- Sultan U, T. A. (2022). Mengantisipasi Gejala Fear Of Missing Out (FOMO) Terhadap Dampak Social Global 4.0 Dan 5.0 Melalui Subjective Weel-Being Dan Joy of Missing Out (JoMO). *Taswiyah*, 8(1), 103–115.
- Wahyudi R, Bebasari E, N. E. (2017). Gambaran Tingkat Stres pada Mahasiswa Fakultas Kedokteran Universitas Riau Tahun Pertama. *Jurnal Ilmu Kedokteran*, 9(2), 107–113.
- Yaribeygi H, Panahi Y, Sahraei H, Johnston TP, S. A. (2017). The Impact of Stress on Body Function: A Review. *EXCLI*.

Leadership Synergy of Principals and School Committees in Improving the Quality of Education: The Perspective of Elementary School Teachers

Ririn Asparingga¹, Edi Harapan², Nila Kesumawati²

¹SD Negeri 26 Palembang, Indonesia

²Universitas PGRI Palembang

Corresponding author e-mail: nilakesumawati@univpgri-palembang.ac.id

Abstract: This study aims to analyze the leadership synergy between School Leadership Principals and School Committees in improving the quality of education from the perspective of elementary school teachers. The research employs a quantitative approach with a descriptive design. The population consists of all teachers at public elementary schools in Ilir Barat I District, Palembang, totaling 113 individuals. A sample of 88 teachers was selected using a proportional stratified random sampling technique. Data were collected through questionnaires and analyzed using multiple linear regression with the help of SPSS version 26.00. The results indicate that both teacher perceptions of the leadership of School Leadership Principals and the role of School Committees have a positive and significant impact on the quality of education, both individually and simultaneously. These findings highlight that synergy between visionary and participatory school principals and active school committees can serve as a strategic force in supporting the improvement of basic education quality. The implications of this study can serve as a foundation for educational policy formulation and for strengthening collaboration among school stakeholders.

Keywords: School Leadership Principal, School Committee, Quality of Education, Elementary School.

A. Introduction

According to Tilaar (2021), basic education is the main foundation for the holistic development of human beings. Education at this level is not only intended to develop cognitive abilities but also to instill character and social values that serve as the basis for community life. This aligns with Sallis' (2020) view, which states that quality education can only be achieved when all school components work systematically and support one another. Mulyasa (2022) further adds that improving the quality of basic education cannot be separated from the role of school leadership and active community participation, including the school committee.

Basic education in Indonesia faces a number of challenges, such as the uneven quality of teachers, limited infrastructure, minimal community involvement, and suboptimal school leadership (Rohmah et al., 2023). The government has responded to these issues through the Teacher Leadership and School Leadership programs, which aim to produce transformative school principals capable of driving change within educational institutions. Principals recruited from the Teacher Leadership program are expected not only to carry out administrative tasks but also to be visionary leaders who foster collaboration, inspire innovation, and strengthen students' character and competence (Hanafie Das & Halik, 2021; Mulyanti, 2024).

On the other hand, the school committee plays an essential role in supporting the implementation of education. As representatives of the community, school committees are responsible for providing input, support, and oversight regarding school policies (Umami et al., 2024). Active involvement of the school committee has been shown to enhance school management, increase community participation, and create a more conducive learning environment (Amon & Harliansyah, 2022). Teachers' perceptions of school leadership and the role of the school committee are important indicators in measuring education quality. When teachers feel professionally supported and valued, they tend to perform better, which directly impacts student learning outcomes (Nurafni et al., 2022; Musa et al., 2022).

Therefore, this study aims to examine the synergy between school principals and school committees in improving the quality of education from the perspective of elementary school teachers, particularly in the context of the School Leadership Program in Ilir Barat I District, Palembang. This study is expected to contribute to a deeper understanding of leadership dynamics and community participation in educational quality improvement, as well as to serve as a reference for policymakers in formulating more effective and sustainable education development strategies.

B. Methods

This study employed a quantitative descriptive method. The research population included all public elementary school teachers in Ilir Barat I District, Palembang City. Data collection was conducted using a closed-ended questionnaire, developed based on indicators from the three main variables: Principal Leadership as Driving School Leader (X1), Role of the School Committee (X2), and Quality of Education (Y). The population of this study consists of 113 public elementary school teachers in Ilir Barat I District, Palembang City.

In this study, data collection techniques consisted of questionnaires, observations, and documentation. The questionnaire was selected as the primary technique because it

allows for the direct measurement of respondents' perceptions through Likert-scale-based statements (Mulyatiningsih, 2015). Observation was used to gather data through direct monitoring of activities related to the leadership of school principals and the role of school committees. Meanwhile, documentation was utilized to collect secondary data from various written sources such as school documents, photographs, and other archives.

The combination of these three techniques provided a comprehensive approach to collecting valid and relevant data, thereby supporting statistical analyses such as regression to determine the influence of variables on the quality of education. In this study, questionnaires were used as the primary data collection tool. The questionnaires included both closed-ended and open-ended questions. The closed-ended questionnaire consisted of five answer choices for each question, considering that some respondents may provide limited responses. Open-ended questions, while offering deeper insights, required more time to analyze each response.

According to Sugiyono (2017), the Likert scale is used in quantitative research to assess the degree of agreement or frequency of a statement or behavior. In this study, the Likert scale was applied to measure the frequency or occurrence of specific activities, using categories such as "always," "often," and so on, each assigned with a corresponding score. For example, the answer criteria and corresponding scores were as follows:Selalu (SL) skor 5

1. Always (SL) – score 5
2. Often (SR) – score 4
3. Sometimes (KD) – score 3
4. Ever (P) – score 2
5. Never (TP) – score 1

This methodology is based on the theory developed by Rensis Likert (1932), who created the scale to quantitatively measure attitudes or opinions. Each response category was assigned a uniformly spaced score to ensure that the results could be easily calculated and interpreted.

Hypothesis testing was conducted to determine whether there is sufficient evidence from the sample data to reject or accept the null hypothesis.

H_{01} : There is no significant effect of teachers' perceptions of the leadership of the driving school principal on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

H_{a1} : There is a significant effect of teachers' perceptions of the leadership of the driving school principal on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

H₀₂: There is no significant effect of the school committee on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

H_{a2}: There is a significant effect of the school committee on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

H₀₃: There is no significant joint effect of teachers' perceptions of the leadership of the driving school principal and the school committee on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

H_{a3}: There is a significant joint effect of teachers' perceptions of the leadership of the driving school principal and the school committee on the quality of education in public elementary schools in Ilir Barat I District, Palembang.

In this study, data analysis techniques utilized inferential statistics with the application of t-test, F-test, multiple linear regression, and the coefficient of determination test (R^2), analyzed using SPSS version 26. The objective of this analysis is to determine the extent of the influence of the independent variables—School Leadership Principal (X1) and School Committee (X2)—on the dependent variable, namely Quality of Education (Y).

Before conducting regression analysis, a series of prerequisite tests were carried out to ensure the feasibility and validity of the data, as follows:

Normality Test

To determine whether the data are normally distributed. This test was conducted using the Kolmogorov-Smirnov method and Normal P-P Plot. The data are considered normally distributed if the significance value is ≥ 0.05 .

Linearity Test

To test whether the relationship between the independent and dependent variables is linear. The relationship is considered linear if the Linearity significance is ≥ 0.05 .

Multicollinearity Test

Aims to identify whether there is correlation among the independent variables. There is no multicollinearity if the tolerance value > 0.10 and $VIF < 10$.

Autocorrelation Test

Used to assess whether residual values are correlated with themselves. This test uses the Durbin-Watson (DW) statistic, and no autocorrelation is indicated when the DW value is between -2 and +2.

Heteroscedasticity Test

To check whether the variance of the residuals is constant. This test was conducted using a scatterplot. If there is no clear pattern and the data points are randomly scattered around the horizontal axis ($Y = 0$), it indicates no heteroscedasticity.

Through these prerequisite tests, regression analysis could be conducted validly, and the results can be reliably used to determine the influence between the research variables.

C. Results and Discussion

Descriptive Analysis of the Driving Principal Leadership Variable

The descriptive analysis of the Driving Principal Leadership variable shows that, in general, principals in the Ilir Barat I District of Palembang have demonstrated excellent performance in fulfilling their strategic roles. This is reflected in the overall average score of 3.926, which falls into the "good" category, with a total score of 2,552. Indicators such as vision and mission formulation, instructional leadership, collaborative leadership, resource management, and character development all scored above 3.8. Notably, the character development indicator received the highest score, with item KPSP27 obtaining a mean of 4.73 and a low standard deviation, indicating that respondents consistently rated the principal's performance in student character development very highly. Likewise, for the resource management indicator, the highest mean score was found in item KPSP24 (4.15), signifying that principals have effectively utilized and managed school resources. Although variations in assessments were observed through the minimum and maximum score ranges, the stable median and mode at 4 reflect that the majority of respondents held a positive view. Overall, these findings affirm that Driving Principal Leadership has significantly contributed to establishing a progressive school culture that prioritizes quality improvement in education.

Descriptive Analysis of the School Committee Role Variable in Ilir Barat I District

The analysis of the School Committee Role variable also reveals a very positive trend, with an average score of 4.155 and a total score of 2,597. These figures indicate that school committees in the research area have carried out their functions and roles optimally in supporting school education programs. The most prominent indicator was the management of stakeholder relationships, with item KS28 achieving the highest mean score of 4.92. This suggests that school committees have been highly effective in building strong communication and networking with external parties, including parents, the local community, and educational partners. In other aspects—such as education quality improvement, consultative, supporting, and mediating roles—the average scores were also within the "good" to "very good" categories. However, certain items such as KS4 (mean = 3.52) and KS12 (mean = 3.36) pointed to weaknesses in specific roles, particularly in comprehensive consultation and the delivery of aspirations. Despite these limitations, the overall role of school committees has made a positive contribution to the development and strengthening of participatory school governance. These findings reinforce the notion that partnerships between schools and committees are a vital pillar in achieving sustainable education quality.

Descriptive Analysis of the Education Quality Variable in Ilir Barat I District

The descriptive analysis of the education quality variable indicates that the quality of education in elementary schools within the Ilir Barat I District of Palembang is in the "good" category. This is reflected in indicators such as the quality of learning processes,

curriculum goal achievement, student learning outcomes, and supportive school environments. Most respondents stated that learning activities are conducted effectively and in a structured manner, supported by competent teachers and the use of diverse teaching methods and media. In addition, student academic achievements are generally improving, as indicated by test results and participation in various competitions and personal development programs. The presence of a safe, clean, and supportive school environment further strengthens the existing education quality. Nonetheless, some schools still face challenges in terms of learning facilities and equitable teacher training, which are noted as key areas for improvement. In general, this strong educational quality is inseparable from the positive synergy among school leadership, school committee roles, and the active involvement of the entire school community in building a high-quality educational ecosystem.

Conclusion of Descriptive Analysis of the Three Variables

Based on the descriptive analysis results of the three research variables—Driving Principal Leadership, School Committee Role, and Education Quality—it can be concluded that all three fall into the "good" category. Driving principals are perceived as capable of bringing positive change through clear vision, participatory decision-making, and innovative school management. The school committee plays an effective role in supporting school policies and programs, contributing ideas, providing oversight, and participating in school activities. Meanwhile, education quality is reflected in structured learning processes, adequate student outcomes, and a conducive school environment. These three variables are interconnected and form a positive synergy in establishing quality schools. Therefore, the sustainability of transformational leadership, community involvement through school committees, and the strengthening of quality learning systems must continue to be maintained and enhanced to ensure sustainable education quality.

Hypothesis

Table 1. Partial Test Results (t-test)

Coefficients ^a						
Model		Unstandardize		Standardized	T	Sig.
		d Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	47,553	13,888		3,424	,001
	School Leadership Principal (X1)	,345	,139	,273	2,472	,015
	School Committee (X2)	,276	,117	,262	2,365	,020
a. Dependent Variable: Quality of Education (Y)						

Based on the results of the partial test (t-test), it was found that both the Driving School Principal Leadership variable and the School Committee Role variable had a significant influence on Education Quality individually. The significance values for each variable were below 0.05, namely 0.015 for the leadership of the driving school principal and 0.020 for the role of the school committee. This indicates that the better the school principal's leadership and the more active the role of the school committee, the higher the quality of education will be.

Table 2. Simultaneous Test Results (F-test)

		ANOVA ^a				
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2791,939	2	1395,970	11,561	,000b
	Residual	10263,958	85	120,752		
	Total	13055,898	87			

a. Dependent Variable: Quality of Education (Y)

b. Predictors: (Constant), School Committee (X2), School Leadership Principal (X1)

Furthermore, based on the results of the simultaneous test (F-test), both independent variables jointly had a significant influence on education quality, with a significance value of 0.000 (< 0.05). This indicates that the leadership of the driving school principal and the role of the school committee simultaneously contribute to the improvement of education quality.

Table 3. Results of Multiple Linear Regression Test
Coefficients^a

Unstandardized Coefficients				Standardized Coefficients	T	Sig.
Model	B	Std. Error		Beta		
1	(Constant)	47,553	13,888		3,424	,001
	School Leadership Principal (X1)	,345	,139	,273	2,472	,015
	School Committee (X2)	,276	,117	,262	2,365	,020

a. Dependent Variable: Quality of Education (Y)

Through multiple linear regression analysis, the following equation was obtained:

$$Y = 47.553 + 0.345X_1 + 0.276X_2.$$

This means that each one-unit increase in the leadership of the driving school principal (X_1) will increase the quality of education (Y) by 0.345 points, and each one-unit increase

in the role of the school committee (X_2) will increase the quality of education by 0.276 points..

Table 4. Results of the Coefficient of Determination Test

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,462 ^a	,214	,195	10,989	1,913

a. Predictors: (Constant), School Committee (X_2), School Leadership Principal (X_1)

b. Dependent Variable: Quality of Education (Y)

Based on the coefficient of determination test (R Square), it was found that the contribution of the two independent variables to the quality of education was only 21.4%. This means that 78.6% of the factors influencing educational quality lie outside this model.

Therefore, it can be concluded that both individually and collectively, the leadership of the driving school principal and the role of the school committee have a significant influence on the quality of education, although the influence is still considered moderate. Hence, strengthening both aspects is crucial in efforts to improve the quality of education in primary schools

The Quality of Education from the Perspective of Transformational School Leadership

The analysis results show that the leadership of driving principals at public elementary schools in the Ilir Barat I District of Palembang significantly contributes to the quality of education. Principals are considered fairly effective, especially in formulating the school's vision and mission (average score of 3.92), although stakeholder involvement in the process remains low (3.23). In the area of instructional management, principal support is strong (4.00), but the implementation of learning evaluations is still weak (3.23), indicating the need for improved assessment systems. A collaborative leadership style is evident from the high level of teacher involvement in decision-making (4.56). The management of facilities and infrastructure is relatively good (4.15), but the development of human resources—teachers and education personnel—still needs improvement (3.77). Character education is a strength (4.73), although responsiveness to special situations still requires enhancement (3.77). Overall, the leadership of driving principals plays a positive and constructive role in shaping improved educational quality.

Educational Quality from the Role of the School Committee

The role of the school committee demonstrates a significant contribution to supporting educational quality, with a relatively high average score (4.155). The committee excels

particularly in establishing strong external relationships with the community and other institutions (4.92). Its support and mediation functions are running fairly well (3.76–4.16), indicating a harmonious collaboration between the school and the committee. However, the consultative function remains relatively low (3.36), suggesting a need for improvement in providing strategic input for school policies. Overall, the school committee has played an active role in creating an environment that supports the educational process, although there is still room for improvement.

Educational Quality in Terms of Leadership and the Role of the School Committee

The combination of the principal's leadership and the role of the school committee has been proven to contribute significantly to improving the quality of education. The principal demonstrates effectiveness in leadership, particularly in character development among students (highest score of 4.73) and in managing school resources (4.15). On the other hand, the school committee actively contributes by building strong external relationships (4.92) and performing mediation functions, which help create a conducive school atmosphere. However, improvement in the consultative function is still needed to enable the committee to provide more strategic input. A synergistic collaboration between the principal and the school committee creates a positive educational climate, supports high-quality learning, and encourages the involvement of all school stakeholders in achieving educational goals.

D. Conclusion

Research findings indicate that there is a significant influence between teachers' perceptions of the leadership of the Driving School Principal and the quality of education in public elementary schools in Ilir Barat I District, Palembang. In addition, the role of the School Committee has also been proven to contribute positively to the improvement of educational quality in the region. Simultaneously, school leadership and the role of the school committee demonstrate a strong synergy in promoting better educational outcomes. These findings affirm that a harmonious collaboration between school leadership and community participation through the school committee is a key factor in creating quality primary education from the teachers' perspective.

E. Acknowledgements

We would like to express our sincere gratitude to the school authorities for their support in the implementation of the research entitled 'Teachers' Perceptions of the Leadership of Driving School Principals and the Role of School Committees in Improving the Quality of Education in Public Elementary Schools in Ilir Barat I District, Palembang.

Reference

Astuti, I. (2022). *Kepemimpinan pembelajaran sekolah inklusi*. Media Nusa Creative (MNC Publishing).

- Fitrah, M. (2017). Peran kepala sekolah dalam meningkatkan mutu pendidikan. *Jurnal Penjaminan Mutu*, 3(01), 31–42.
- Hasibuan, P. M., & Hadijaya, Y. (2024). Implementasi Budaya Organisasi dalam Meningkatkan Kinerja Guru. *Journal of Education Research*, 5(3), 2802– 2809.
- Hidayati, N. (2023). Kepemimpinan Transformasional Kepala Sekolah dalam Meningkatkan Mutu Pendidikan. Bandung: Penerbit Cendekia Utama.
- Hanafie Das, S. W., & Halik, A. (2021). *Kompetensi Manajerial Kepala Madrasah & Relasinya Terhadap Profesionalisme Guru*. UNSPECIFIED.
- Herlambang, Y. T. (2021). *Pedagogik: Telaah kritis ilmu pendidikan dalam multiperspektif*. Bumi Aksara.
- Isma, A., Isma, A., Isma, A., & Isma, A. (2023). Peta Permasalahan Pendidikan Abad 21 di Indonesia. *Jurnal Pendidikan Terapan*, 11–28.
- Kesumawati, N., & Aridanu, I. (2018). Statistik parametrik penelitian pendidikan. Palembang: NoerFikri Offset.
- Kusuma, J. W., Hamidah, H., Umalihayati, U., & Rini, P. P. (2024). Mengurai benang kusut kebijakan pendidikan Indonesia: Sebuah literature review analitik. *Jurnal Ilmiah Global Education*, 5(2), 1810–1826.
- Lahagu, S. E., Kustiawan, B., & Adhicandra, I. (2024). *Manajemen pendidikan: Teori & referensi komprehensif untuk pengembangan dan kemajuan pendidikan di Indonesia*. PT. Sonpedia Publishing Indonesia.
- Mesra, R. (2023). *Strategi Pembelajaran Abad 21*.
- Mulyanti, D. (2024). Peran Guru dan Kepala Sekolah sebagai Aktor Pendidikan di Tengah Perubahan Lingkungan Pendidikan yang Berubah Cepat. *Journal of Comprehensive Science (JCS)*, 3(6).
- Mulyasa, H. E. (2021). *Menjadi guru penggerak merdeka belajar*. Bumi Aksara.
- Mulyatiningsih, E. (2015). *Metode penelitian terapan bidang pendidikan*. Uny Press.
- Musa, S., Nurhayati, S., Jabar, R., Sulaimawan, D., & Fauziddin, M. (2022). Upaya dan tantangan kepala sekolah PAUD dalam mengembangkan lembaga dan memotivasi guru untuk mengikuti program sekolah penggerak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 6(5), 4239–4254.
- Nurafni, K., Saguni, F., & Hasnah, S. (2022). Pengaruh Kinerja Komite Sekolah dan Kepemimpinan Kepala Sekolah Terhadap Peningkatan Mutu Pembelajaran Pendidikan Agama Islam. *Jurnal Integrasi Manajemen Pendidikan*, 1(1), 44–68.
- Purwanto, A. (2022). *Konsep dasar penelitian kualitatif: Teori dan contoh praktis*. Penerbit P4I.
- Ramli, A., Sudadi, S., Siswanto, E., Shobri, M., Nurdiana, D. D., Adnan, M., Nurasiah, S., Nurbaiti, N., Fitriana, F., & Rezky, M. P. (2023a). *Manajemen pendidikan*. CV. Aina Media Baswara.
- Ramli, A., Sudadi, S., Siswanto, E., Shobri, M., Nurdiana, D. D., Adnan, M., Nurasiah, S., Nurbaiti, N., Fitriana, F., & Rezky, M. P. (2023b). *Manajemen pendidikan*. CV. Aina Media Baswara.
- Rohmah, N. N. S., Narimo, S., & Widyasari, C. (2023). Strategi penguatan profil pelajar Pancasila dimensi berkebhinekaan global di sekolah dasar. *Jurnal Elementaria Edukasia*, 6(3), 1254–1269.
- Rosyada, D. (2017). *Madrasah dan profesionalisme guru dalam arus dinamika pendidikan Islam di era otonomi daerah*. Kencana.

- Sallis, E. (2021). *Total Quality Management in Education* (Edisi revisi). Routledge. Berdasarkan konsep TQM di lingkungan sekolah, Sallis mengemukakan bahwa mutu pendidikan tercapai melalui perbaikan proses pembelajaran yang berkelanjutan dan dukungan kepemimpinan sekolah .
- Sari, D. A., & Nugroho, H. (2024). *Sinergi Komite Sekolah dan Peningkatan Mutu Pendidikan di Sekolah Dasar*. Yogyakarta: Pustaka Edukasi.
- Shafa, M. (2024). *Transformational Leadership Kepala Sekolah Dalam Mengelola Sekolah Di Sekolah Dasar Se-Kelurahan Banjarsari Metro Utara*.
- Sirojuddin, A., Aprilianto, A., & Zahari, N. E. (2021). Peran Kepala Sekolah Sebagai Supervisor Pendidikan Dalam Meningkatkan Profesionalisme Guru. *Chalim Journal of Teaching and Learning*, 1(2), 159–168
- Sulistiyanto, E., & Efendi, N. (2023). Kompetensi Sosial Kepala Madrasah Dalam Memberdayakan Komite Untuk Peningkatan Sarana Prasarana di MAN 1 Tulungagung. *Al-Fahim: Jurnal Manajemen Pendidikan Islam*, 5(2), 166–186.
- Sutikno, M. S. (2021). *Strategi pembelajaran*. Penerbit Adab.
- Umami, I. O. N., Mutthohharoh, M., Khoiruddin, U., & Indrioko, E. (2024). Peran Masyarakat dan Komite Madrasah Dalam Meningkatkan Mutu Pendidikan di Mts Al-Manar Tanjungtani Prambon Nganjuk. *Khodimul Ummah: Journal of Community Service (ISSN 2963-9719)*, 3(2), 79–90.
- Yulianto, H. (2023). *Paradigma Transformasi Sistem Pendidikan: Perspektif Fasilitator Sekolah Penggerak*. Sagusatal Indonesia.

The Impact of Human Relations and Work Appreciation on Improving Employee Performance at The Department of Population and Civil Registration of Bogor Regency

Dhiya Fauziah¹, Nazifah Husainah¹

¹Universitas Muhammadiyah Jakarta, Tangerang Selatan,
Banten, Indonesia

Corresponding author e-mail: humas@umj.ac.id

Article History: Received on 5 June 2025, Revised on 13 June 2025,
Published on 20 June 2025

Abstract: The purpose of this study is to examine the influence of human relations and work appreciation on employee performance at the Department of Population and Civil Registration of Bogor Regency. This research uses a quantitative associative method aimed at identifying the effect of independent variables on dependent variables. The results of this study provide up-to-date information regarding the influence of human relations and work appreciation on employee performance. The findings offer new insights into the importance of fostering good relationships among employees and providing work appreciation to create a positive impact on employee performance. However, since this study focuses solely on the Department of Population and Civil Registration of Bogor Regency, the generalization of the findings is limited. Acknowledging this limitation is important for enhancing the credibility of the research and providing direction for future studies to cover a broader range of institutions.

Keywords: *Human Relation, Work Appreciation, Employee Performance*

A. Introduction

Competition between companies today is getting wider in network, companies need to be able to follow trends or developments, not only developing in terms of company output but companies also need to develop their Human Resources capabilities to be more proactive so that they are easy to understand and open to dealing with new things in front of them Human Resources needed today are human resources who understand technological developments quickly, adaptable and responsive to changes in developments, both technological and otherwise. Because if the human resources in a company cannot quickly adapt to new things, it will become an obstacle that makes these demands a burden for them.(Prof. Dr. H. Edy Sutrisno dalam buku MSDM hal 1-2 2017) . Human Resource Management, According to (Hasibuan, 2019:10) It is an art and science that studies how to manage bonds and the role of employees efficiently and effectively in order to play a role in realizing company goals, employee welfare and public interest.

Thus, the quality and effectiveness of human resource management greatly determine the success of an organization, especially in facing dynamic developments. Two important aspects of HR management in improving employee performance are human relations and work appreciation. Both are essential components in creating a conducive work environment and motivating employees to perform optimally. Harmonious interpersonal relationships and recognition of their contributions can increase job satisfaction, emotional attachment to the organization, and enthusiasm to achieve established targets..

In the face of an era of increasingly competitive competition, it is not uncommon for an organization or company to experience failure in carrying out its business activities can be caused by several things, such as because the company has not been able to adapt to technological advances or current business developments, or the

company cannot develop due to the lack of optimal ability of human resources to carry out its duties. . In fact, although technology is currently developing and many human resources have begun to be replaced by technology, it is based on the lack of cognitive and social skills that a person has in adapting to his environment.

Human resources are factors that can determine the success of a company in carrying out its business activities. Companies are required to be able to acquire, improve and maintain quality and competent human resources in terms of productivity and performance. Human resources are an important role in the company to support the effectiveness and efficiency of the company to achieve the company's goals. Competent human resources owned by a company are competitiveness in a company. Human resources are assets that have an important role for companies in efforts to maintain, improve and develop a company. Human resources are capital for companies to be able to carry out their operational activities. It is undeniable that currently human resources have been replaced by Artificial Intelligence, but in essence, humans still have a major role in carrying out their duties and obligations in a company because not all jobs can be replaced by Artificial Intelligence.

The readiness of human resources in the company to prepare in taking steps or decisions in the company to minimize errors. The right decision is of course produced by the right human resources in every taking of the steps/decisions that have been considered which indicate that a person's performance is seen from the ability to analyze a problem, but the accuracy and accuracy of a person in work is also determined by the work environment, Human Relations and their job position/position. Because the abilities that human resources have determine their job position. The Right Man in the right place, will greatly help the company in carrying out its company activities and minimize work mistakes because it is done with the right person in the right position so as to improve performance.

Competent human resources in a company are seen from the performance of the employee. According to (Mangkunegara, 2017) Performance is the result of quality or quantity work that has been completed by an employee in carrying out his duties and responsibilities. It can also be concluded that a person's performance in a company is measured from the results of work in carrying out their duties and responsibilities to be able to achieve the company's targets and goals. Employee performance can have a significant impact on the success of a company, if employees give poor performance, the company can experience various problems or failures in carrying out its business activities and vice versa, then if employee performance is significantly optimal, it can have an impact on the progress and development of a company in carrying out its business activities. According to (Mangkunegara, 2017) Performance is the result of work measured by the quality and quantity of work in carrying out its duties. The performance of Bogor Regency Population and Civil Registration Office employees has a level of performance that fluctuates based on the state of the community's condition every day because of course there will always be various services of the population administration system. The performance of Bogor Regency Population and Civil Registration Office employees is assessed based on the elements of employee performance.

Other factors that affect performance are abilities, support and motivation for work, and relationships between people or companies. In addition, the performance of a person in the company is also influenced by the workload, work stress or motivation of the employee. The establishment of human relations in a company has a positive impact on employee performance, because a good relationship between superiors and subordinates, or employees with other employees can create a comfortable work environment that affects in carrying out their duties and responsibilities so that it

can trigger the employee to be able to work optimally and vice versa when the relationship between people is not good, it will have a negative impact to the performance of the Employee because the Employee feels uncomfortable so that it can have an impact on the results of his performance that is less than optimal or may occur Misscommunication.

Work appreciation is a form of gratitude of an organization or company to the employee as a form of loyalty from the employee to an organization/company. Work appreciation is very much needed by Employees in an effort to provide work spirit to Employees in achieving the company's targets. The form of giving appreciation is not only in the form of compensation but can also be in the form of praise or other gifts, but in fact the giving of compensation appreciation is needed by employees and can trigger enthusiasm in working to improve the performance of the employee.

Table 1. Elements of Employee Performance at the Population and Civil Registration Office of Bogor Regency for the 2021-2023 Period

nts of Employee Performance Assessment	
ork Behavior	ree Performance Goals
ice Orientation	ality of Work Results
ommitment	ntity of Work Results
Discipline	Time
Collaborate	Cost
Point 40%	Point 60%

Source: Dinas Kependudukan dan Pencatatan Sipil Kabupaten Bogor

In Table 1. above, shows that the Elements of Employee Performance Assessment consist of two categories, namely Employee Work Behavior and Employee Performance Targets. In the Work Behavior

Category, there are various classifications such as Service Orientation, Commitment, Discipline, and Cooperation with a Point of 40%, while in the Employee Target Assessment (ETA) category consists of various classifications such as Quality of Work Results, Quantity of Work Results, Time, Cost with a Point of 60%.

Table 2. Category of Employee Performance Assessment Standards at the Population and Civil Registration Office of Bogor Regency

No	Value %	Category
1.	110 – 120	Excellent (SB)
2.	90 – 110	Good (B)
3.	70 – 90	Enough (C)
4.	50 – 70	Not Good (KB)
5.	0 – 50	Poor (SK)

Source: Government Regulation No. 30 of 2019

Table 1.2 has a standard category for performance assessment of the Bogor Regency Population and Civil Registration Office. This category is based on Government Regulation No. 30 of 2019 which is used for Civil Servants, namely having a classification such as an assessment of 110 to 120 and can create ideas in improving performance that benefit the organization or the country can be categorized as Excellent, assessment of 90 to 110 is categorized as good, assessment 70 to 90 is categorized as Enough, A score of 50 to 70 is categorized as Not Good, and a score of 50 to 0 is categorized as poor.



The performance of employees at the Population and Civil Registration Office of Bogor Regency shows fluctuating levels based on the daily conditions of the community, as there are always various population administrative services to be handled. Employee performance is measured based on specific performance elements. According to the data presented in the performance evaluation graph and tables, there is a declining trend in performance scores from 2021 to 2023. In 2021, the performance score was recorded at 87.9, which dropped to 85.48 in 2022, and further declined to 84.1 in 2023. This decline indicates potential issues in work processes or internal employee motivation. Possible causes may include decreased work enthusiasm due to lack of recognition for employee contributions, weak communication and working relationships among staff, or an unbalanced workload. Therefore, it is essential to further examine the role of human relations and work appreciation as two important factors that may significantly influence the decline in employee performance.

Based on the research gap that has been identified, as shown by Annisa Ayu Faddila (2014), human relations have a positive influence on employee performance. However, this contrasts with the findings of Erini Junita Sari, Hanifah, and

Monika in the *Economina Journal* Vol. 1 No. 4, which indicate that although human relations have a positive influence, the effect is not significant on employee performance. This difference in findings highlights a gap in understanding that needs to be further explored, particularly within the context of local government bureaucracy such as the Population and Civil Registration Office of Bogor Regency. It is possible that the context of public organizations, the characteristics of public service jobs, and differing work cultures are reasons why the influence of human relations and work appreciation on performance is not always consistent. Therefore, this research is important to conduct in order to gain a more specific, relevant, and contextual understanding. The purpose of this study is (1) To determine the influence of human relations on employee performance at the Population and Civil Registration Office of Bogor Regency. (2) To determine the influence of work appreciation on employee performance at the Population and Civil Registration Office of Bogor Regency. (3) To determine the simultaneous influence of human relations and work appreciation on employee performance at the Population and Civil Registration Office of Bogor Regency. This research is expected to provide both theoretical and practical contributions to human resource management, particularly in the governmental sector, and serve as a reference for improving employee performance through a more appropriate approach to human relations and work appreciation.

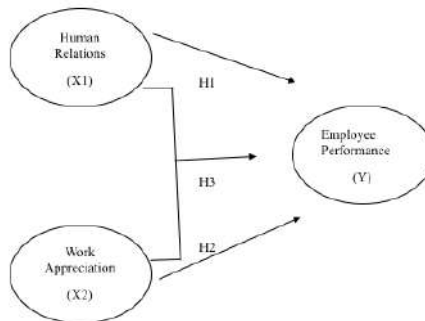
B. Methods

Quantitative Method is the method used in this study. According to (Creswell 1994) dalam Ali et al. 2022) PQualitative research is the study of social problems by testing theories through error variables that are measured with numbers and

analyzed statistically to determine whether the predictive generalization of the theory is accurate.

The associative method was used in this study to analyze the relationship between two or more variables, including their positive and negative influences. This study uses the total sampling technique, in which the entire population consisting of fewer than 100 individuals is used as the research sample. Since all members of the population are included as the sample, there is no random selection process or differing probabilities among individuals. This study uses questionnaires as a data collection method where researchers collect and provide a set of statements or questions related to the problems faced and given to respondents to answer them, in addition to questionnaires, this study also uses direct and indirect observations to strengthen the data.

Picture 1
Frame of Mind



C. Results and Discussion

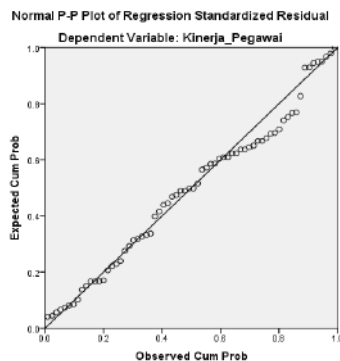
Based on the research results, the Human Relation variable has a positive but not significant effect on employee performance at the Department of Population and Civil Registration of Bogor Regency.

This is indicated by the T-count value of 1.694, which is greater than the T-table value of 1.668, and a significance value of 0.095, which is greater than 0.05. Although the influence is statistically positive, it is not significant, indicating that human relations are not strong enough to directly affect performance.

There may be mediating variables such as job satisfaction, organizational commitment, or leadership style that have not been examined and could influence this relationship. In addition, the formal and hierarchical bureaucratic context of local government institutions like Disdukcapil Bogor may also weaken the direct impact of social relationships on performance output. This finding is consistent with the study by Erini Junita Sari, Hanifah, and Monika in *Jurnal Economina*, which reported that human relations do have an effect, but it is not significant on employee performance unlike the study by Annisa Ayu Faddila (2014), which found a significant effect in a different context. Result :

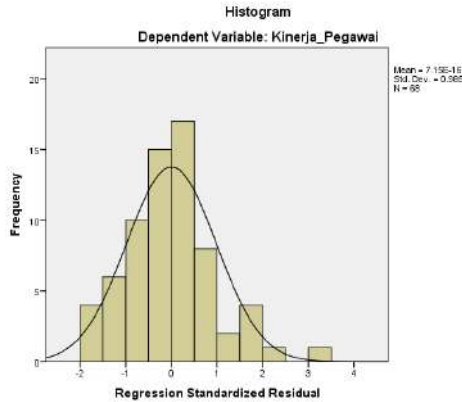
1. Normality Test

Picture 2 Probability Plot Normality Test



Based on Figure 2 (Probability Plot), the data points follow a diagonal line, indicating that the regression data distribution is normal

Picture 3 Histogram



Based on Figure 3 (Histogram) shows a curve pattern resembling a bell shape, reinforcing that the data is normally distributed.

Picture 4 Kolmogorov-Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		68
Normal Parameters ^{a, b}	Mean	.0E-7
	Std. Deviation	1.62352126
Most Extreme Differences	Absolute	.097
	Positive	.097
	Negative	-.049
Kolmogorov-Smirnov Z		.802
Asymp. Sig. (2-tailed)		.542

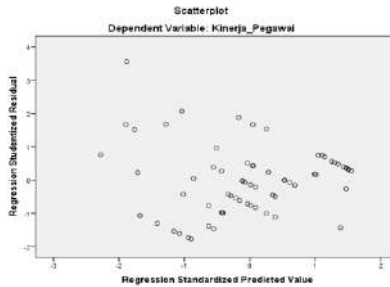
a. Test distribution is Normal.

b. Calculated from data.

Based on Picture 4 The Kolmogorov–Smirnov test result in Figure 4 shows an Asymp.Sig value of $0.542 > 0.05$, which means the regression model meets the normality assumption.

2. Heterokedasticity Test

Picture 5 Heterokedasticity test



Based on Picture 5 (Scatterplot), the points are randomly scattered above and below the Y-axis at zero, indicating that there is no heteroscedasticity in the regression model.

3. Multicollinearity Test

Table 3 Multicollinearity Test

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	18.141	2.266		8.005	.000		
Human_Relation	.061	.072	.098	.847	.400	.624	1.603
Apresiasi_Kerja	.391	.073	.615	5.333	.000	.624	1.603

a. Dependent Variable: Kinerja_Pegawai

Based on Table 3 The results in Table 3 show that the VIF value for all independent variables is 1.603 (<10), and the tolerance value is 0.624 (>0.20). This indicates that there is no multicollinearity among the independent variables in the model.

4. Multiple Regression Test

Table 4 Multiple Regression Tests

Coefficients ^a								
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	18.141	1.133		16.009	.000		
	Human_Relation	.061	.036	.126	1.694	.095	.624	1.603
	Apresiasi_Kerja	.391	.037	.796	10.666	.000	.624	1.603

a. Dependent Variable: KINERJA_Y

The Work Appreciation variable has been proven to have a positive and significant effect on employee performance, as indicated by a T-count value of 10.666 > T-table 1.668 and a significance value of 0.000 < 0.05. This finding suggests that recognition for work contributions can directly enhance employee motivation, work enthusiasm, and productivity. In the context of Disdukcapil Bogor, the most effective forms of appreciation are likely to include formal recognition from superiors, non-financial rewards such as certificates or monthly performance awards, and career development opportunities. These results align with motivational theories such as Herzberg's Two-Factor Theory and Reinforcement Theory, both of which propose that positive reinforcement or rewards can consistently increase desired work behaviors.

5. Coefficient of Determination Tes

Tabel 1 Coefficient of Determination Test

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.880 ^a	.774	.767	.824

a. Predictors: (Constant), Apresiasi_Kerja, Human_Relation

b. Dependent Variable: KINERJA_Y

Based on Table 5 The R Square value is 0.774, which means that 77.4% of the employee performance variable can be explained by Human Relation and Work Appreciation, while the remaining 22.6% is explained by other variables outside the scope of this study

The analysis results show that Work Appreciation has a positive and significant effect on employee performance This indicates that providing rewards or recognition for work outcomes can enhance employee motivation and productivity. This finding aligns with Herzberg's Motivation Theory which identifies work appreciation as one of the key driving factors of performance. The study is also consistent with previous research by Dewi Nisa Apriani (2023) which stated that recognition in the workplace significantly impacts productivity improvement.

Meanwhile, Human Relation shows a positive but not significant effect on employee performance. This means that although interpersonal relationships in the workplace are important, in the context of the Population and Civil Registration Office of Bogor Regency, this factor is not strong enough to significantly influence performance improvement. This may be due to organizational culture, bureaucratic structure, or employee priorities that place greater value on achievement-based recognition rather than social relationships. This finding should be further explored through qualitative studies to investigate the contextual factors that affect the effectiveness of workplace relationships.

Simultaneously, both variables have a positive and significant effect on employee performance. This suggests that an approach that combines improving social relations in the workplace with providing appreciation will be more effective in boosting productivity and service quality in government institutions such as the Population and Civil Registration Office.

Based on these findings, the practical implication is the need to design a data-driven and measurable employee appreciation program within the Bogor Disdukcapil environment. This program may include a transparent periodic performance evaluation system, achievement-based rewards, and improved communication quality between supervisors and subordinates in expressing appreciation. Additionally, it is important to **reassess** managerial approaches in fostering interpersonal relationships among employees to be more participatory and support a positive work climate, both emotionally and professionally. Thus, HR management based on healthy social relations and appropriate work appreciation can serve as an effective strategy to sustainably improve employee performance

D. Conclusions

Based on the research findings, it can be concluded that work appreciation has a stronger and more significant influence on improving employee performance compared to human relations, which, although showing a positive influence, is not statistically significant. These findings emphasize that recognition of work contributions has a direct impact on employee motivation and productivity, while interpersonal relationships within bureaucratic environments such as the Bogor Civil Registry Office may require more strategic approaches to have a significant effect on performance. Therefore, the meaning of this research illustrates the importance of creating a work culture that values performance fairly and transparently, and fostering workplace relationships that support collaboration and healthy emotional engagement.

The recommendation for the institution is to develop a measurable and data driven employee appreciation program, such as a transparent performance evaluation system, regular achievement-based rewards, and effective communication between superiors and subordinates when delivering positive feedback. In addition,

training for leaders on interpersonal skills and participatory leadership is also recommended to improve the quality of employee relations.

For future research, it is suggested to explore other variables that may act as mediators in the relationship between human relations and performance, such as job satisfaction, organizational commitment, or leadership style. A qualitative approach is also recommended to further explore employees' perceptions and experiences regarding the importance of social relationships and forms of work appreciation in the workplace.

E. Acknowledgement

I would like to express my gratitude to all the employees of the Department of Population and Civil Registration of Bogor Regency who were willing to complete the questionnaire. I also thank my thesis advisor for their guidance, which enabled me to complete this writing article.

References

- AA, A. P. M. (2018). *Anwar Prabu Mangkunegara*. Remaja Rosdakarya.
- Ali, M.Makhrus, Tri Hariyati, Meli Yudestia Pratiwi, dan Siti Afifah. 2022. "Metodologi Penelitian Kuantitatif dan Penerapannya dalam Penelitian." *Education Journal*.2022 2(2): 1–6.
- Afrianti, Sonia. 2019. "Pengaruh Hubungan Antar Manusia Dan Kondisi Fisik Lingkungan Terhadap Kinerja Pegawai Dalam Manajemen Psikologi." (17002104). <http://dx.doi.org/10.31227/osf.io/ycxbn>.
- Annisa, E K A Dini, Program Studi, Magister Manajemen, Program Pascasarjana, Universitas Muhammadiyah, dan Sumatera Utara. 2024. *MEDAN*.
- Apriyani, D. N. (2023). Pengaruh Apresiasi Kerja dan Motivasi Kerja

- Terhadap Kinerja Karyawan PT Sumbu Energi Abadi. *Atama: Indonesian Multidiscipline Journal*, 2(1), 37–49.
- Hasibuan. (2022). Peran Manajemen Sumber Daya Manusia Dalam Meningkatkan Kinerja Karyawan Bagian Penagihan Kredit (Studi Kasus Pada Bank Pembangunan Daerah Kalimantan Barat). *Equator Journal of Management and Entrepreneurship (EJME)*, 10(03), 127.
<https://doi.org/10.26418/ejme.v10i03.55179>
- Hidayah, K N. 2018. “Pengaruh Human Relation dan kondisi lingkungan kerja fisik terhadap kinerja karyawan PT Sumber Abadi bersama Gondanglegi melalui variabel etos kerja.” <http://etheses.uin-malang.ac.id/id/eprint/14128>.
- Hukubun, Deanly M, William A Areros, dan Ventje Tatimu. 2020. “Pengaruh Penghargaan (Reward) Terhadap Kinerja Karyawan Best Western Lagoon Manado.” *Productivity* 1(1): 84–88.
- Kawulur, Tresia Karli, W.A. Areros, dan R.J. Pio. 2018. “Pengaruh Reward and Punishment Terhadap Loyalitas Karyawan di PT. Columbia Perdana Cabang Manado.” *Jurnal Administrasi Bisnis* 6(2): 68–76.
- Lengkey, L., Sendow, D. G. M., & Saerang, R. T. (2023). Pengaruh Kompetensi, Lingkungan Kerja Dan Human Relation Terhadap Kinerja Pegawai Di Sekretariat Dewan Perwakilan Rakyat Daerah Kabupaten Minahasa Selatan. *Jurnal EMBA : Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 11(02), 31–43.
<https://doi.org/10.35794/emba.v11i02.47224>
- Lestari, Dena. 2021. “Pengaruh Human Relation Terhadap Kepuasan Kerja Karyawan Pada Kharisma Hotel Bukittinggi.” (113): 1–94.
- Lindrawati, L. (2024). Pengaruh Motivasi Dan Disiplin Terhadap Kinerja Tenaga Kependidikan Di Universitas Abdurachman Saleh Situbondo Dengan Variabel Intervening Kepuasan Kerja. *Jurnal Mahasiswa Entrepreneurship (JME)*, 2(12), 2795.
<https://doi.org/10.36841/jme.v2i12.4215>
- Mangkunegara, A. (2017). Manajemen Sumber Daya Manusia. *Remaja Rosdakarya*, 67.

- Mora, Zulkarnen., Muhammad Rizqi. Zati, dan Sova. Musdalifa. 2019. "Reward dan Kompensasi Serta Pengaruhnya Terhadap Kinerja Karyawan Bank BRI Cabang Langsa." *Jurnal Samudera Ekonomika* 3 (2)(2): 93-104.
- Nadapdap, Kristanty. 2017. "Analisis Pengaruh Human Relation Terhadap Kinerja Karyawan Pada PT. Perkebunan Nusantara III (Persero) Medan." *Jurnal Ilmiah Methonomi* 3(2): 47-60.
- Negara, Andi Kusuma. 2017. "PENGARUH HUBUNGAN INTERPERSONAL DAN LINGKUNGAN KERJA TERHADAP KEPUASAN KERJA KARYAWAN (Studi pada PT. Bank Bukopin Wilayah Tangerang)." *JMB: Jurnal Manajemen dan Bisnis* 6(1): 42-50. doi:10.31000/jmb.v6i1.994
- Prof. Dr. H. Edy Sutrisno, M. S. (2017). *MANAJEMEN SUMBER DAYA MANUSIA* (Cetakan ke). KENCANA.
- Ramadanita, D. N., Nugroho, E. S., & Suyaman, D. J. (2021). Pengaruh Reward dan Punishment Terhadap Kinerja Karyawan PT Glenmore Agung Nusantara. *Syntax Literate; Jurnal Ilmiah Indonesia*, 6(1), 173. <https://doi.org/10.36418/syntax-literate.v6i1.2269>
- Ratnasari, S. L., Wulandari, S., & Hadi, M. A. (2022). Pengaruh Perceived Organizational Support, Human Relation, Kompetensi, Dan Disiplin Kerja Terhadap Kinerja Karyawan. *Jurnal Dimensi*, 11(1), 115-126. <https://doi.org/10.33373/dms.v11i1.3958>
- Robbins. 2016. *Robbins Manajemen Coulter*. <https://inlislite.uin-suska.ac.id/opac/detail-opac?id=15814>.
- Sahir, Syafrida Hafni. 2021. *Metodologi Penelitian*. Cetakan 1. ed. M.Si Dr. Ir. Try Koryati. Penertbit KBM Indonesia. [https://repositori.uma.ac.id/bitstream/123456789/16455/1/E-Book Metodologi Penelitian Syafrida.pdf](https://repositori.uma.ac.id/bitstream/123456789/16455/1/E-Book%20Metodologi%20Penelitian%20Syafrida.pdf).
- Siagian, S. . (2015). *Sistem Informasi Manajemen* (Cetakan ke). Jakarta : Bumi Aksar.
- Silaswara, D., Parameswari, R., Kusnawan, A., Hernawan, E., & Andy. 2021. *Manajemen Sumber Daya Manusia*. ed. Giap Ceng Yo. CV

Pustaka Kreasi Mandiri.

https://repositori.buddhidharma.ac.id/1118/2/MSDM_1_53.pdf.

- Sondang .P, Siagian. 2019. *Manajemen Sumber Daya Manusia*. 1 Cet
27. AKARTA : BUMI AKSARA., 2019. https://katalog-perpustakaan.dinus.ac.id/index.php?p=show_detail&id=12034&keywords=.
- Ummah, M. S. (2019). Pengaruh Hubungan antar manusia (Human Relation) Terhadap Etos Kerja Karyawan London Beauty Centre (LBC) Kota Medan. In *Sustainability (Switzerland)* (Vol. 11, Issue 1).

Development of LKPD Through the RADEC Model to Improve Learning Outcomes of Pancasila Education for Class IV SDN 064990 Medan Johor

Reno Francius Simanullang¹, Surya Dharma¹, Sri Milfayetty¹

¹Universitas Negeri Medan, Sumatera Utara, Indonesia, 20221

Corresponding author e-mail: renosimanullang40@gmail.com

Article History: Received on 13 June 2025, Revised on 19 June 2025, Published on 20 June 2025

Abstract: This study develops Student Worksheets (LKPD) based on the RADEC (Read, Answer, Discuss, Explain, Create) learning model to improve learning outcomes of Pancasila Education on the material "Cooperation in My Environment" for fourth grade students of SDN 064990 Medan Johor. This study uses an R&D approach with the 4D model (Define, Design, Develop), without the Disseminate stage due to time constraints. Data collection includes expert validation of questionnaires, teacher and student response surveys, and pretests and posttests. Data analysis uses quantitative descriptive methods (SPSS and N-Gain). The validation results show that LKPD is very feasible in terms of content (86.11%), design (92.85%), and language (81.94%). The practical test produced very positive responses from teachers (92.7%) and students (88.3%). LKPD is proven to be effective in improving learning outcomes with an N-Gain score of 42.86% (moderate category). RADEC-based LKPD also succeeded in increasing character values and 21st century skills (collaboration, critical thinking, creativity). In conclusion, RADEC-based LKPD is very valid, practical, and quite effective for Pancasila Education learning, and can be replicated and become a reference for innovation in the Merdeka Curriculum.

Keywords: *Student Worksheet, RADEC Model, Pancasila Education, Learning Outcomes, Merdeka Curriculum*

A. Introduction

The improvement of the quality of education must continue to be encouraged in order to be able to keep up with the development of the times and prepare superior human resources. Especially in the 21st century, education continues to adapt to various innovations, especially in the learning process, in order to create more effective and relevant methods or models.

Adaptation in the field of education is inseparable from government policies in implementing the government system. One of the government policies in the current education system is the change in the subject of Citizenship Education (PKn) to Pancasila Education, which is mandatory in all schools starting this year. Changes in the name and focus of this subject often occur in accordance with the dynamics of the Indonesian nation and the character of its people. Therefore, Pancasila Education is flexible and able to adapt to developments in the era in Indonesia.

According to Mulyani et al., (2023:34) Pancasila Education is one of the main pillars in the formation of character and identity of the Indonesian nation. Students who successfully achieve competency in this subject are expected to be able to form a strong character, improve knowledge and skills, and develop critical thinking skills in order to achieve optimal learning outcomes. In addition, students are also expected to be able to implement the values of Pancasila Education in everyday life. However, in reality, the implementation of Pancasila Education is still not fully in line with the knowledge taught due to limitations in the implementation of learning and the material presented by educators has not been applied comprehensively in the practice of student life.

A good educator should be able to explain the material clearly and develop their skills in managing learning according to the material to be presented. In addition, educators also need to adapt to the rapid advancement of technology in order to be able to empower technology in the field of education so that the learning process is more effective. However, the reality in the field often does not match expectations, especially in the use of teaching materials. Many educators are still not fully ready to adapt to technological developments, especially in the creation of teaching materials that are increasingly developing and increasingly interesting. In fact, the use of technology in teaching materials is an important aspect in improving the quality of learning in the classroom.

In addition, the Student Worksheet (LKPD) teaching material is currently easily accessible and has undergone various creations, so that it can attract students' attention to be more active in learning. In addition, LKPD can help students to improve learning outcomes in class. LKPD can also direct students to be more active, sporty, and open to outside ideas. The development of LKPD has an important role in facilitating students to learn according to their intelligence. Through LKPD, students can be directed to maximize their intelligence and developing LKPD can accommodate students' intelligence easily, such as student characteristics and the material taught must be well combined to produce the right LKPD as a learning tool (Lestari, N. D., & Pratiwi, N. 2024).

Observations conducted at SDN 064990 Medan Johor showed several things that need to be considered to improve the potential of the learning process, especially in Pancasila Education learning in grade IV of Elementary Schools using the Merdeka Curriculum. The results of the observation showed that several classes still use exercise books alternately with deskmates. In fact, some students do not have exercise books to work on questions after learning.

This condition causes educators to not always provide questions from books or LKPD facilitated by the school. As an alternative, educators only provide questions by writing on the board so that all students can work on them without having to share books or write in turns. However, this can cause chaos and discomfort during the learning process.

The impact is that students will lose their natural and direct learning experience, and only respond to instructions from educators. Pancasila Education learning is very important as an approach developed in elementary schools to shape students' attitudes and morals. Therefore, improvements need to be made in the learning process to improve the quality of learning and achieve the desired educational goals.

According to Triana, N. (2021) Student Worksheets (LKPD) are an important tool in the learning process that contains a set of basic activities to maximize understanding and the formation of basic student abilities. Through LKPD, the initial arrangement of knowledge and understanding is empowered through the provision of learning media that allows learning situations to become more meaningful and productive. Therefore, LKPD has several important functions in learning, including: (1) Facilitating educators in managing the learning process by shifting the focus from teacher center to student center; (2) Helping educators direct students to find concepts through their own activities or in work groups; (3) Developing process skills, scientific attitudes, and arousing students' interest in the surrounding environment; (4) Facilitating educators in monitoring students' success in achieving learning targets. Thus, LKPD becomes an important tool in improving the quality of learning and achieving the desired educational goals.

In the development of Student Worksheets (LKPD), learning models play an important role in improving the quality of learning. Therefore, educators need to master various learning models that

can increase active participation of students and avoid boredom in the learning process. One of the effective learning models in accommodating these aspects is the RADEC (Read-Answer-Discuss-Explain And Create) learning model. This model is a systematic and structured approach, which involves students in an active and creative learning process. Through this model, students can develop their reading skills, answer questions, discuss, explain, and create something new.

The RADEC (Read-Answer-Discuss-Explain And Create) Learning Model is a student centered learning approach that actively involves students in solving learning difficulties. According to Sopandi (2017:17) and Sopandi et al. (2019:28), the RADEC learning model is suitable for Indonesian conditions and can be used as an innovative alternative learning model. Primary and secondary education educators can easily learn the syntax of the model and make it a suitable choice for use in this research location. The syntax is not only easy to learn, but is also made with the Indonesian education system in mind, which requires students to understand many scientific topics in a short time. This model can represent the latest developments in education, which aims to achieve literacy, character, and 21st century skills along with exam preparation for higher education and universities.

Students' intelligence can develop through the implementation of the RADEC Learning Model (Read-Answer-Discuss-Explain And Create). This model changes the paradigm of learning, especially in the role of educators. Educators not only give lectures, but also walk around the class to facilitate discussions, ask questions, and encourage students to be more creative and realize the value of learning.

Research by Mubiar Agustin, Yoga Adi Pratama, and Wahyu Sopandi (2022:34) shows that the RADEC learning paradigm can help develop students' thinking skills. This study used a

pre experimental method with a one-group pre-test and post-test design. The research sample was 27 class VA students at the Rahmatan Lil Alamin Integrated Islamic Elementary School (SDIT), Bogor.

The instrument used a critical thinking skills test and observation sheet. The results showed that students' critical thinking skills increased significantly, with an average score of 74 in the pre-test and 86 in the post-test. This difference is also supported by the results of the paired sample t-test at α (0.05), which shows a sig value of 0.000. In addition, the N-gain value (medium category) of 0.513 also shows an increase in students' critical thinking skills. Thus, it can be concluded that the implementation of the RADEC Learning Model can improve students' critical thinking skills.

In line with the research of Fitriyah et al., (2024:11) the results are, 1) Active participation of students in the learning process is influenced by the use of the RADEC learning paradigm. Students have the ability to articulate responses, challenge, clarify, solve problems, and generate concepts for new items related to modifying the state of objects; 2) The analysis shows that, with a sig value of $0.000 < 0.05$, the video-assisted RADEC learning paradigm has a good influence on concept mastery. In terms of mastery of material ideas about changes in the state of objects, the group that used the video-assisted RADEC learning model obtained more optimal results than the group that did not use it. So, from the background information provided above, it is clear that there is a close relationship between critical thinking, student learning outcomes, and the RADEC Learning Model (Read-Answer-Discuss-Explain And Create). This is relevant to the research that will be conducted with the title "Development of LKPD Through the RADEC Model to Improve Learning Outcomes of Pancasila Education for Grade IV at SDN 064990 Medan Johor".

The results of the researcher's initial survey showed several findings that need to be considered, first, educators are still relatively low in providing Student Worksheets (LKPD) to students. Second, educators have not maximized the creation of teaching modules, so that student learning outcomes are still low. Third, educators have not used a character-based approach in learning. In addition, the facilitated LKPD still does not refer to specifications and is incomplete.

Other findings show that some LKPD do not present examples of the application of concepts in students' daily lives. The contents of LKPD only consist of readings without pictures, colored printed animations, concept maps, and the language used is too complicated. This needs to be fixed to improve the quality of learning and facilitate students in understanding the concepts taught.

Therefore, the current problem is that educators at SDN 064990 Medan Johor use Pancasila Education teaching materials that are classified as very low, especially in the use of LKPD which should be able to develop the intelligence of the students themselves. Some of the LKPD used are also not in accordance with the characteristics of the students that have been observed, so that the learning system seems to force them to be able to follow the ongoing learning process and finally makes students bored in understanding the questions given by the educator.

Based on the description above, the author developed LKPD through the RADEC learning model which is expected that students feel happy to learn and enthusiastic in participating in learning so that they are able to grow their own character, moral attitudes, self-confidence, and independence to explore existing potential, and are able to apply it in everyday life. These reasons are factors for conducting research entitled "Development of LKPD Through the

RADEC Model to Improve Learning Outcomes of Pancasila Education Class IV at SDN 064990 Medan Johor".

B. Methods

This study uses a Research and Development (R&D) approach with the aim of producing a product in the form of a Student Worksheet (LKPD) based on the RADEC (Read, Answer, Discuss, Explain, Create) learning model and testing the effectiveness of its use in improving the learning outcomes of Pancasila Education for grade IV students.

The development model used in this study refers to the 4D model, namely Define, Design, Develop, and Disseminate. However, in this study only three stages were carried out, namely Define, Design, and Develop, considering the limitations of time and scope of the study.

The research instruments used consist of:

1. Validation questionnaire to measure product feasibility from the aspects of material, media design, and language,
2. Teacher and student response questionnaires to assess the practicality of the product,
3. Learning outcome tests in the form of pretests and posttests to assess the effectiveness of LKPD.

The data obtained were analyzed descriptively quantitatively. Product validation was analyzed based on the percentage score of eligibility. Product effectiveness was analyzed using a paired sample t-test with the help of SPSS, as well as N-Gain calculations to measure the increase in student learning outcomes according to Hake's criteria.

C. Results and Discussion

Product Validation Results Subject Matter Expert Validation

Validation was conducted in two stages. In the first stage, the average score of LKPD eligibility by material experts reached 65.27%, categorized as “eligible”. After revision, the score increased to 86.11%, categorized as “very feasible”. The overall average validation was 75.69%, indicating that the product had met the eligibility requirements for use in field trials.

Media Design Validation

The validation results by media design experts showed an increase from 83.92% in the first stage to 92.85% in the second stage. With an average of 88.38%, LKPD was declared very feasible visually and in design to support interesting and communicative learning.

Linguist Validation

Validation was conducted once with a score of 81.94%, indicating that the use of language in the LKPD was very appropriate, although there was minor input for improving the question instructions. Because the score was high, no second stage validation was conducted. Overall, the three validation aspects show that the RADEC-based LKPD product developed is suitable for use in field learning trials.

Summary of Data Analysis of Phase I and II Trial Results: Expert Validation Materials, Learning Media Design Expert, and Language Expert

From the overall validation results carried out by several experts including material experts, learning media design experts, and language experts on the developed products, so that they get a value that is worthy

of being tested in the field, with the average score obtained included in the category of being worthy of being used in field trials. Therefore, each assessment from the validator can be seen in the following summary table:

Table 1. Validator Summary Results

Validation	Stage 1	Stage 2	Criteria
Material Validation	65.27	86.11	Very Worth It
Media Design Validation	83.92	92.85	Very Worth It
Language Validation	81.94	-	Very Worth It

Based on table below, the validation value of the suitability of learning media can be clearly seen based on the following diagram:

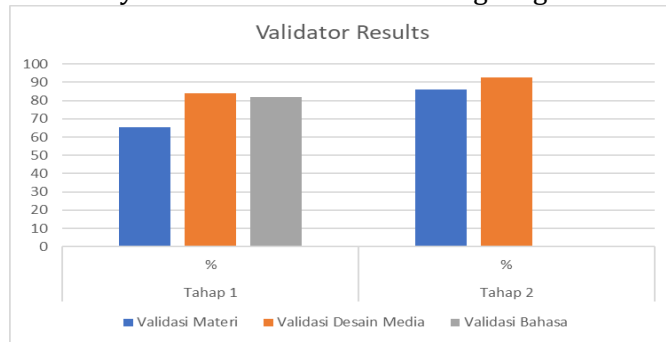


Figure 1. Summary Graph of Validation Results Assessment

The diagram above is a summary obtained from the validation results and has been carried out and assessed by several experts related to their fields. The average score obtained from the validation carried out in two stages, the first average score obtained from the material expert validator in stage I was 65.27%, in stage II obtained an average score of 86.11%. In the design of learning media stage I obtained an average score from the validator of 83.92%, in stage II obtained 92.85% and finally the validation carried out by the language expert validator with an average score obtained in stage I of 81.94%. It can be seen from the validation results that have been carried out, both those that are only in stage one and those that have reached stage two, it can be concluded that the learning media developed in the form of LKPD based on *read, answer, discuss, explain, create* (RADEC) from the overall score shows a very valid category (very feasible) so that the product developed is very feasible to be used for

testing and the LKPD developed is also in accordance with the syntax *read, answer, discuss, explain, create* (READ) contained in the LKPD.

Evaluation Result Data: Teacher Response Assessment and Response

Four teachers gave an assessment of LKPD with an average score of 92.7%, included in the very practical category. Teachers stated that LKPD is easy to use, interesting, and able to help the active learning process. The assessment and responses from this individual trial were to obtain input and criticism as well as suggestions on the products developed which can be seen in the following table:

Table 2. Results of Assessment and Teacher Responses to Learning Media in the Form of LKPD Based on *Read, Answer, Discuss, Explain, Create* (RADEC)

Average Score	Number of Respondents	Average	Criteria
70% ≤ to ≤100%	4	92.7%	Very Practical

Based on the results of the percentage assessment of the trial of teacher responses to LKPD based on *read, answer, discuss, explain, create*, it can be concluded that overall the percentage of the average value of the indicator is 92.7%. This shows that the range of values is at a score of 92.7% P <100% according to the practicality percentage scale of the LKPD learning media showing 100%, so this gets a very practical classification. So, the results of the LKPD learning media assessment assessed from teacher responses can be in the "very practical" category for use in learning.

Evaluation Result Data: Student Response Trial

A total of 30 fourth grade students gave an assessment of LKPD, with an average score of 88.3%. This shows that students feel LKPD is fun, easy to understand, and makes them more active in learning. From the trial that was carried out, the value of the response from the results of the student response trial to the developed LKPD will be obtained. Therefore, the results of the student response trial evaluation can be seen in the table below:

Table 3. Assessment and Responses from the Results of the Trial of Student Responses to the LKPD Learning Media Based on *Read, Answer, Discuss, Explain, Create* (RADEC) at SDN 064990 Medan Johor

Average Score	Number of Respondents	Average	Criteria
70% ≤ to ≤100%	30	88.3%	Very Practical

Based on the results of the percentage assessment of the trial of student responses to the LKPD learning media based on *read, answer, discuss, explain, create* (RADEC) on the Pancasila Education subject with the material of cooperation in my environment that has been done, so that it gets an average value of 88.3%. Where the results of this trial show a range of 88.3 <P <100%, this is in accordance with the assessment criteria of Yamansari (in Santoso, 2016) where the percentage scale of the practicality of learning media shows a value of 70 <P <100% getting a very practical classification. Therefore, the trial of student response results shows a value of 88.3 <P <100% where the value is in accordance with the assessment criteria, so that the value of the trial of student response results shows into the category of "very practical" to be used as a learning medium. The data obtained through the student response questionnaire were then analyzed to obtain the accumulation level of the LKPD learning media based on *read, answer, discuss, explain, create* (RADEC) which was developed can be seen in table as follows:

Table 4. Analysis of Teacher and Student Response Questionnaire Regarding LKPD Learning Media Based on *Read, Answer, Discuss, Explain, Create* (RADEC)

No	Validation	RTP	Average	Criteria
1	Teacher Response	92.7%	90.5%	Very Practical
2	Student Response	88.3%		Very Practical

Based on the overall data from the analysis of teacher and student responses to the use of LKPD learning media based on *read, answer, discuss, explain, create* (RADEC) can be seen from the results of the overall average value of 90.5%. From the results of the teacher's response consisting of 4 people including 1 homeroom teacher IV, and 3 other people are teachers who teach in class IV, while from the student response consisting of 30 class IV students.

Product Effectiveness Research Results
Results of Pretest and Posttest Data Analysis of Student Learning Outcomes

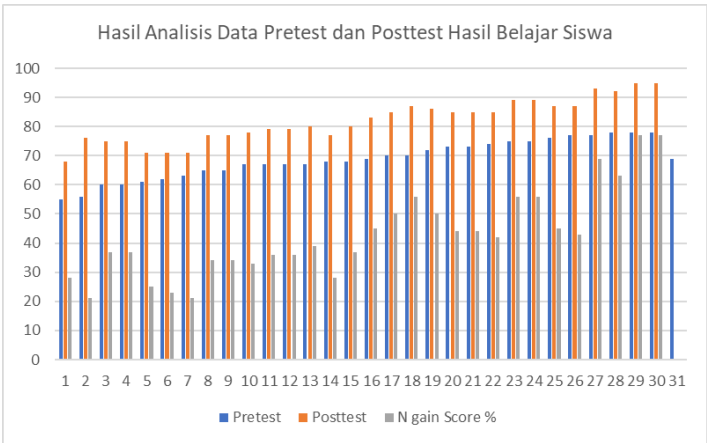
The field trial phase that is carried out will obtain data results and will be analyzed to determine the effectiveness value of learning media in the form of LKPD based on *read, answer, discuss, explain, create* (RADEC) on the subject of Pancasila education which was developed based on the results of the pretest and posttest trials conducted. However, before the posttest trial, students will carry out learning activities without using the LKPD learning media developed or before being given treatment. The results of the pretest and posttest can be seen in table below.

Table 5. Results of Pretest and Posttest Data Analysis of Student Learning Outcomes

No	Pretest	Posttest	Pre-posttest	Ideal Score	N gain Score	N gain Score %
N= 30	68,86667	81.9	12.7	31.2	0.4286	42.86

Based on the results of the table above, it can be described in the form of a histogram of the frequency distribution of the pretest and posttest results scores in the following image.

Figure 2. Results of Pretest and Posttest Data Analysis of Student Learning



Outcomes

The results of the pretest and posttest data analysis that have been conducted at SDN 064990 Medan Johor can be seen in the table above showing the results of the pretest and posttest in class IV. Almost all students obtained scores below the average and the completion score. However, after the pretest was conducted and the results of the trial were known, then a posttest trial or trial was conducted after the treatment was carried out, namely learning using learning media in the form of LKPD based on *read, answer, discuss, explain, create* (RADEC) for the posttest results themselves can be seen in the table above showing that there were 26 students who obtained scores above the average completion score or as many as 86% and 4 students obtained scores below the average completion score or as many as 14% who did not complete.

The table above shows that the N gain value is 42.86 %, it can be concluded that the trial conducted has been quite effective, where the average value of N gain shows in the category of quite effective. Then for the value of N gain score of 0.4286% where the value is in the moderate category, this is because the value of N gain 0.5645 is between the values $0.35 \leq g \leq 0.7$ with the category of N gain score "moderate". After the trial was conducted, the next stage was a validity test and reliability test. This trial was conducted with the aim of determining the validity of the questions that would be applied in the experiment conducted.

Student Learning Outcomes Using Learning Media RADEC Based LKPD

With a total of 30 students collected, they obtained a score of 55 to 95, with a Mode (Mo) of 85, a median (Me) of 81.5, and a mean (M) of 81.9.

Table 6. Student Learning Outcomes Using RADEC-Based LKPD Learning Media

The highest score	95
Lowest Value	68
Average	81.9
Mode	85
Median	81.5

The frequency distribution of learning outcomes about cooperation in my environment which was studied using learning devices (XPD) based on *read, answer, discuss, explain, create* (RADEC) can be seen in table below.

Table 7. Frequency Distribution of Student Learning Outcome Scores Using LKPD Learning Media Based on *Read, Answer, Discuss, Explain, Create* (RADEC)

Mark	Frequency
68	1
71	3
75	2
76	1
77	3
78	1
79	2
80	2
83	1
85	4
86	1
87	3
89	2
92	1
93	1
95	2

Based on the results of the table above, it can be described in a histogram the frequency distribution of the learning outcome scores of Pancasila education on the material of cooperation in my environment which is taught using LKPD learning media based on *read, answer, discuss, explain, create* (RADEC) in Figure below.

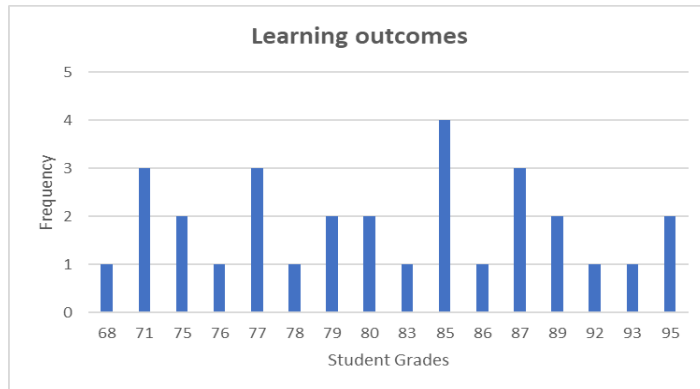


Figure 3. Histogram of Student Learning Outcome Scores Using LKPD Learning Media Based on *Read, Answer, Discuss, Explain, Create* (RADEC)

The histogram image above shows that the learning outcome scores of students using LKPD learning media based on *read, answer, discuss, explain, create* (RADEC) have increased.

Learning Outcomes of Student Character Using Media RADEC Based LKPD Learning

The results of the study indicate that the development and implementation of LKPD based on the RADEC model can improve students' affective attitudes, especially in the context of Pancasila Education learning on the material *Cooperation in My Environment*. During the learning process, students showed more positive changes in attitudes, such as an increased sense of responsibility, spirit of cooperation, and empathy for peers.

This is reflected in group discussion activities, where students are able to listen to friends' opinions, respect each other, and participate actively. In addition, an attitude of pride in being part of the Indonesian nation, an attitude of tolerance towards diversity, and the habit of working together also began to be seen to form during learning activities. By involving students in interactive and meaningful learning, this LKPD media has succeeded in fostering character values in students that are in accordance with the profile of targeted Pancasila students, namely independent,

critical thinking, and working together, which are embedded through collaborative learning experiences in groups.

They not only learn about the importance of cooperation theoretically, but also practice it through real interactions in the classroom. Evaluation of students' affectivity is also seen from their positive responses to the learning media. As many as 88.3% of students and 92.7% of teachers gave a "very practical" assessment, which reflects the high affective involvement of students during the learning process.

Learning Outcomes of Student Skills Using RADEC-Based LKPD Learning Media

The learning outcomes from the psychomotor aspect using RADEC-based LKPD also have a positive impact on students' practical skills. This is shown through the "Create" activity in the RADEC syntax, where students are assigned to create real products in the form of plant pots from used plastic bottles. This project encourages students to apply knowledge in the form of real actions, hone fine motor skills, and develop the ability to work together in completing tasks in groups. In addition, other activities such as filling out LKPD, writing discussion results improve writing skills, and presenting work results. In presentations, students are also trained to have the courage to appear in public, speak systematically, and use appropriate body language, all of which are forms of expressive motor skill development and using simple tools in the process of creating works. Thus, the psychomotor aspect of students develops systematically through structured and contextual activities and contributes directly to learning, not just passively or theoretically.

The assessment of these two aspects is supported by data from the results of a trial of 30 fourth-grade students at SDN 064990 Medan Johor. The response test showed that the LKPD media was not only "very feasible" in terms of material validation, design, and language, but also very practical in terms of use by teachers and students. Thus, the psychomotor aspect developed through the RADEC LKPD plays a major role in forming more holistic learning, in accordance with the principles of 21st-century learning and the Pancasila Student Profile.

D. Conclusions

Conclusion Based on the research results and discussion, the following conclusions can be drawn: Based on the research results and discussion, the following conclusions can be drawn: LKPD based on the RADEC model effectively improves the learning outcomes of grade 4 Pancasila Education students, with 86% of students completing and N-Gain 42.86% (quite effective). Expert validation shows that the product's feasibility is very high (material 86.11%, design 92.85%, language 81.94%). LKPD is also very practical to use (teacher response 92.7%, students 88.3%), facilitating teaching and student understanding. In addition, this LKPD has succeeded in strengthening character (mutual cooperation, tolerance) and 21st century skills (critical thinking, creativity, collaboration) through the "Create" activity.

References

- Amelia, N. (2017). Pengaruh Bimbingan Belajar Terhadap Hasil Belajar Peserta Didik Kelas Iv Sd Inpres Batangkaluku Kabupaten Gowa. Undergraduate (S1) Thesis, Universitas Islam Negeri Alauddin Makassar
- Ardianti, S., Lestari, H., & Trimulyo, J. (2023). Penerapan Model Pembelajaran Radec Terhadap Peningkatan Kemampuan Literasi Numerasi Siswa. *Jurnal Kajian Islam Modern*, 10(01), 59–67. <https://doi.org/10.56406/jkim.v10i01.343>
- Arikunto, S., Suhardjono, & Supardi. (2017). *Penelitian Tindakan Kelas*. PT Bumi Aksara.
- Arikunto, S. (2017). *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta. (n.d).
- Arsyad. 2015. *Media Pembelajaran*. Jakarta. Rajawali Press. (n.d).
- Dharma, S., & Siregar, R. (2020). Membangun Pengalaman Belajar Kewarganegaraan melalui Model Pembelajaran Project citizen pada Siswa. *Jupiis: Jurnal Pendidikan Ilmu-Ilmu Sosial*, 7(1), 100. <https://doi.org/10.24114/jupiis.v7i1.2303>
- Fahrurrozi, Edwita, Bintoro, T., Kusmawati, A. P., Zakiah, L., Sundari,

- F. S., & Murnivianty, L. (2022). *Model-Model Pembelajaran Kreatif dan Berpikir Kritis di Sekolah Dasar*. UNJ Press.
- Fierna, M., Lusie, J., Pamulang, U., Pratama, F. F., & Asmalinda, A. (2024). *Pendidikan pancasila*. May.
- Fitriyah, S. R., Ismail, A., & Isrok'atun. (2024). *Pengaruh Model Pembelajaran Read Answer Discuss Explain Creat (Radec) Berbantuan Video Terhadap Penguasaan Konsep Pada Materi Perubahan Wujud Benda*. 11(2502-4264), 1-10.
- Heru Nurgiansah. (2021). Pendidikan Pancasila Sebagai Upaya Membentuk Kependidikan Open Access at: <https://ejournal.undiksha.ac.id/index.php/JJPP>. 9(1), 33-41
- Internasional, J., Vol, K., Pratama, Y. A., Sopandi, W., & Hidayah, Y. (2020). *Machine Translated by Google Model Pembelajaran RADEC (Baca-Jawab-Diskusikan-Jelaskan Dan Buat) : Pentingnya Membangun Keterampilan Berpikir Kritis Dalam Konteks Indonesia*. 1(2), 109-115.
- Kementerian Riset, Teknologi, dan Pendidikan Tinggi: Jakarta.
- Kurniawan, D., Priharto, D. N., & Yusnawan, L. (2023). *Panduan Pendidik Pendidikan Pancasila untuk SD/MI Kelas IV*. Kementerian, Pendidikan, Kebudayaan, Riset, dan Teknologi.
- Lestari, A., & Suhandi, A. (2020). An Analysis of Hots in the 5th Grade Elementary School Students' Learning with Radec Model with the Theme of "Electricity Around Us." *International Conference on Elementary Education*, 2(1), 1574-1582.
- Lestari, H., Rahmawati, I., Yudianti, I. G. A., Rifatunisa, A., & Mardiatama, W. (2023). Implementasi Model Pembelajaran Radec Dalam Proyek Penguatan Profil Pelajar Pancasila, Kurikulum Merdeka Di Sekolah Dasar. *Primary Education Dedicate Journal*, 1(01), 9-18.
- Lestari, N. D., & Pratiwi, N. (2024). Pengembangan E-LKPD berbasis Project Based Learning (PjBL) pada Materi Laporan Keuangan. *Bedelau: Journal of Education and Learning*, 5(2).
- Margono. 2015. "Landasan dan Tujuan Pendidikan Pancasila" dalam Margono (Ed). *Pendidikan Pancasila Topik Aktual Kenegaraan dan Kebangsaan*. Malang: Universitas Negeri

Malang (UM Press).

- Marsela Yulianti, Divana Leli Anggraini, Siti Nurfaizah, & Anjani Putri Belawati Pandiangan. (2022). Peran Pendidik Dalam Mengembangkan Kurikulum Merdeka. *Jurnal Ilmu Pendidikan Dan Sosial*, 1(3), 290–298.
- Mubiar Agustin, Yoga Adi Pratama , Wahyu Sopandi, I. R. (2022). *Pengaruh Model Pembelajaran Radec Terhadap Keterampilan Jurnal Cakrawala Pendas*. 8(January 2021), 47–56.
- Mulyani, S., Nurmeta, I., & Maula, L. (2023). Analisis Implementasi Profil Pelajar Pancasila di Sekolah Dasar. *Jurnal Educatio FKIP UNMA*, Query date: 2024-03-01 22:45:44. <https://ejournal.unma.ac.id/index.php/educatio/article/view/5515>.
- Nurdin, I., & Hartati. (2019). *Metodologi Penelitian Sosial*. Media Sahabat Cendekia.
- Nurhayati, H., & , Langlang Handayani, N. W. (2020). Jurnal basicedu. *Jurnal Basicedu*, 5(5), 3(2), 524–532. <https://journal.uui.ac.id/ajie/article/view/971>
- Nur, R., Truvadi, L., Agustina, R., & Salam, I. (2023). Peran Pendidikan Pancasila dalam Membentuk Karakter Bangsa Indonesia: Tinjauan dan Implikasi. *Jurnal Advances in Social Humanities Research*, 1(4), 501–510.
- Prastowo, A. (2016). *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta: Diva Press
- Pratama, Y. A., Sopandi, W., & Hidayah, Y. (2020). Model Pembelajaran Radec (Read-Answer-Discuss-Explain And Create): Pentingnya Membangun Keterampilan Berpikir Kritis Dalam Konteks Keindonesiaan. *Indonesian Journal of Learning Education and Counseling*, 2(1), 1–8. <https://doi.org/10.31960/ijolec.v2i1.99>
- Pratama, Y. A., Sopandi, W., Hidayah, Y., & Trihatusti, M. (2020). Pengaruh model pembelajaran RADEC terhadap keterampilan berpikir tingkat tinggi siswa sekolah dasar. *JINoP (Jurnal Inovasi Pembelajaran)*, 6(2), 191–203. <https://doi.org/10.22219/jinop.v6i2.12653>

- Priansa, D. J. (2019). *Pengembangan Strategi & Model Pembelajaran Inovatif, Kreatif dan Prestatif Dalam Memahami Peserta Didik*. CV. Pustaka Setia.
- Putri, M. A. (2021). Pengaruh Bimbingan Orang Tua Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam Di Kelas XI IPA SMA YLPI Pekanbaru (Doctoral Dissertation, Universitas Islam Riau).
- Saino, Y. A. (2022). Penguatan Ideologi Pancasila Sebagai Penangkal Radikalisme Agama. *Jurnal Filsafat Indonesia*, 5(2), 147–160
- Setyawan, J., Roshayanti, F., & Novita, M. (2023). Model pembelajaran RADEC berbasis STEAM pada materi sistem koloid mampu meningkatkan kemampuan berpikir kritis siswa. *Practice of The Science of Teaching Journal: Jurnal Praktisi Pendidikan*, 2(1), 18–26.
<https://doi.org/10.58362/hafecspost.v2i1.29>
- Slameto. (2021), *Belajar Dan Faktor-Faktor Yang Mempengaruhi (Revisi)*. Pt Rineka Cipta
- Sopandi, W. (2017). The Quality Improvement Of Learning Processes And Achievements Through The Read-Answer-Discuss-Explain-And Create Learning Model Implementation. Conferenced Paper. Kuala Lumpur 20 September 2017.
- Sopandi, P. H. W., Sujana Atep, Sukardi, R. R., Sutinah, C., Yanuar, Y., Imran, E., & Suhendra, I. (2019). *Model Pembelajaran RADEC: Teori & Implementasi di Sekolah*. UPI PRESS.
- Sudjana. 2016. *Metode Statistika*. Bandung: Tarsito
- Sugiyono. (2015). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Alfabeta.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif* (Setiyawami (ed.)). Alfabeta CV.
- Sugiyono. (2019). *Metode penelitian pendidikan (pendekatan kuantitatif, kualitatif, dan R&D)*. (ke-12). ALFABETA, cv.
- Susanto, A. (2016). *Teori Belajar & Pembelajaran di Sekolah Dasar*. Kencana.
- Sutantri, N., Sopandi, W., Wahyu, W., & Latip, A. (2023). Model

- Pembelajaran RADEC (Read, Answer, Discuss, Explain, and Create) Ditinjau dari Perspektif Pembentukan Profil Pelajar Pancasila. *EduMatSains: Jurnal Pendidikan, Matematika Dan Sains*, 7(2), 254–269.
<https://doi.org/10.33541/edumatsains.v7i2.4045>
- Titin, M., Qomario, & Nureva. (2021). Pengaruh Model Pembelajaran Radec Terhadap. *Jurnal Cakrawala Pendas*, 7(1), 140–152.
- Triana, N. (2021). *LKPD Berbasis Eksperimen: Tingkatkan Hasil Belajar Siswa*. Guepedia.
- Usmi, R., & Samsuri, S. (2022). Urgensi pendidikan kewarganegaraan global dalam kurikulum pendidikan pancasila dan kewarganegaraan di abad 21. *Jurnal Ilmiah Pendidikan Pancasila dan Kewarganegaraan*, 7(1), 149–160
- Wahyudin, H., Pendidikan, S., & Guru, P. (2024). *Strategi Pembelajaran Pendidikan Pancasila yang Efisien untuk Kelas I Sekolah Dasar*. 5, 570–577.

Android-Based Biology Learning Media: A Breakthrough to Improve Senior High School Students' Learning Outcomes

Atmi Suprpti¹, Ervan Johan Wicaksana¹, Dian Arisandy Eka Putra Sembiring¹

¹Universitas Jambi, Jambi, Indonesia

Corresponding author e-mail: ervan_jw@unja.ac.id

Article History: Received on 19 June 2025, Revised on 20 June 2025,
Published on 21 June 2025

Abstract: This study aims to develop an Android-based biology learning media and determine its effectiveness in improving the learning outcomes of 11th-grade high school students on the circulatory system material. The research method used is Research and Development (R&D) with the ASSURE development model. The trial subjects consisted of 6 students for the small group and 18 students for the large group. Validation results from material and media experts indicated that the media was in the "Highly Feasible" category. Teacher and student assessments also showed positive responses with a "Feasible" category. Students' learning outcomes increased significantly after using the developed learning media, as evidenced by the comparison of pretest and posttest scores.

Keywords: Android, Learning media outcomes, System circulatory

A. Introduction

Learning outcomes are changes that occur in students as a result of the learning process, including cognitive, affective, and psychomotor aspects. These changes can be observed in the development of

students' knowledge, attitudes, and skills. Learning outcomes reflect behavioral changes in students after participating in learning activities, which are influenced by various factors such as the physical and psychological conditions of the students, family environment, school environment, and social environment (Haryadi, 2021).

That learning outcomes can be seen when students experience a change from not knowing to knowing, or from not understanding to understanding. Learning outcomes reflect changes within students as demonstrated through their mastery of knowledge, attitudes, and skills in accordance with instructional objectives. These three domains cognitive, affective, and psychomotor are key components in evaluating learning outcomes. Their achievement is significantly influenced by the strategies, models, and media employed during the learning process (Nurhasnah et al., 2023). One approach to improving learning outcomes is through the use of appropriate learning media. Learning media can help students understand concepts more effectively, increase learning motivation, and make learning more enjoyable (Wahyuningtias et al., 2020). When learning media are tailored to the characteristics and needs of students, learning outcomes tend to improve significantly.

However, the reality in the field shows that there are still obstacles in the learning process that can affect students' learning outcomes. Based on initial observations at SMAN 14 Kota Jambi, it was found that the school is undergoing facility construction, resulting in the learning activities being divided into two shifts: morning and afternoon. Consequently, the lesson time was shortened from 45 minutes to 25 minutes. In addition, learning facilities such as printed books are still very limited. The books are only available at school and cannot be taken home, so students do not have sufficient access to study independently at home.

The limitation of printed book media directly impacts students' learning outcomes. Those who do not have full access to learning resources tend to experience difficulties in understanding the material. Printed book media that cannot be accessed independently by students can limit their exploration of the subject matter, hinder concept comprehension, and reduce learning motivation (Akbar, 2017). The use of printed books as learning resources poses challenges when students lack adequate guidance or access. Their reliance on teachers to understand the book content results in low learning autonomy, limited material exploration, difficulty in grasping concepts, and ultimately a decline in learning motivation (Solong et al., 2024). When learning media is less supportive, information transfer does not run optimally, ultimately resulting in low learning outcomes.

Interviews with two biology teachers at SMAN 14 Kota Jambi also revealed that an uncondusive classroom environment and low student motivation pose significant challenges. The teachers have attempted to use learning media such as YouTube videos and presentations, but there has been no utilization of Android application-based media. In fact, from a survey conducted with 129 students, almost all are active Android smartphone users. About 53.5% of them stated that the circulatory system material is difficult to understand due to many unfamiliar terms, and they need interactive and easily accessible learning media.

Currently, the development of digital technology offers various solutions to learning challenges, one of which is through Android application-based learning media. Mobile learning media can increase learning flexibility because it can be accessed anytime and anywhere. Besides providing attractive visual displays, this media also allows the integration of audio, video, text, images, and interactive quizzes that can help students understand the material comprehensively (Kartini et al. 2020). That digital learning media

can encourage active participation, critical thinking, and collaboration between students and teachers (Ciric et al. 2021).

Therefore, teachers are expected to effectively utilize learning media to motivate students, so that learning objectives and outcomes can be achieved (Tafonao, 2018). In today's digital era, the use of smartphones as learning media is highly potential. Smartphones have become multifunctional devices supporting communication, information searching, and learning (Choi et al. 2016). Android, as the most widely used operating system among students, provides ease in developing and accessing learning applications (Annisa et al., 2017). One of the main benefits of Android is its use as a learning media platform. This research provides a novelty in the form of Android-based biology learning media specifically developed to address the unique learning challenges faced by students in a dual-shift school with limited access to textbooks.

B. Methods

This development research uses the R&D (Research and Development) method, which is a research method used to produce a specific product and to test the effectiveness of the resulting product. These products are not limited to books, modules, or learning aids in classrooms or laboratories, but can also include educational games that motivate students (Amir, 2019). Research and development methods constitute a scientific system aimed at updating or even producing a new product by analyzing, researching, designing, producing, and testing the product's validity (Sugiyono, 2019). The R&D method is very popular in the development of media and learning tools because this approach allows the developed product to be thoroughly tested in the field and be relevant to user needs.

The development model used in this study is the ASSURE model, which focuses on lesson planning for actual classroom learning situations. This model leverages media and technology, which have become essential tools to assist students in achieving learning objectives (Smaldino et al., 2024). The stages in developing learning media using the ASSURE model include several components, namely: (A) Analyze Learner Characteristics; (S) State Objectives; (S) Select Method, Media, or Materials; (U) Utilize Media and Materials; (R) Require Learner Participation; (E) Evaluate and Revise.

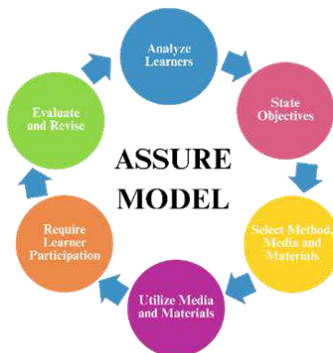


Figure 1. ASSURE Step

The determination of the validity of the media and the validity of the learning materials to be developed is done by examining the results of a questionnaire consisting of 16 questions regarding the feasibility of the product, to analyze the calculations using:

Table 1. Validation Assessment Categories for Media Experts and Content Experts

Score Scale	Score Range	Percentage (100%)	Description
4	52 – 64	81.2 – 100	Very Feasible
3	40 – 51	62.5 – 79.7	Feasible
2	28 – 39	43.7 – 60.9	Not Feasible
1	16 – 27	25 – 42.1	Very Not Feasible

The determination of validity based on small group testing was conducted with 6 students, and large group testing was conducted

with 18 students from class XI Science 2 at SMAN 14 Kota Jambi, representing different levels of academic achievement (high, medium, low). The method for determining students' perceptions in the small group test, using a total of 16 questionnaire items, is as follows:

Table 7. Assessment Categories for Small Group Testing

Score Scale	Score Range	Percentage (100%)	Description
4	312 – 384	81.3 – 100	Very Feasible
3	240 – 311	62.5 – 80.1	Feasible
2	168 – 239	43.7 – 62.2	Not Feasible
1	96 – 167	25 – 43.5	Very Not Feasible

Table 8. Assessment Categories for Large Group Testing

Score Scale	Score Range	Percentage (100%)	Description
4	1,560 – 1,920	81.3 – 100	Very Feasible
3	1,200 – 1,559	62.4 – 80.2	Feasible
2	840 – 1,199	43.8 – 62.3	Not Feasible
1	480 – 839	25 – 43.7	Very Not Feasible

The N-Gain test is an analytical method used to measure the effectiveness of a learning intervention by comparing the increase in scores between the pretest (before learning) and posttest (after learning). The formula for calculating the N-Gain is as follows:

$$\text{N-Gain} = \frac{\text{Posttest Score} - \text{Pretest Score}}{\text{Maximum Score} - \text{Pretest Score}}$$

Remarks:

Pretest Score: the score obtained before the treatment

Posttest Score: the score obtained after the treatment

Maximum Score: the highest possible score that can be achieved

Figure 2. The Formula for Calculating The N-Gain

With the N-Gain criteria as shown in the table below:

Table 4. N-Gain Score Criteria

Score	N-Gain Criteria
N-Gain > 70%	High
$30\% \leq \text{N-Gain} \leq 70\%$	Medium
N-Gain < 30%	Low

C. Results and Discussion

Analyze Learner

A general analysis was conducted to identify the fundamental problems encountered during the classroom learning process. Based on field interviews with the biology subject teacher for class XI Science, it was found that students are still using the K13 curriculum, face shortened learning time allocations, and lack adequate learning facilities. As a result, students experience difficulties in understanding several biology topics during the learning process. These challenges can affect the quality of students' learning processes, making them less optimal.

Competency analysis was conducted to determine the competencies needed by students in the learning process. The identification of students' initial abilities was based on interviews with the biology teacher, who stated that students were not very conducive during the learning process. This was supported by the results of a student needs questionnaire, which showed that students were interested in new learning media, and 53.5% of them found it difficult to understand the sub-topic of blood circulation due to its abstract

nature and the presence of many unfamiliar terms. Therefore, appropriate learning media are needed.

Learning styles are an important factor in improving academic achievement and the quality of learning in education. Learning styles are related to an individual's personality, which can be influenced by innate traits, experiences, education, and developmental history through the senses (Surur, 2020). The analysis of students' learning styles was obtained from questionnaire results distributed to students of classes XII1, XII2, XI1, and XI2. The results showed that 70.5% of students were interested in interactive learning media and found it easier to understand learning materials presented in digital media format. This study is limited to the circulatory system material and was conducted only in one school setting. Future research may expand to other biology topics and a broader population to validate generalizability.

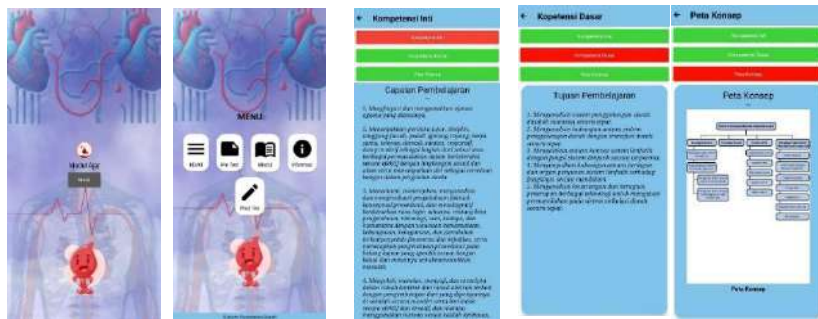
State Standards and Objectives

The second stage is determining the targets or standards and objectives, which are derived from the lesson syllabus aligned with the core competencies and basic competencies in the 2013 curriculum. After analyzing the Core Competencies and Basic Competencies, the next step is to formulate learning objectives for the topic of blood circulation, specifically the sub-topic of the lymphatic system. The learning objectives are as follows: (1) Students are able to accurately analyze the blood classification system in the human body; (2) Students are able to analyze the relationship between the blood classification system and blood transfusion accurately; (3) Students are able to correlate the lymphatic system with its functions in detail; (4) Students are able to conclude the relationship between organ tissues and components of the lymphatic system and their functions in depth; (5) Students are able to analyze the advantages and disadvantages of applying

various technologies to address blood circulation problems accurately.

Select Strategies, Technology, Media, and Materials

The selection of strategies, technology, media, and teaching materials is an essential component to support students in achieving the learning objectives more easily. The methods used in this development are question-and-answer and discussion. The learning media developed is an Android-based learning application that can be accessed using an Android smartphone. There are six components included in the application-based learning media product, as follows figure 3:



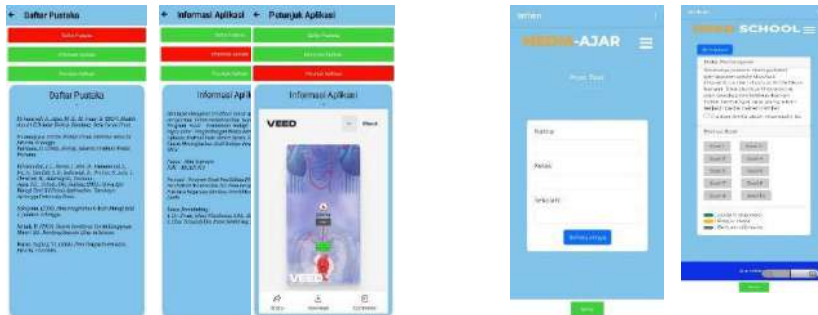
(a) Home page of the application

(b) Core & basic competencies



(c) Pretest

(d) Module/material



(e) Application information

(f) Posttest

The use of this learning media can be applied to all learning methods because it utilizes technology in the form of an application accessed via smartphone. The media serves as a tool to deepen understanding and encourage students to be active in their education, in addition to functioning as a means of disseminating information in the context of modern education (Nurazizah, 2024). The Android application is designed for offline access after download and can be provided to students by the teacher for independent learning at home.

Utilize Technology, Media and Materials

Before being used as a learning medium, several validations from experts are needed to determine the feasibility and suitability of the learning media to be developed. This Android application-based learning media will be developed and validated by material experts twice. After validation, suggestions and comments will be obtained to improve the product so that the quality of the final product will be maximized. The results of the material validation and the suggestions and comments provided by the validators are as follows:

Table 5. Validation Results for Material Expert Aspect

No	Indicator	Validation Round

		Validation 1	Validation 2
1	Competency	58.3%	91,6%
2	Content	59.3%	96,8%
3	Language	70.0%	100%
	Average (%)	57.8%	98,8%
	Category	Feasible	Very Feasible

The results of the material expert validation showed an increase in percentage from the first validation stage to the second, based on the assessment aspects. In the first stage, the validation by the material expert obtained a percentage of 57.8% with the category "Feasible." After making improvements, a second validation was conducted, resulting in a percentage of 98.8% with the category "Very Feasible." These validation results indicate that the developed learning media product is suitable for field testing. It can be concluded that the quality of the developed product meets the expected indicators, which were continuously improved in terms of basic competencies, learning objectives, content, and language aspects.

According to Marisa et al. (2023), after receiving feedback and suggestions from validators, the researcher revised the product based on the analysis results. The developed learning media fulfilled the validity criteria based on the established indicators.

This Android-based learning media will be developed and validated by media experts in three stages. After each validation, suggestions and comments will be gathered to improve the product so that the quality of the final product can be optimized. The result are follows:

Table 6. Validation Results for Media Expert Aspect

No	Indicator	Validation Round		
		Validation 1	Validation 2	Validation 3
1	Appearance	72.7%	79,5%	100%
2	Programming	70.0%	90%	95%
	Average (%)	71.8%	82,8%	100%

Category	Feasible	Very Feasible	Very Feasible

The results of the media expert validation showed an increase in percentage across the first, second, and third validation stages based on the assessment aspects. In the first stage, the media expert validation obtained a percentage of 71.8% with the category "Feasible." Improvements were then made to the media, and the second validation was carried out, resulting in a percentage of 82.8% with the category "Very Feasible." Further improvements were made based on suggestions, and the third validation achieved a perfect score of 100% with the category "Very Feasible". It can be concluded that the quality of the developed learning media product aligns with the predetermined indicators, which were continuously improved in terms of basic competencies/indicators/learning objectives, content, and language aspects.

These improvements were made to ensure the product is attractive and feasible for field trials. This is in line with Hanin & Lutfi (2023), who stated that the product validation stage is conducted to assess whether the developed interactive learning media is appropriate to be implemented as one of the learning resources for students.

Require Learner Participation

The Android-based learning media that has been validated by media and material experts and declared feasible for field testing was subsequently given to the biology subject teacher at SMAN 14 Kota Jambi for evaluation. The teacher's evaluation of the media was conducted by providing a questionnaire to gather opinions, suggestions, and comments regarding the product being tested.

Table 7. Teacher Evaluation Results

No	Indicator	Score
1	Content Feasibility	78.5
2	Language	68.7

3	Presentation	75.0
4	Graphics	66.6
Average (%)		71.8%
Category		Feasible

Based on the table, the evaluation result obtained a score of 46 out of a maximum score of 64, resulting in a product quality percentage of 71.8% with the category "Feasible." The teacher's assessment indicates that the developed learning media product is feasible to be tested in the field.

The small group trial was conducted by distributing questionnaires to 6 students selected based on high, medium, and low levels of learning ability. The results of the small group trial on the developed learning media product are as follows.

Table 8. Small Group Testing

No	Indicator	Score
1	Feasibility	86.1
2	Language	89.5
3	Presentation	83.3
4	Appearance	85.4
Average (%)		85.9%
Category		Highly Feasible

The small group trial was conducted on 6 students from grade XI IPA. This trial involved completing an evaluation questionnaire consisting of 16 items in a single session. Based on the small group results table, the total score percentage of 85.9%, which is categorized as feasible to proceed with a large-scale trial.

Table 9. Large Group Testing

No	Indicator	Score
1	Feasibility	87
2	Language	87.5
3	Presentation	84

4	Appearance	86.8
	Average (%)	81.2%
	Category	Highly Feasible

The large group trial was conducted on 18 students from grade XI IPA by completing an evaluation questionnaire consisting of 16 questions. The large group trial was carried out in a single session, resulting in a total percentage of 81.2%, which is categorized as highly feasible for development.

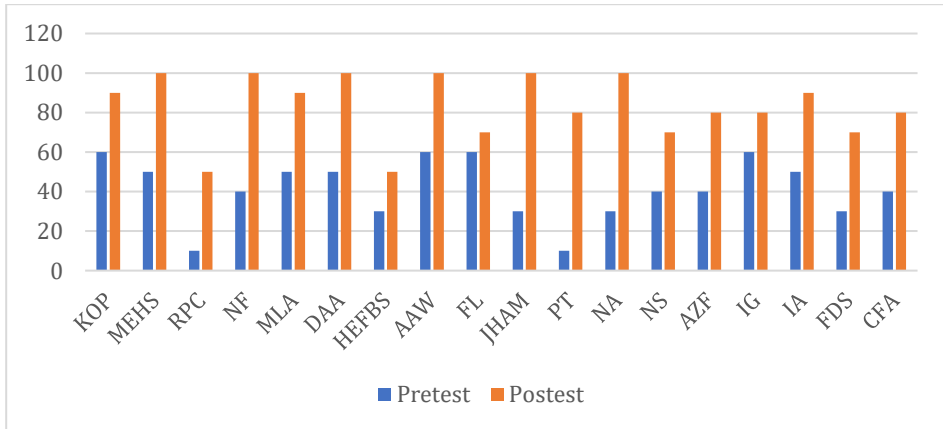
Normality testing was used to check whether the data were normally distributed. If the significance value is > 0.05 , data is normal; if < 0.05 , it is not (Rizka et al., 2023). The pretest-posttest learning data had Asymp. Sig. (2-tailed) = $0.048 < 0.05$, indicating the data were not normally distributed. Therefore, a non-parametric test, the Mann-Whitney test, was used. The Mann-Whitney test resulted in Asymp. Sig. (2-tailed) = $0.000 < 0.05$, indicating a significant difference between pretest and posttest scores. Thus, the Android-based Biology Learning Media significantly influenced student learning outcomes.

The Mann-Whitney test result indicated a significant difference in student learning outcomes, which supports the conclusion that the developed media had a real impact on improving students' understanding.

Table 10. N-Gain Score

	N	Minimum	Maximum	Mean	Std. Deviation
NGain Score	24	.25	1.00	.7292	.23341
NGain Persen	24	25.00	100.00	72.9299	23.341111
Valid N (listwise)	24				

Figure 4. Large Group Testing Pretest & Posttest Diagram



The N-Gain score calculation showed an average of 72.93%, categorized as "Effective" based on the N-Gain effectiveness interpretation table. This suggests that the Android-based Biology Learning Media effectively improves student learning outcomes.

The large group trial was conducted by distributing questionnaires to 18 students selected based on high, medium, and low learning abilities. This trial was carried out on students of grade XI at SMA Negeri 14 Kota Jambi, who were then given a questionnaire in the form a consisting of 16 questions. The product trial with 18 students (large group) using a questionnaire showed an assessment score of 81.2%, categorized as "Very Feasible," supported by an increase in learning outcomes from a pretest average of 41.1% to a posttest average of 83.3%, an improvement of 42.2%.

This demonstrates that the developed learning media positively impacted student learning and is suitable as an instructional aid to facilitate classroom learning. Teachers assess learning outcomes through various methods and tools to gauge students' achievement of competencies (Mahdiansyah, 2018). Appropriate learning media

aligned with student abilities and conditions supports the success of the learning process (Marbella et al., 2024).

Based on the results obtained, there was a good evaluation from the teacher and a positive response from the students. This is evidenced by the average teacher evaluation, which falls into the "good" category, and the student responses, which are categorized as "very good." Likewise, the significant improvement in pretest and posttest scores indicates that the developed media product is feasible to be used as a learning aid and can facilitate the teaching and learning process in the classroom.

Evaluate and Revise

The revision stage was carried out after each validation cycle by implementing the suggestions given by the experts, especially regarding competency formulation, content structure, and programming design to optimize the quality of the media. The advantages of this android-based learning media are that it can be accessed anywhere due to its flexibility.

The use of this learning media is easy and practical, so students do not need special skills to access it. There are evaluation questions useful for measuring students' level of understanding of the material presented. The drawbacks of this android-based learning media are that the application only focuses on the sub-material of the blood circulation system. Before using the application, the app file must be downloaded. Accessing the app requires an online connection, so often the process is hindered by internet speed. During the learning process, students' attention is easily distracted by other applications.

D. Conclusions

Based on the research and discussion on the biology learning media developed as an Android-based application, the conclusions are; The development process used the ASSURE model consisting of six stages: analyzing learner characteristics, stating objectives, selecting methods/media/materials, utilizing media and materials through expert validation, involving learners via trials with biology teachers and students, and evaluating and revising based on expert feedback.

The Android-based learning media on the blood circulation system for 11th-grade science students is feasible for use in learning. This is supported by expert validation results with 96.8% (material experts) and 98.4% (media experts), both categorized as "Highly Feasible". Biology teachers rated the media with a feasibility score of 71.8%, categorized as "Feasible," indicating it can be used as an alternative learning media. Student responses were positive, with small group trials scoring 85.9% and large group trials scoring 81.2%, both in the "Highly Feasible" category. Student learning outcomes improved significantly after using the media, demonstrated by an average increase of 42.2 points from pretest to posttest scores.

E. Acknowledgement

I would like to express my sincere gratitude to all parties involved in the writing of this article who have contributed their time, effort, and resources. I hope this article will be beneficial in the future.

References

- Akbar, S. (2017). *Instrumen Perangkat Pembelajaran*. Bandung: Remaja Rosdakarya.
- Annisa, A., Rachmadtullah, R., & Riana, M. (2017). Pemanfaatan smartphone android sebagai media pembelajaran. *Jurnal Pendidikan Teknologi dan Kejuruan*, 13(1), 23-28.

- Arifin, Z. 2012. *Evaluasi Pembelajaran*. Bandung: Remaja Rosdakarya.
- Choi, et. al, W. (2016). The Effects of Laughter Therapy Interventions for Smartphone Addicts. *International Journal of Bio-Science and BioTechnology*.
- Ciric, Z., Sedlak, O., Horvat, A. M., & Stojic, D. (2021). Information Technology Impact On Education For The Development Profession Standards. *EDULEARN21 Proceedings*, 5723–5728.
- Hanin, F. & Lufri. (2023). Meta-Analisis Validitas Media Pembelajaran Interaktif pada Pembelajaran Biologi. *JOTE: Journal On Teacher Education*. 4(4): 532-539.
- Haryadi. (2021). *Psikologi Pendidikan*. Yogyakarta: Deepublish.
- Hidayat, W., Putri, R., Wiwin, Y. (2021). Uji Validitas dan Reabilitas Angket Kepercayaan Diri. *Jurnal FOKUS*. 4(5): 367-372.
- Kartini, K.S., & I.N.T.A Putra. (2020). Pengaruh Penggunaan Media Pembelajaran Interaktif Berbasis Android Terhadap Hasil Belajar Siswa. *Jurnal Redoks: Jurnal Pendidikan Kimia dan Ilmu Kimia*. 3(2): 8-12. ISSN: 2614-7300.
- Mahdiansyah. (2018). Evaluasi Pelaksanaan Sistem Penilaian Hasil Belajar Siswa. *Jurnal Penelitian Kebijakan Pendidikan*. 11(2): 48-63.
- Marbella, F., Silvia, P., Tria, P.M. (2024). Validitas Media Digital Nearpod untuk Pembelajaran Membaca Puisi Siswa Kelas X SMA. *Journal of Education Research*. 5(3): 2600-2607.
- Marisa, A., Agustiany, D.P., Riza, A., Atika, Z. (2023). Proses Validasi Pengembangan Media Pembelajaran dengan iSpring 11. *Wahana Matematika dan Sains: Jurnal Matematika, Sains, dan Pembelajarannya*. 17(2): 45-55.
- Norfai. (2021). *Statistika Non-Paramterik untuk Bidang Kesehatan (Teoritis, Sistematis dan Aplikatif)*, Klaten: Lakeisha.
- Nurhasnah, R., Remiswal, R., & Sabri, A. (2023). Ranah Kognitif, Afektif, dan Psikomotorik sebagai Objek Evaluasi Hasil Belajar. *Jurnal Pendidikan Tambusai*, 7(3), 28204–28220. <https://doi.org/10.31004/jptam.v7i3.11169>

- Nurhaswinda., Aklilah, Z., Juita, G., Marshella, S.Z., Raesa, A.A., Wahida, A., Yuni,F. (2025). Tutorial Uji Noralitas dan Uji Homoginitas dengan Menggunakan Aplikasi SPSS. *Jurnal Cahaya Nusantara*. 1(2): 55-68.
- Quraissy, A., & Madya, S. (2021). Analisis Nonparametrik Mann Whitney Terhadap Perbedaan Kemampuan Pemecahan Masalah Menggunakan Model Pembelajaran Problem Based Learning. *VARIANSI: Journal of Statistics and Its Application on Teaching and Research*, 3(1), 51-57. <https://doi.org/10.35580/variansiunm23810>.
- Sarip, M., Amintarti, S., & Utami, N. H. (2022). Validitas Dan Keterbacaan Media Ajar E-Booklet Untuk Siswa SMA/MA Materi Keanekaragaman Hayati. *JUPEIS: Jurnal Pendidikan dan Ilmu Sosial*, 1(1), 43-59.
- Smaldino, S. E., Lowther, D. L., & Mims, C. (2024). *Instructional technology and media for learning* (12th ed.). Pearson.
- Solong, N. P., Igirisa, M. A., Mustapa, I., & Labaru, S. T. (2024). Kesulitan peserta didik dalam memanfaatkan buku cetak sebagai sumber belajar Tajwid di SMP 1 Limboto Kabupaten Gorontalo. *Konstruktivisme: Jurnal Pendidikan dan Pembelajaran*, 16(2), 371-379. <https://doi.org/10.35457/konstruk.v16i2.3662>
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabeta.
- Surur, A. M. (2020). Ragam Strategi Pembelajaran. Kediri:AA. Rizky.
- Suryani, Y. E. (2017). Pemetaan Kualitas Empirik Soal Ujian Akhir Semester Pada Mata Pelajaran Bahasa Indonesia SMA di Kabupaten Klaten. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 21(2), 142-152.
- Tafonao, T. (2018). Peranan media pembelajaran dalam meningkatkan minat belajar mahasiswa. *Jurnal Komunikasi Pendidikan*, 2(2), 103-114.
- Wahyuningtias, R., Bambang, S.S. (2020). Pentingnya Media Pembelajaran Guna Meningkatkan Hasil Belajar Di Sekolah Dasar. *Jurnal Edukatif: Jurnal Ilmu Pendidikan*. 2(1): 23-27.

Widoyoko, S. E. P. (2018). *Penilaian Hasil Pembelajaran Di Sekolah*.
Pustaka Pelajar.

A Proposal of Rewards-Linked Performance Development System: A Case Study of PT MNO

Danang Muchammad Gumilang¹, Yudo Anggoro¹

¹Master of Business Administration Program, Institut Teknologi
Bandung, Bandung

Corresponding author e-mail: danang_gumilang@sbm-itb.ac.id

Article History: Received on 19 June 2025, Revised on 22 June 2025,
Published on 24 June 2025

Abstract : This study highlights the gap between formal performance development values and hierarchical work culture in emerging market FMCG companies, specifically in PT MNO, Indonesia. This qualitative research proposes a reward-integrated Performance Development System (PDS) that aligns with agile transformation goals and cultural realities. Data from in-depth interviews, surveys, HR documents, and performance reports indicate that the existing PDS is ambiguous, disconnected from career development, bureaucratic, and inconsistent with rewards. Cultural aspirations such as agility and autonomy are hampered by high power distance and collectivist norms, reducing clarity and trust. Therefore, a new PDS model that is culturally responsive and behaviorally aligned is developed. The model includes shared goal setting, continuous feedback, transparent communication of performance and reward expectations, and competency-based achievement tied to financial incentives and career mobility. This approach is expected to increase employee engagement, fairness, system adoption, and alignment with business agility. This study makes a significant contribution as the first adaptive PDS blueprint that integrates a transparent dual-track reward mechanism while

bridging the barriers of hierarchical culture with agile performance demands in emerging markets. It offers practical guidance for HR leaders and transformation architects.

Keywords: Performance Development System, Employee Engagement, Rewards Alignment, Cultural Fit

A. Introduction

In today's rapidly evolving Fast-Moving Consumer Goods (FMCG) industry, failure to adapt is no longer a gradual risk but an imminent threat. Global examples abound such as Kodak's delayed response to digital photography or several traditional cosmetics giants losing ground to agile, influencer-driven startups—that illustrate how inflexibility in organizational design and talent systems can result in lost market share, talent drain, or even collapse. In the digital era, where consumer expectations shift in real time and speed-to-market is critical, performance is no longer a function of efficiency alone, but of responsiveness, innovation, and empowered execution.

Indonesia's FMCG sector, particularly the beauty and cosmetics category, reflects this volatility. With a projected CAGR of 7.5% between 2023–2028 (Ministry of Trade, 2017), the market is expanding but so is the complexity. Companies now compete not only on product quality and price but on speed, relevance, and their ability to evolve with consumer behavior shaped by socio-commerce, digital reviews, and on-demand delivery. Those unable to transform internally risk being overtaken by leaner, faster competitors.

Recognizing these shifts, PT MNO—a key player in Indonesia's beauty FMCG segment embarked on a full-scale organizational transformation in 2022. Guided by its core values of creating impact for employees, communities, and the planet, the company shifted from a traditional, hierarchical structure to an agile operating model

centered on cross-functional squads. This transformation was aimed at accelerating market responsiveness, breaking down silos, and cultivating innovation. However, while the structural overhaul signaled progress, the internal systems underpinning people management—especially the performance management system remained out of sync with the company’s new agile reality.

The shift toward agile work rhythms required more than just new workflows; it demanded a rethinking of how employee goals are set, how performance is guided, and how success is rewarded. In line with its human-centric philosophy, PT MNO reframed its system not as “performance management” but “performance development,” focusing on capability-building, learning, and intrinsic motivation. Yet, the implementation has not fully met expectations.

Findings from PT MNO’s 2022 employee engagement survey highlighted three of the lowest-scoring dimensions directly tied to performance development: Clear Expectations (59.6%), Growth (60.3%), and Awards and Recognition (46%). Although the overall engagement score stood at 74.7%, these gaps act as silent alarms. When left unresolved, unclear expectations hinder alignment, lack of perceived growth reduces ambition and innovation, and insufficient recognition erodes trust each of which can lead to cascading effects such as key employee churn, weaker team morale, and declining brand performance in the market.

This engagement gap marks a critical turning point. PT MNO’s transformation will stall if its Performance Development System (PDS) fails to evolve in parallel with its organizational shift. To sustain agility and realize its intended impact, the company must urgently redesign its PDS into a system that reinforces clarity, fosters continuous growth, and delivers meaningful, transparent recognition anchored in cultural relevance and behavioral alignment with agile work.

B. Method

This study adopts a qualitative exploratory case study approach focused on PT MNO, aiming not merely to explore, but to conduct a deep investigation into the underlying causes of misalignment between performance development systems and organizational culture in the context of agile transformation. The qualitative method was selected due to its strength in capturing interpersonal dynamics, cultural nuances, and contextual complexity that are often inaccessible through standardized quantitative surveys (Tracy, 2020; Given, 2022). Through this approach, the study seeks to develop a culturally responsive, reward-linked Performance Development System (PDS) tailored to PT MNO's environment.

The research process involved five key stages: (1) research design and instrument development; (2) primary and secondary data collection; (3) thematic data analysis; (4) triangulation and data integration; and (5) system formulation based on emergent findings. The research problem was grounded in organizational symptoms identified through the 2022–2023 employee engagement survey and Check-in Time participation records, which revealed persistent weaknesses in the areas of clarity, growth, reward, and system participation.

Primary data were collected through semi-structured interviews using purposive sampling to ensure relevance and depth of insight (Palinkas et al., 2015). A total of 18 informants were selected to represent three career tracks functional, business, and professional—and four organizational levels: officer, executive, department head, and group head. This sampling approach allows a multi-perspective understanding of the system's impact across hierarchy and function. The principle of data saturation (Fusch & Ness, 2015) guided the determination of sample size.

The interview protocol was structured around four theoretical lenses; (1) Engagement Survey Drivers particularly the three lowest scoring dimensions in the 2022 survey (Clear Expectations, Growth, Awards and Recognition); (2) Total Performance Scorecard (TPS) Framework – used to guide inquiry into goal setting, evaluation, and feedback systems (Amin, 2023); (3) McKinsey People-First Framework – to map PDS-related experiences from onboarding to recognition; (4) Motivation and Organizational Culture Theories, including Self-Determination Theory (Ryan & Deci, 2017), Expectancy Theory (Kanfe & Johnson, 2017), Hofstede’s Cultural Dimensions, and Schein’s Model, to probe how personal and cultural factors influence system perception.

Secondary data were obtained from four key internal sources: (1) the Management System Book to understand PT MNO’s formal values and workflow structures; (2) the Performance Development System (PPDS) document as the formal reference for policies and procedures; (3) participation records from 2021–2024 to track user behavior; and (4) the 2022–2023 engagement survey reports, especially for dimensions linked to developmental experience. Qualitative document analysis (Bowen, 2022) was applied to examine the consistency between formal system narratives and field perceptions.

Triangulation was used to ensure data reliability and deepen insight. For example, employee complaints about bureaucratic delays in performance evaluation (interview data) were matched with internal system records, which showed that the average completion time for quarterly evaluations exceeded 14 working days—highlighting a gap between agile aspirations and rigid administrative processes. Similarly, statements about unclear goal setting were triangulated with inconsistencies between individual work plans and the performance criteria in PPDS documents.

Thematic analysis followed Braun and Clarke's (2019) six-phase method using ATLAS.ti to code and synthesize interview data. Coding was guided by the theoretical frameworks mentioned above and conducted iteratively to surface dominant and latent themes.

To strengthen trustworthiness, member checking was conducted with all interview participants and three additional internal HR experts at PT MNO. After the initial thematic synthesis, each participant was invited to review a personalized summary of their interpreted responses and given the opportunity to confirm or correct the interpretation (Birt et al., 2016). Feedback from this process led to refinement of themes—particularly regarding perceived fairness in recognition practices and the operational impact of agile role ambiguity thus reinforcing the credibility and dependability of the study's findings in line with updated trustworthiness criteria as outlined by Nowell et al. (2017).

C. Results and discussion

PT MNO's transformation into an agile organization necessitated a fundamental shift in how performance is developed, not merely managed. This study proposes the Agile MNO Performance & Growth Framework (APGF) as a holistic redesign of the existing PPDS. This framework integrates goal alignment, continuous development, fair evaluation, and strategic rewards as interdependent levers to foster agility, motivation, and long-term growth. Findings are presented thematically, directly integrated with discussion and theory, to illustrate how APGF addresses current gaps in practice.

1) Clarity and Co-ownership in Goal Setting

Findings revealed that many employees lacked clarity regarding expectations, especially those outside strategic units. While goal-setting is theoretically collaborative, in practice it is often top-down and vague, which contradicts agile principles and reduces motivation. This gap is further complicated by Indonesia's high

power distance culture, where employees hesitate to challenge vague instructions.

The APGF addresses this through two-way goal-setting sessions, combining personal development objectives (Personal Scorecard) with organizational goals (Organization Scorecard), supplemented by squad-level priorities to reinforce collectivist values. For example, in the Commercial Division, employees expressed frustration with “vague quarterly targets.” Under APGF, these targets are co-developed during Check-In Time using shared digital tools with clear, trackable metrics.

From a theoretical lens, this approach reinforces Expectancy Theory employees understand what is expected and believe their effort contributes directly to outcomes while also supporting Self-Determination Theory by fostering autonomy and competence through shared ownership of goals.

2) Continuous Development and Feedback Culture

Despite PT MNO's investment in coaching, academies, and learning wallets, development activities were reported as disconnected from career milestones. Interviewees such as AD (Marketing) stressed the need for clear competency standards and feedback tied to specific roles.

The APGF embeds structured quarterly feedback loops with documented reflection points. Managers are trained to deliver feedback in context: “To move from Officer to Executive, you need to master X and improve Y.” This specificity creates developmental traction.

Feedback in APGF is not limited to managers. A 360° peer-feedback pilot is being tested in cross-functional squads, normalizing appreciation and corrective input across levels. This structure turns feedback into a developmental tool, not a judgment. As FW

(Commercial) noted, “We need feedback to be conversational, not ceremonial.”

This evolution aligns with Schein’s cultural model, building a feedback culture that gradually rewires behavior and expectations. It also activates competence and relatedness dimensions in motivation theory, affirming that progress is seen and valued.

3) Transparent and Fair Performance Evaluation

One of the strongest pain points across interviews was the perceived unfairness of performance evaluations, particularly due to infrequent reviews and memory bias among appraisers. Although a calibration committee exists, many employees felt decisions did not reflect the full scope of their contributions.

In response, APGF introduces a cumulative evidence-based evaluation process. Informal feedback and coaching moments are recorded quarterly in a centralized digital log, forming a continuous “performance memory” throughout the year. This shifts performance discussions from static ratings to dynamic progress narratives.

In a pilot with the Digital Team, shifting to quarterly narrative reviews increased perceived fairness by allowing employees to present achievements in context. This also enhances instrumentality, reinforcing belief in the reward-performance link.

4) Rewards and Recognition as Strategic Accelerators

Current reward systems at PT MNO emphasize fairness but suffer from a lack of transparency and communication, not from inadequate reward size. Many employees expressed uncertainty about how their performance translated to tangible outcomes, creating motivational ambiguity.

APGF reframes rewards not just as incentives but as strategic accelerators of system adoption. Leaders are expected to clearly link performance milestones to recognition—both financial and non-financial—during formal and informal sessions. In high power distance cultures like Indonesia, proactive recognition by leaders carries significant motivational weight. For example, in the Innovation Team, a Group Head now ends each quarter with an open team huddle acknowledging achievements, which doubled nomination rates for performance-based bonuses in two quarters.

Rewards under APGF are multidimensional—including personalized learning opportunities, fast-track development roles, and team-based recognition sessions. This holistic approach aligns with the Total Rewards model and integrates intrinsic and extrinsic motivators into a unified strategy.

The Agile MNO Performance & Growth Framework is not just a redesign of technical processes, but a cultural intervention. It bridges formal structures with behavioral realities by aligning agile values with culturally grounded strategies—acknowledging hierarchy while promoting clarity, ownership, and continuous learning.

By transforming rewards from silent assumptions into visible, communicated outcomes, APGF fuels motivation, increases adoption, and supports PT MNO's long-term competitiveness in the dynamic FMCG landscape.

D. Conclusion

This study has revealed that PT MNO's existing performance development system is misaligned with its agile organizational structure and cultural realities, resulting in unclear expectations, limited developmental traction, and a perceived disconnect between performance and rewards. Through qualitative inquiry and deep triangulation of employee experiences, this research formulated the

Agile MNO Performance & Growth Framework (APGF), a culturally contextualized and behaviorally aligned model that integrates clarity in goal setting, continuous development, transparent evaluation, and strategic rewards.

Importantly, the end goal of this study is not merely to refine the technical components of a performance system, but to catalyze a broader cultural transformation—one that promotes transparency, shared ownership, and outcome-oriented thinking across levels. By embedding developmental principles and reward visibility into everyday work rhythms, APGF lays the groundwork for a more empowered and agile workplace culture.

To operationalize this transformation, we propose a three-phase implementation roadmap: Phase 1: Pilot & Learn (Introduce the APGF model in selected squads, test digital tools for goal-setting and feedback, and monitor engagement changes). Phase 2: Scale & Adapt (Expand implementation across business units, refine based on feedback, and ensure manager readiness through targeted upskilling). Phase 3: Full Integration & Optimization (Embed the system into all HR cycles, link with promotion and compensation mechanisms, and institutionalize recognition rituals to reinforce cultural alignment).

The expected return on investment (ROI) from implementing APGF extends beyond increased engagement. With improved clarity, motivation, and fairness, PT MNO can expect measurable gains in employee productivity, faster product development cycles, and reduced turnover of high-potential talent ultimately strengthening its competitive edge in a highly dynamic FMCG market.

References

Amin, A.M. (2023), The Influences Of Organization Learning, Changes, And Capability On The Corporate Performance

- Study In Go Public Companies In Indonesia. *Doctoral Disertation, Universitas Padjajaran*
- Armstrong, M., & Taylor, S. (2023). *Armstrong's handbook of human resource management practice: A guide to the theory and practice of people management*. Kogan Page Publishers.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation?. *Qualitative health research*, 26(13), 1802-1811.
- Bowen, G. A. (2022). Document Analysis as a Qualitative Research Method: Updated Frameworks and Applications. SAGE Open.
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597.
- Cappelli, P., & Tavis, A. (2016). The performance management revolution. *Harvard business review*, 94(10), 58-67.
- Elrayah, M., & Semlali, Y. (2023). Sustainable total reward strategies for talented employees' sustainable performance, satisfaction, and motivation: Evidence from the educational sector. *Sustainability*, 15(2), 1605.
- Fletcher, D., Melin, L., & Gimeno, A. (2012). Culture and values in family business A review and suggestions for future research. *Journal of Family Business Strategy*, 3(3), 127-131.
- Fusch Ph D, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research.
- Given, L. M. (Ed.). (2022). *The SAGE Encyclopedia of Qualitative Research Methods* (Updated edition). SAGE Publications.
- Goswami, I., Mittal, A., Kumar, V., Verma, P., & Mer, A. (2023). Analyzing the Role of Total Rewards and Compensation in Increasing Employee Motivation. *International Journal of Business Excellence*.
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human resource management review*, 21(2), 123-136.

- Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*, 2(1), 8.
- Hogan, S. J., & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609–1621
- Hoole, C., & Hotz, G. (2016). The impact of a total reward system of work engagement. *SA Journal of Industrial Psychology*, 42(1), 1-14.
<https://doi.org/10.1177/1609406917733847>
- Irawan, D. A. (2017). Expatriates perceptions toward Hofstede's Indonesia cultural dimensions. *Journal The WINNERS*, 18(2), 83-92.
- Irawan, D. A. (2017). Expatriates perceptions toward Hofstede's Indonesia cultural dimensions. *Journal The WINNERS*, 18(2), 83-92.
- Kanfer, R., Frese, M., & Johnson, R. E. (2017). Motivation related to work: A century of progress. *Journal of Applied Psychology*, 102(3), 338–355.
- Kelly G., Kopka, U., Kupper, J., Moulton, J. (2018). Consumer Package Goods The new model for consumer goods. *McKinsey & Company, April*
- Kementrian Perdagangan Republik Indonesia. (2017). Health and Beauty Industry in Indonesia. *Export News*, 90/MJL/2017, 7-9
- Lasa, A. N., Pedroni, A., & Komm, A.. (2024). In The Spotlight: Performance Management That Puts People First. *McKinsey & Company, May, 15*
- Li, C., Duan, X., Chu, X., & Qiu, Y. (2023). Total reward satisfaction profiles and work performance: A person-centered approach. *Heliyon*, 9(3).
- Nixon, A. (2011). A handbook for measuring employee performance. *Office of Personnel Management, US Government [Online]. - OPM.GOV MARCH 2017*
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness

- criteria. *International Journal of Qualitative Methods*, 16(1), 1–13.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health and mental health services research*, 42, 533-544.
- Rigby, D. K., Sutherland, J., & Noble, A. (2018). Agile at scale. *Harvard business review*, 96(3), 88-96.
- Rigby, D. K., Sutherland, J., & Takeuchi, H. (2016). Embracing Agile. *Harvard business review*, 50, 40-48.
- Robertson, P. J., & Egdell, V. (2018). A capability approach to career development: An introduction and implications for practice. *Australian Journal of Career Development*, 27(3), 119-126.
- Ryan, R. M., & Deci, E. L. (2017). *Self-Determination Theory: Basic Psychological Needs in Motivation, Development, and Wellness*. Guilford Press.
- Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.
- Schoch, K. (2020). Case study research. *Research design and methods: An applied guide for the scholar-practitioner*, 31(1), 245-258.
- Tracy, S. J. (2020). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact* (2nd ed.). Wiley-Blackwell.
- Tribe, M. A. (2017). The 5 trademarks of agile organizations. *New York: McKinsey*. Retrieved August, 1, 2021.
- Vroom, V., Porter, L., & Lawler, E. (2015). Expectancy theories. In *Organizational behavior 1* (pp. 94-113). Routledge.
- Weaver K., and Hudson, S. (2023). *The Beauty Boom and Beyond: Can The Industry Maintain its Growth*. New York: McKinsey & Company
- Yin, R. K. (2018). *Case Study Research and Applications: Design and Methods* (6th ed.). Thousand Oaks, CA: SAGE Publications.

Disability Scholarship Impact Evaluation

Rizkyta Cahya Maghfira¹, Victo Anggara Wisesa¹

¹Master of Business Administration Program, Institut Teknologi
Bandung

Corresponding author e-mail: rizkyta_maghfira@sbm-itb.ac.id

Article History: Received on 17 June 2025, Revised on 23 June 2025,
24 June 2025 Published on

Abstract: This study explores the transformative potential of the Disability Scholarship Program initiated by Indonesia's Ministry of Finance through the Indonesia Endowment Fund for Education (LPDP) in 2019. The program aims to empower persons with disabilities by providing access to higher education. A qualitative approach was adopted, combining semi-structured interviews and questionnaires using a four-point Likert scale. Data were analyzed through thematic analysis, integrating both primary and secondary sources. Findings indicate that the program successfully facilitates access to top universities (mean score: 3.80), enhances equal opportunity (3.75), and enables alumni to inspire others in their communities (3.85). These outcomes highlight the program's broader social impact beyond educational access. Based on the results, the study proposes practical improvements, including regular policy updates, professional assistance during recruitment, customized academic and psychological preparation, stronger monitoring, active alumni engagement, and comprehensive staff training. These recommendations aim to strengthen the program's inclusivity and sustainability. This study offers a new perspective by evaluating the LPDP disability scholarship from the beneficiaries' viewpoint and providing actionable, field-based recommendations to inform inclusive scholarship policies.

Keywords: Disability, Scholarship, Evaluating, Scholarship
Program, Impact.

A. Introduction

The United Nations (UN) formally adopted the Convention on the Rights of Persons with Disabilities (CRPD) in 2006, which marked a global shift in the use of the term from 'disability' to 'persons with disabilities' a more participatory and inclusive approach to persons with disabilities. The Convention aims to promote, protect and ensure full respect and equality for all human rights and fundamental freedoms for persons with disabilities, including respect for their inherent dignity (UN, 2006). In line with this, various countries have taken concrete steps to ensure the welfare of their citizens with disabilities. Australia became a pioneer through the Disability Standards for Education Policy, which recognizes that students with disabilities are entitled to equal learning opportunities. In the United States, international education programs sponsored by the Bureau of Educational and Cultural Affairs in collaboration with Mobility International USA (MIUSA) have been developing more structured resources for participants with disabilities since the early 2000s.

The Australian government's involvement was further strengthened by the "Development for All" policy in 2008, which was launched through the Australia Awards Scholarship (AAS) and explicitly targeted groups with disabilities. The UK government through Chevening has also begun to develop a more comprehensive support system for disability scholarship recipients since the 2010s. Meanwhile, the Government of Indonesia has only adopted the principles of CRPD through the passage of Law No. 8 of 2016 concerning Persons with Disabilities, which marks the official change of the term from 'disability' to 'disability'. This law affirms equal rights for persons with disabilities in accessing public services, including education, social welfare, and accessible facilities and infrastructure (Law No. 8/2016, Article 5 Paragraph 1). In fact, Article 40 Paragraph 6 mandates that the central and regional governments are obliged to provide scholarships for

students with outstanding disabilities from underprivileged families.

Following up on this mandate, the Ministry of Education and Culture has implemented a number of programs, such as the development of Indonesian Sign Language and the establishment of 2,329 Extraordinary Schools (SLB). For higher education, the government through the Education Fund Management Institution (LPDP) under the Ministry of Finance launched the Disability Scholarship program since the end of 2019. The program provides master's and doctoral study funds for eligible individuals with disabilities. Since its introduction, the number of applicants and recipients of scholarships in the disability category has continued to increase every year. LPDP specifically provides affirmation through lowering requirements such as minimum GPA and English proficiency scores, as well as providing an inclusive and disability-friendly service infrastructure, including basic Indonesian Sign Language training for customer service officers and stipends for personal assistants of scholarship recipients.

Although these efforts reflect LPDP's strong commitment to inclusivity, the National Commission on Disabilities (KND) stated in the 2023 Focus Group Discussion (FGD) that there is still a gap between the expectations of people with disabilities and the implementation of existing programs. Moreover, the participation of higher education of persons with disabilities is still low, even though education is one of the main factors in improving individual welfare. This is also part of the national target in the 2025–2029 National Medium-Term Development Plan (RPJMN), which introduces the Disability Welfare Index with a target value of 55.30 by 2029 (Indonesian State Secretariat, 2025). Therefore, evaluation of the performance of this scholarship program is very important to find out the extent of its contribution in improving the welfare and self-development of alumni with disabilities. This research will focus on the evaluation by considering the welfare and

development indicators of alumni who receive the LPDP Disability Scholarship.

B. Methods

Methodology is a general strategy that describes the overall research approach, including the philosophical beliefs underlying the selection of methods (Saunders et al., 2009). This study uses a mixed-methods approach, which combines qualitative and quantitative methods. A qualitative approach was used to explore the perspectives of the designers of the LPDP Disability Scholarship program, while a quantitative approach was used to measure the impact of the program based on specific indicators.

This research is motivated by the attention of the National Commission on Disability to the implementation of the LPDP Disability Scholarship program, aligned with the 2025–2029 RPJMN and the Disability Welfare Index. A Theory of Change (ToC) framework guides the evaluation process, beginning with qualitative interviews to map the causal logic of the program.

The core assumptions underlying the ToC are: (1) scholarships reduce access barriers to higher education for persons with disabilities, (2) inclusive academic experiences enhance self-efficacy and employability, and (3) graduates can become agents of change. The logical sequence starts with inputs such as funding, mentoring, and support services, followed by activities including selection, training, and academic support. These lead to outputs like increased participation and retention in higher education. Short-term outcomes include improved academic performance and confidence, while long-term outcomes target higher employment, leadership among alumni, and progress in national disability indicators. This framework ensures a more structured and transparent evaluation of the program's contribution to individual empowerment and systemic inclusion.

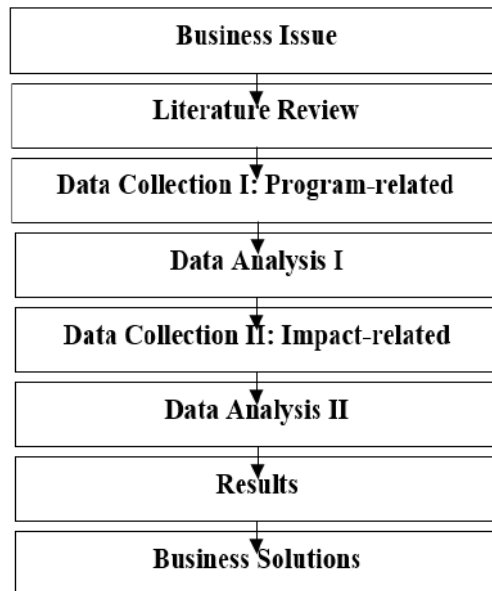


Figure 1. Research Framework

Qualitative data was obtained through semi-structured interviews with three main informants: the Director of LPDP Scholarships, the Head of the Scholarship Development and Cooperation Division, and the Head of the Scholarship Services Division. Interview questions cover three main topics: social initiatives and program vision (related to program design), social change (related to program framework), and improvement of social well-being (related to program outcomes). Each informant gets relevant questions according to his role.

Primary data were obtained through a questionnaire distributed to 28 alumni of LPDP Disability Scholarship recipients, with a target of at least 50% response rate, as suggested by Nulty (2008). To avoid the middle bias bias, a Likert scale of 1–4 was used, following the recommendations of Krosnick & Presser (2010). The questionnaire variables were determined based on indicators identified through

qualitative interviews. Examples of the questionnaire items include: “The scholarship program encourages persons with disabilities to apply” (Q1), “The scholarship program supports persons with disabilities to succeed in the selection process” (Q2), and “The scholarship program supports me in giving feedback to improve the program” (Q3), which reflect the access, support, and participation dimensions of the program. The instrument was reviewed by experts in disability studies and program evaluation to ensure content validity, and a pilot test was conducted with a small group of respondents to confirm reliability. Secondary data was obtained from LPDP's internal documents, including alumni tracer reports, study tracers, and funding reports. The impact evaluation was carried out based on the results of a questionnaire with a 4-point Likert scale, which was interpreted as follows:

Table 1. Impact Evaluation Analysis

Score	Interpretation	Action Implication
1 – 1.99	Poor	High priority for improvement
2 – 2.99	Fair	Needs improvement
3 – 3.99	Good	Satisfactory, maintain
4	Very Good / Excellent	Best practice

Source: Author, 2025

Qualitative data analysis was carried out using Thematic Analysis based on six phases of Braun and Clarke (2021): (1) Data familiarization, (2) Initial code, (3) Identification of initial themes, (4) Theme review, (5) Definition and naming of themes, and (6) Report writing. The process is reflective and flexible, focusing on patterns of meaning that are relevant to answering the research question. Quantitative analysis is descriptive, used to summarize the fulfillment of the indicators of the scholarship program.

Statistical measures such as frequency, percentage, and average are used to describe the data in a concise manner.

C. Results and Discussion

The questionnaire was initially planned as a census, since there are only 28 alumni of the Disability Scholarship Program. However, after distribution, only 20 individuals met the eligibility criteria. The author also provided contact information in case Disability Scholarship alumni required further assistance. However, most of the respondents only used it to verify the author's identity mainly to ensure that the message was legitimate and not a scam. The respondents' information as follows:

Table 2. Respondents Demography

Category	Frequency	%
Kind of Disabilities		
Physical Disability	11	55%
Sensory Disability	8	40%
Others/prefer not to disclose	1	5%
Level of study, funded by LPDP		
Master's degree	19	95%
Doctoral degree	1	5%

Source: Author, 2025

More than half of the respondents are persons with physical disabilities. Other disability groups may have been less willing or able to respond, possibly due to communication barriers, lack of outreach, or lower engagement with the alumni network. In addition, nearly all of the respondents have completed their Master's degrees, with only one individual having attained a Doctoral degree. This relatively small sample size (20 out of 28 alumni) limits the generalizability of the findings. Furthermore, the predominance of respondents with physical disabilities (55%) may

reduce the representation of experiences from other disability groups such as sensory, intellectual, or psychosocial disabilities. Future evaluations should consider broader outreach strategies to ensure more inclusive representation across disability types.

This suggests that the Disability Scholarship Program has been more widely utilized at the master's level, possibly due to lower barriers of entry or greater availability of programs. The limited number of doctoral recipients may also indicate future opportunity for LPDP in overcoming the challenges in access, readiness, or institutional support for persons with disabilities pursuing higher academic levels.

The data collected from the Disability Scholarship alumni were analyzed using descriptive statistics. This approach includes calculating averages (means) and identifying minimum and maximum values for each variable. The aim is to provide a general overview of the Disability Scholarship Program intended outcomes, without making inferential conclusions. Table 3 shows Questionnaire Results in this research.

Table 3. Questionnaire Results

	Max	Min	Average
Q1	4	2	3,65
Q2	4	2	3,20
Q3	4	1	3,05
Q4	4	2	3,80
Q5	4	1	2,90
Q6	4	1	2,75
Q7	4	2	3,20
Q8	4	1	3,35
Q9	4	2	3,30
Q10	4	2	3,60
Q11	4	2	3,75
Q12	4	3	3,85

Q13	4	2	3,40
Q14	4	2	3,25
Q15	4	3	3,60
Q16	4	2	3,50
Q17	4	1	2,75

Source: Author, 2025

The descriptive statistics, particularly the average scores, serve as the basis for interpreting the perceived effectiveness of various program outcomes. By analyzing these averages, the study aims to identify which outcomes are considered less successful or underperforming by the Disability Scholarship alumni. This interpretation provides insights into the areas of the program that may require further improvement or targeted support to better serve the needs of awardees with disabilities. Figure 2 shows LPDP Disability Scholarship Program Pathways.

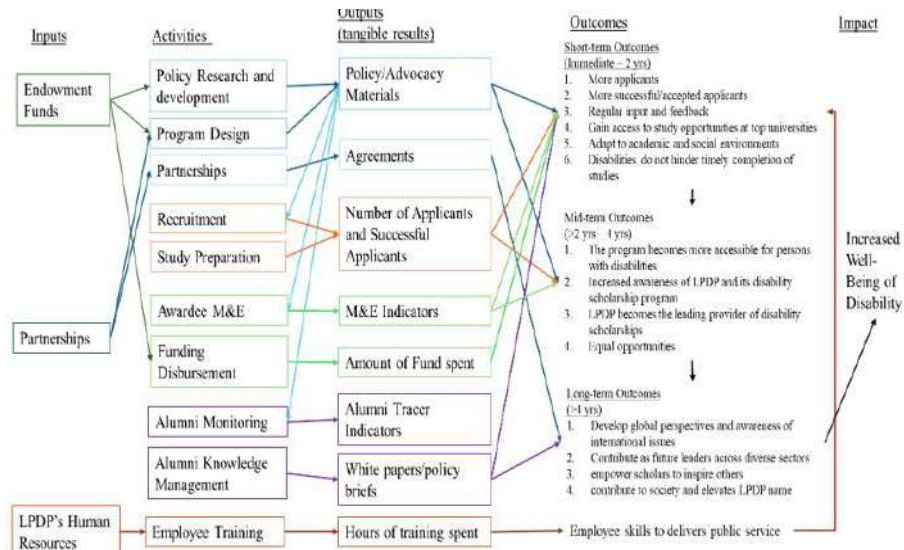


Figure 2. LPDP Disability Scholarship Program Pathways

Based on the results of the evaluation of the LPDP Disability Scholarship program, the majority of indicators (14 out of 17) obtained an average score above 3.00 which reflects the perception of "Good" from the beneficiaries. The highest score was recorded on the Q12 indicator (3.85), which shows that the program is considered successful in empowering scholarship recipients to be an inspiration to their communities (Table 3). This was followed by Q4 (3.80) and Q11 (3.75), which respectively demonstrated the program's success in opening up access to leading universities and creating equal opportunities for recipients. These results indicate that aspects of empowerment, access to education, and equity are the main strengths of the program, as shown in the positive perception of the program by alumni.

However, several indicators scored in the "Fair" category (2.75–2.90), particularly Q5, Q6, and Q17, pointing to limitations in academic adaptation, social adjustment, and staff competence in disability-related services. To provide a more comprehensive understanding of these findings, quantitative results were further contextualized through qualitative insights derived from in-depth interviews with LPDP program managers. The relatively lower score in academic adaptation (Q5), for instance, corresponds with managers' recognition of the limited scope of preparatory support provided before departure, which currently emphasizes administrative compliance over psychosocial readiness. Likewise, the low rating on staff competence (Q17) aligns with managerial reflections on the need for more systematic and outcome-oriented employee training programs. This convergence between alumni perceptions and managerial perspectives strengthens the internal validity of the findings and underscores the importance of integrating both data sources to inform more responsive program improvements.

Table 3. Impact Evaluation Interpretation

	Average	Performance Interpretation	Action Implication
Q1	3,65	Good	Satisfactory, maintain
Q2	3,20	Good	Satisfactory, maintain
Q3	3,05	Good	Satisfactory, maintain
Q4	3,80	Good	Satisfactory, maintain
Q5	2,90	Fair	Needs Improvement
Q6	2,75	Fair	Needs Improvement
Q7	3,20	Good	Satisfactory, maintain
Q8	3,35	Good	Satisfactory, maintain
Q9	3,30	Good	Satisfactory, maintain
Q10	3,60	Good	Satisfactory, maintain
Q11	3,75	Good	Satisfactory, maintain
Q12	3,85	Good	Satisfactory, maintain
Q13	3,40	Good	Satisfactory, maintain
Q14	3,25	Good	Satisfactory, maintain
Q15	3,60	Good	Satisfactory, maintain
Q16	3,50	Good	Satisfactory, maintain
Q17	2,75	Fair	Needs Improvement

Source: Author, 2025

Based on the previous description, the following proposed solutions are designed to address several key aspects of the Disability Scholarship Program. Key focuses include policy formulation, improvements in the recruitment and study preparation process, strengthening monitoring and evaluation (M&E) mechanisms for Awardees, increasing alumni engagement as a source of feedback and inspiration, and increasing investment in employee training.

a) Disability Scholarship Policy

Policy is the main foundation for the entire series of scholarship program activities. In the governance structure of LPDP, the

implementation of the scholarship program cannot be started without a policy that is formulated in advance, as stated in the program activity flow. As illustrated in Figure 2, policies affect various other activities such as the recruitment process, Awardee monitoring, payment process, and alumni tracking. One of the weaknesses identified is the limited frequency of Focus Group Discussions (FGD) or data collection as the basis for policy, which is currently only carried out once a year. In the context of people with disabilities, needs and challenges can change dynamically, so more adaptive policy updates are needed. Therefore, it is recommended that LPDP increase the frequency of policy reviews periodically, while maintaining the open input channels that have been available. A structured review schedule can encourage a more systematic work process.

In addition, the participation of people with disabilities in the policy formulation process is still limited. Informant 2 mentioned that although LPDP has signed a memorandum of understanding with the National Commission on Disability, the cooperation is still limited to socialization activities so far. Therefore, it is recommended that LPDP build closer partnerships with policy experts who are also persons with disabilities, both through the National Commission on Disability and through the involvement of independent professionals who have experience and expertise in policy development.

b) Recruitment Process

In general, the implementation of recruitment has followed the applicable policy. However, from a technical perspective, there is a need to improve the provision of specialized professional assistance for applicants with disabilities. Currently, LPDP places the onus on applicants to find assistants independently, and even recommends that assistants come from the nuclear family. This approach is risky because family members do not always have sufficient professional capacity or skills to support the applicant's

academic or administrative needs. For example, in the interview stage, assistants can be instrumental in helping to explain the applicant's proposed contributions that are usually contained in an essay or research plan. A lack of professional understanding from the assistant can hinder the effective delivery of the applicant's vision and ideas.

c) Study Preparation Process

The current study preparation phase still focuses on fulfilling academic documents that are a prerequisite for the destination university, such as English proficiency certification. In fact, as the name implies, this stage should also provide adequate support in terms of psychological readiness, especially for people with disabilities who will start studying abroad. Transitioning to a new academic environment often triggers culture shock, and Informant 3 emphasizes that people with disabilities are potentially more psychologically vulnerable in dealing with this kind of transition. Therefore, it is necessary to add a disability assessment component in the study preparation process. This assessment will serve to detect potential psychological vulnerabilities, design a more targeted support system, and provide comprehensive data for LPDP in responding to the specific needs of each Awardee. These recommendations can also be built on best practices from other scholarship providers who have implemented special programs for people with disabilities. Thus, a formal assessment of disability can strengthen LPDP's capacity to respond accurately and comprehensively to the individual needs of scholarship recipients.

d) Awardee Monitoring and Evaluation (M&E)

The Awardee's monitoring activities are the most sustainable process in the program cycle, as they take place during the study period. On the other hand, this activity can also be used to strengthen LPDP's active intervention in supporting the Awardee's learning process which has so far tended to be reactive to certain cases. As such, the M&E process should not solely rely on

independent reports from the Awardee, but also create a more participatory and supportive relationship. As stated by Informant 3, the initiative to develop counseling services or disability support is a positive step. However, accelerating the implementation and scaling up of these services is highly recommended. For this reason, new activity indicators can be added that reflect the extent of LPDP's active involvement in accompanying the Awardee during the study. These indicators can include the frequency and quality of interactions, such as counseling sessions, academic guidance, and participation in support services.

e) Alumni Participation in Knowledge Sharing

Currently, LPDP has held a knowledge sharing forum that presents alumni and professionals as speakers, especially in discussions that take place at the Community of Practice (CoP) forum. However, of the eight topics that have been discussed, there has been no participation of alumni who received Disability Scholarships as the main speakers. Therefore, in addition to strengthening networks with alumni with disabilities, this forum can be used as a space to provide motivation, inspiration, and moral support to fellow people with disabilities. The presence of these alumni will not only increase representation, but also strengthen the value of inclusivity and empowerment in the LPDP community. Furthermore, CoP sessions can be expanded to include specific topics relevant to the welfare of persons with disabilities, such as micro and macroeconomic issues for economists, Corporate Social Responsibility (CSR) strategies applicable to the corporate sector, and inclusive education practices for educators and policymakers.

f) Employee Training

As a public service institution, the quality of LPDP's services is highly dependent on the competence and attitude of its employees. LPDP seems to have realized this by providing training programs that include an understanding of disability, inclusive communication (including sign language), as well as the use of

assistive technologies. However, the current indicators of training activities are still limited to the duration of the training followed. This shows that LPDP's internal human resource development emphasizes more on the sustainability of training than its applicative impact. Currently, there are no indicators that assess the extent to which employees apply this knowledge in the work environment or show an increase in post-training professionalism. Therefore, it is recommended that LPDP provide a more comprehensive and sustainable training program, especially in public services for people with disabilities. In addition, it is necessary to add new activity indicators such as post-training assessments or post-training evaluations to measure the effectiveness of training in changing work behavior and improving service quality.

D. Conclusions

Using the Theory of Change as a lens, the research combined in-depth interviews with LPDP leaders and a questionnaires to the alumni to map the program's strengths and shortcomings. The findings reveal a program that opens doors to opportunity, particularly in securing spots at top universities (mean: 3.80), fostering fairness (3.75), and empowering graduates to inspire others (3.85). Yet, the journey isn't without hurdles. Alumni flagged challenges in adjusting to academic demands (2.90) and social settings (2.75), as well as gaps in staff support for disability specific needs (2.75).

These issues, especially for those with mental health challenges, point to a need for more tailored support. Despite these, with a 41.21% acceptance rate in 2024, the program outperforms its regular counterpart, reflecting its commitment to affirmative action through relaxed criteria and accessibility investments. The program also advances Indonesia's goal of reducing disparities, nurturing talent, and building a more inclusive future, as outlined in the

RPJMN 2025–2029. It lays a foundation for systemic change, but its full potential depends on addressing these critical gaps.

E. Acknowledgement

Author should present list of Acknowledgement at the end. Any financial or nonfinancial support for the study should be acknowledged.

References

- Arensman, B., Waegeningh, C. v., & Wessel, M. v. (2017). Twinning "Practices of of Change" With "Theory of Change" : Room for Emergence in Advocacy Evaluation. *American Journal of Evaluation*, 1-16.
- Bennet, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons*, 1126 - 1132.
- Boyles, M. (2023). DEI: What It Is & How to Champion It in the Workplace. *Harvard Business School Online*.
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*. London: Sage Publications.
- Caring For People (United Kingdom Department of Health 1989).
- Cavalcanti, M. F. (2021). Social entrepreneurship and social change: a practice-based study in non-governmental organizations. *RAUSP Management Journal*, 170-185.
- Dahuri, D. (2023). *Komnas Disabilitas dan Penyedia Beasiswa untuk Penyandang Disabilitas Gelar FGD*. Jakarta: Media Indonesia.
- Koleros, A., Adrien, M.-H., & Tyrrell, T. (2024). *Theories of Change in Reality: Strengths, Limitations and Future Directions*. Routledge.
- Krosnick, J. A., & Presser, S. (2010). *Handbook of Survey Research*. Leeds: Emerald Group Publishing.
- Lembaga Pengelola Dana Pendidikan. (t.thn.). *Visi, Misi, Tugas dan Fungsi*. Dipetik April 2025, dari Lembaga Pengelola Dana

- Pendidikan: <https://lpdp.kemenkeu.go.id/tentang/visi-misi/>
- Luli, F. (2010). Theory of Change (ToC). Diambil kembali dari <https://www.evalcommunity.com/career-center/theory-of-change/>
- Manalu, S. W. (2019). *Social Minister Explained the Vision of Social Welfare Development*. Jakarta.
- Mayne, J., & Johnson, N. (2015). Using theories of change in the CGIAR Research Program on Agriculture for Nutrition and Health. *Journal of Evaluation*, 407-428.
- McKinsey & Company. (2022, August 17). *What is diversity, equity, and inclusion?* Diambil kembali dari Featured Insights: <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-diversity-equity-and-inclusion#/>
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assesment & Evaluation in Higher Education*, 301-314.
- Organisasi Dan Tata Kerja Lembaga Pengelola Dana Pendidikan, Peraturan Menteri Keuangan (PMK) Nomor 252/PMK.01/2011 (2011).
- Organisasi dan Tata Kerja Lembaga Pengelola Dana Pendidikan, Peraturan Menteri Keuangan (PMK) Nomor 47/PMK.01/2020 (2020).
- Parton, N. (2002). *Social Theory, Social Change and Social Work (The State of Welfare Series)*. London: Routledge.
- Penyandang Disabilitas, Undang Undang Republik Indonesia Nomor 8 Tahun 2016 (2016).
- Rencana Pembangunan Jangka Menengah Nasional Tahun 2025 - 2029, Peraturan Presiden Republik Indonesia Nomor 12 Tahun 2025 (2025).
- Rogers, P. (2014). *Methodological Briefs, Impact Evaluation No. 2: Theory of Change*. Florence: UNICEF Office of Research - Innocenti.
- Saunders, M. N., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. Pearson Education.

- Serrat, O. (2017). *Knowledge Solutions: Tools, Methods, and Approaches to Drive Organizational Performance*. Singapore: Springer.
- Simone, L., Drabble, D., Morelli, N., & Götzen, A. d. (2023). *Strategic Thinking, Design and the Theory of Change: A Framework for Designing Impactful and Transformational Social Interventions*. Great Britain: Edward Elgar Publishing.
- Stein, D., & Valters, C. (2012). Understanding Theory of Change in International Development. *Justice and Security Research Programme*.
- Suharto, E. (2009). *Membangun Masyarakat, Memberdayakan Rakyat (Kajian Strategis Pembangunan Kesejahteraan Sosial dan Pekerjaan Sosial)*. Bandung: Refika Aditama.
- Taplin, D. H., & Clark, H. (2012). *Theory, of, Change, Basics: A Primer tio Theory of Change*. New York: ActKnowledge.
- Tarrow, S. (2002). *Power in Movement: Social Movements and Contentious Politics*. Cambridge: Cambridge University Press.
- The Seebohm Report (United Kingdom Ministry of Health 1968).
- Undang Undang Dasar Negara Republik Indonesia (1945).
- United Nation. (2006). *Convention On The Rights Of Persons With Disabilities and Optional Protocols*. Diambil kembali dari <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- Vogel, I. (2012). *Review of the use of 'Theory of Change' in International Development (for the UK Department of International Development)*. UK Department for International Development .
- Weiss, C. H. (1998). *Evaluation Methods for Studying Programs and Policies*. New Jersey: Prentice Hall.

Effectiveness of Participatory Learning Strategies in Student Activity and Result in Fiqih's Subject

Miftahul Huda¹, Syarwani Ahmad², Darwin Effendi²

¹MA Pondok Pesantren Ahlul Qur'an, Indonesia

²Universitas PGRI Palembang, Indonesia

Corresponding author e-mail: miftahulhudapairobithoh@gmail.com

Article History: Received on 19 June 2025, Revised on 21 June 2025,
Published on 24 June 2025

Abstract: This study examines the effectiveness of participatory learning strategies on the activeness and result of Fiqh. Quantitative experimental design with 40 students. Data collection techniques used questionnaires, observations, tests, and documentation. The validity test used construct validity while the reliability test used Cronbach's Alpha. The data prerequisite test used the normality test and parametric test, and the data was analyzed using a simple regression test. The results of this study indicate that: (1) there is significant effectiveness between participatory learning strategies and student's liveliness with the results of $R > p\text{-value}$ ($0.467 > 0.038$). (2) There is significant effectiveness between participatory learning strategies and student's result with the results of $Y > p\text{-value}$ ($0.324 > 0.164$). And (3) There is an increase in students' grades after using the Participatory Learning strategy when compared to students' mid-term exam grades on the subject of fiqh. Participatory strategies significantly increase activeness, but the effect on result needs further verification.

Keywords: *Participatory Learning Strategy, Student Activity, result*

A. Introduction

The most important learning outcome in the long term is the learner's ability to develop easier and more effective ways of learning. With this ability, it means that they have acquired knowledge and skills of the process and learning (Mundir, 2021). The main task of a teacher is to teach students by encouraging them to learn actively so that their potential in all aspects (cognitive, affective, and psychomotor) can develop optimally (AlAfnan, 2025). By actively participating in learning activities and being involved, students will develop the competence to do positive things, which will ultimately form life skills that will help them in life (Mulyono et al., 2018).

The purpose of learning is basically to change student behavior. Therefore, in the assessment, it is necessary to pay attention to the extent to which the development of student behavior

takes place during the learning process (Do, 2023). Thus, the hope is that it can be known whether the learning objectives have been achieved or not. If not, corrective actions will be taken to improve the learning process and support the development of the students concerned. In other words, evaluation is not only used to assess whether student behavior has been achieved or not (Somers et al., 2025).

However, the results can also be used as useful input in improving the teaching and learning process (Rasid et al., 2024). By increasing the teaching and learning process in the classroom, it will be one of the reasons for the increase in the quality of the madrasah. Based on the efforts made, there have been various actions to improve the quality of education, such as making changes to the curriculum, developing new learning models, and revising the evaluation system (Alvunger, 2024). The learning strategies implemented by teachers in the classroom greatly influence the performance and Result of students (Williams et al., 2024). Now, teachers are not only the center of learning, but also leaders, promoters, and facilitators for students (Nur'aini, 2021) (Aparicio-Gómez et al., 2024). It is necessary to implement effective learning strategies to improve students' learning efforts, such as developing critical and creative thinking skills (Khaled Mohammad Salameh et al., 2025).

The importance of effective learning strategies as the core in improving the quality of student learning achievement. Educators need to implement strategies that can adapt to the various learning styles of students in order to achieve learning goals optimally (Tang & Ruannakarn, 2024). Effective learning strategies not only focus on delivering subjects, but also utilize techniques that can encourage active student participation (Ruijuan et al., 2023). This shows that student academic success can be significantly influenced by the implementation of appropriate learning strategies. Therefore, educators must choose and adjust learning strategies to the needs and character of students during the education process (Nzuza & Chitiyo, 2024). The extent to which learning strategies can be applied in various learning situations also affects their effectiveness (Oudat et al., 2025). Research has shown that student activeness is an important factor in determining the effectiveness of learning strategies (Gruber & Kurahashi-Friedmann, 2024). Fiqh learning, as one of the important religious subjects, has a crucial role in shaping students' character and beliefs (Mahanani et al., 2022). However, fiqh learning is often still trapped in traditional methods that tend to be passive. In a place where students receive more information from teachers without them being actively involved (Rodis, 2024). This can reduce students' interest in learning and hinder their understanding of fiqh subjects. Will affect their Result.

From observations made in class, Effective learning is essential, teachers must motivate students to be active. Learning objectives change behavior. Strategies affect result (Cowan et al., 2023). Fiqh learning is often passive, it needs participatory strategies. Students are less active, scores below KKM. Participatory strategies are expected to increase activity and result. It is important to find a more effective learning strategy to improve students' activeness and Result in fiqh subjects in the current situation. One strategy that can be an option is participatory learning. Participatory learning emphasizes the active involvement of students throughout the learning process, from planning, implementation, to evaluation. Thus, students

not only receive information, but also play a role in finding and building their own knowledge. With participatory learning, it is hoped that student involvement in fiqh learning can increase. This is because students are given the opportunity to be involved in discussions with their groups. Teachers need to plan participatory-based fiqh learning strategies to make students interested. This involves all students without distinguishing status, making students actors, and including elements of student involvement to increase accountability, collaboration, healthy competition, and opportunities to learn. The reason for conducting research on participatory learning by researchers is to be used as one of the references in learning strategies. So that students can increase their activeness in participating in learning and experience improvements in terms of Result.

B. Methods

A research method is a systematic way of collecting, analyzing, and interpreting data to answer research questions or test hypotheses. This method serves as a framework for the entire research process, from planning to compiling the final report (Utomo et al., 2024). Systematic research method collect, analyze data. This study uses quantitative experiments. This quantitative research is conducted to test the effectiveness of the experimental variables. Experimental research is usually used more in the exact field (Fadilla et al., 2022). This research design uses a design with a control group and pre-treatment measurements consisting of 6 types, one of which is used by researchers in this design, namely the control group design that does not receive treatment with the same pre-treatment and post-treatment samples accompanied by a control group that is given the opposite treatment (Untreated control group design with dependent pretest and posttest samples using reversed-treatment control group) (Astuti et al., 2022). This research is an experimental study with two sample groups, as follows:

1. Experimental Group, namely the group of students who receive participatory learning.
2. Control Group: a group of students who receive conventional learning.

Control group design and post-test experiments. Population of 65 students, sample of 2 random groups. Questionnaire data, observation, test, documentation. Test the validity and reliability of the instrument. Data analysis using Jamovi, prerequisite test and regression. Data collection techniques are techniques or methods used to collect data. Methods refer to a method so that its use can be demonstrated through questionnaires, observations, tests, and documentation. Meanwhile, data collection instruments are tools used to collect data. Because they are tools, instruments can be in the form of questionnaire checklist sheets, interview guidelines, camera photos, and others (Tupthong & Chatwattana, 2024). Before conducting data analysis, analysis requirement testing is carried out to determine whether the data analysis for hypothesis testing is successful. There are several methods for analyzing data that require analysis requirement testing. Analysis of variance requires data normality and homogeneity tests because the data is taken from a population with a normal distribution and homogeneous groups being compared. Data processing, also known as data analysis, contributes to decision making and drawing conclusions; therefore, this step is an important part of the research process. The data collected and calculated must be correct. so that the level

of significance meets the initial hypothesis. This data calculation is carried out using the help of the Jamovi program.

C. Results and Discussion

MA Ahlul Qur'an was established in 2021, complete facilities, 15 teachers, 64 students. Theoretical and practical validity instrument tests were successful, good reliability. Before distributing the questionnaire to obtain the data to be processed, the researcher first validated the instrument to ensure that the instrument to be tested was valid or invalid. The instrument validation test was conducted twice, the first was a theoretical validation test which was corrected by three validators from the PGRI Postgraduate University of Palembang who had stated that the instruments of the three variables to be tested were valid. The second instrument validity test was conducted practically which was distributed to 20 students of the Ahlul Qur'an Islamic Boarding School of Palembang with the results of all instruments on the X variable being declared valid with a reliability test of 0.962. Furthermore, the data obtained was then processed statistically. From the results of the processing, data was obtained which can be explained in the following frequency distribution table:

Table 4.8 Frequency Distribution of Learning Strategy Effectiveness

Interval	Category	Frequency	Percentage(%)
60-70	Bad	0	0%
71-80	Enough	8	27%
81-90	Good	22	73%
91-100	Very good	0	0%

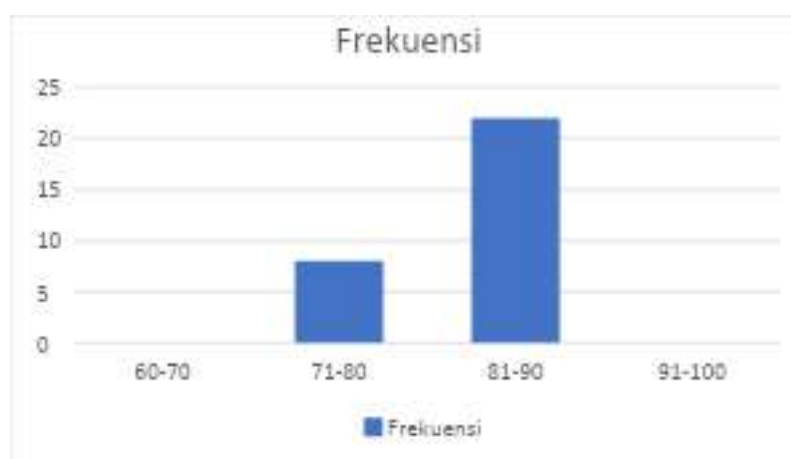


Figure 4.2 Frequency Distribution Diagram of Variable X

Referring to the score grouping in the table above, a number of 20 respondents are known that the learning strategies used in Islamic Senior High School of the Ahlul Quran Islamic Boarding

School are 0 (0%) students are included in the very poor category, 8 (27%) students are included in the sufficient category, 22 (73%) and students are included in the good category, 0 (0%) students are included in the very good category. So the level of student participation in participatory learning strategies is included in the good category with a percentage of 73% and an average of 80.

The second instrument validity test was conducted practically and distributed to 20 students of Islamic Senior High School of the Ahlul Quran Islamic Boarding School Palembang with the results of all instruments in the Y1 variable declared valid with a reliability test of 0.920. Furthermore, the data obtained were then processed statistically. From the results of the processing, data was obtained which can be explained in the following frequency distribution table:

Table 4.10 Frequency Distribution of Variable Y1

Interval	Category	Frequency	Percentage (%)
60-70	Bad	0	0%
71-80	Enough	0	0%
81-90	Good	26	87%
91-100	Very good	4	13%

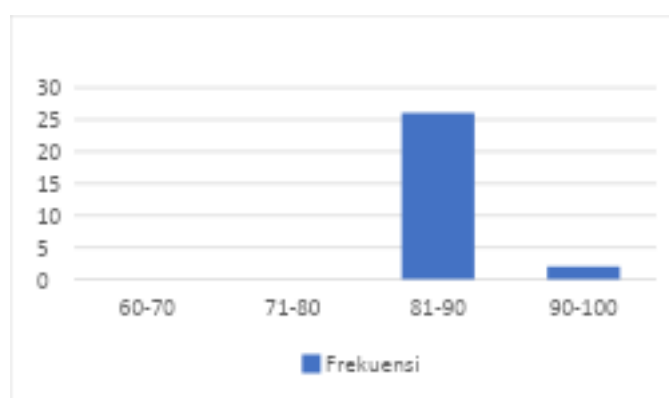


Figure 4.3 Frequency Distribution Diagram of Variable Y1

Referring to the score grouping in the table above, a number of 20 respondents are known that the learning strategies used in Islamic Senior High School of the Ahlul Quran Islamic Boarding School are 0 (0%) students are included in the very poor category, 0 (0%) students are included in the sufficient category, 26 (87%) and students are included in the good category, 4 (13%) students are included in the very good category. So the level of student participation in participatory learning strategies is included in the good category with a percentage of 87% and an average of 89.

The second instrument validity test was conducted practically and distributed to 20 students of Islamic Senior High School of the Ahlul Quran Islamic Boarding School Palembang with the results of all instruments in the Y2 variable declared valid with a reliability test of 0.972. Furthermore, the data obtained were then processed statistically. From the results of the

processing, data was obtained which can be explained in the following frequency distribution table:

Table 4.12 Frequency Distribution of Variable Y2

Interval	Category	Frequency	Percentage (%)
60-70	Bad	0	0%
71-80	Enough	8	27%
81-90	Good	22	73%
91-100	Very good	0	0%

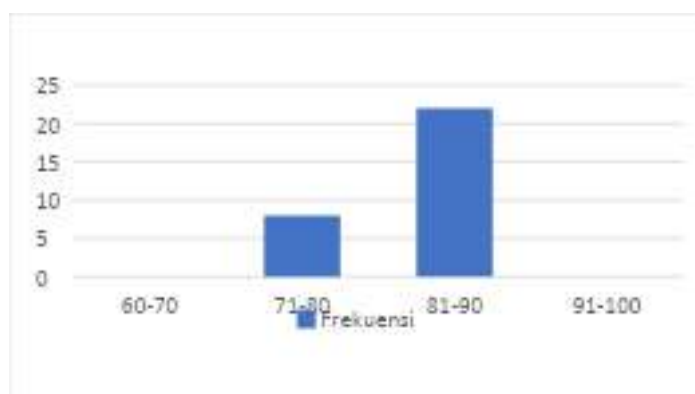


Figure 4.4 Frequency Distribution Diagram of Variable Y2

Referring to the score grouping in the table above, a number of 20 respondents are known that the learning strategies used in Islamic Senior High School of the Ahlul Quran Islamic Boarding School are 0 (0%) students are included in the very poor category, 8 (27%) students are included in the sufficient category, 22 (73%) and students are included in the good category, 0 (0%) students are included in the very good category. So the level of student participation in participatory learning strategies is included in the good category with a percentage of 73% and an average of 83.

Effectiveness of Participatory Learning Strategies on Student Activeness

1. Normality Test: Data from the control and experimental groups were normally distributed ($p > 0.05$).
2. Parametric Test: Significant correlation between participatory strategies and student activeness ($r = 0.467$, $p = 0.038$).
3. Simple Regression Test: Participatory strategies significantly influenced the activeness of the experimental group ($p = 0.038$). Control was not significant. Participatory strategies effectively increased student activeness.

Effectiveness of Participatory Learning Strategy on Student Result in Fiqh Subject

1. Normality Test: Data from the result of both groups were normally distributed ($p > 0.05$).
2. Parametric Test: Significant effectiveness of participatory strategies and result ($r = 0.324$, $p = 0.164$). Attention: the value of $p = 0.164$ is usually not significant at $\alpha = 0.05$.
3. Simple

Regression Test: Experimental regression: participatory strategies affect result ($R^2 = 0.105$, $p = 0.164$). Control is not significant.

Improvement of Student Result After Using Participatory Learning Strategies

1. Experimental group midterm exam scores

Table 4.21 Data on Respondents' Mid-Semester Exam Scores

NO	Interval	Frequency
1	50-59	13
2	60-69	6
3	70-79	1
4	Rate-rate	56

Based on the table above, 20 respondents have varying scores with an average total of 56, with a Minimum Completion Criteria score of 75. So it can be explained that the students' mid-semester scores in the fiqh subject have not reached the KKM.

2. Post-test scores of the experimental group

Table 4.21 Respondents' Post-test Value Data

NO	Interval	Frequency
1	1-74	1
2	75-80	7
3	81-89	7
4	90-95	5
	Rate Total rate	85

Based on the table above, 20 respondents have various scores with an average total of 85, with a Minimum Completion Criteria score of 75. So it can be explained that the post-test score of students in the fiqh subject is 1 student who has not reached the KKM and 19 others have reached the KKM.

The results of the analysis of student Result based on the comparison of post-test scores with students' mid-semester exam scores explain that there is an increase in individual student scores and the total average student scores (Pondongnok & Phrakhrusutheejariyawattana, 2024). This is in line with the statement by Rini et al and Fikri et al. that students who are taught using participatory methods experience a significant increase in Result compared to the control group. The impact of this study shows that participatory learning methods can improve students' understanding and involvement in the learning process (Rini et al., 2024) (Fikri et al., 2025).

D. Conclusions

- 1) Based on the results of the first hypothesis test using a simple linear regression test, the results obtained were R_{count} : 0.467 with a significance level of p-value: 0.038. so that the $R_{value_{count}} > p\text{-value}$ ($0.467 > 0.038$). Thus, the hypothesis can be accepted which states that

there is a positive and significant impact between participatory learning strategies on student activity at Islamic Senior High School of the Ahlul Quran Islamic Boarding School Palembang in the 2024/2025 academic year.

- 2) Based on the results of the second hypothesis test using a simple linear regression test with the results of $R_{\text{count}}: 0.324$ with a significance level of $p\text{-value}: 0.164$ so that the $R_{\text{value}} > p\text{-value}$ ($0.324 > 0.164$). Thus, the hypothesis can be accepted which states that there is a positive and significant impact between participatory learning strategies on student Result at Islamic Senior High School of the Ahlul Quran Islamic Boarding School Palembang in the 2024/2025 academic year.
- 3) Based on the comparison of student Result in the research post-test with students' mid-semester exam scores, it can be stated that there is an increase in scores in the Fiqh subject. Thus, it can be stated that there is a positive and significant impact between participatory learning strategies on student Result at Islamic Senior High School of the Ahlul Quran Islamic Boarding School Palembang in the 2024/2025 academic year.

E. Acknowledgement

We thank all stakeholders and respondents who helped us in creating and completing this, God willing, useful research. Thank you to the Chancellor, Dean of the Faculty of Education, Universitas PGRI Palembang, and not forgetting the lecturers who have given us the opportunity to obtain supporting materials for this project.

References

- Alafnan, M. A. (2025). Enhancing Educational Outcomes Using Alafnan Taxonomy: Integrating Cognitive, Affective, And Psychomotor Domains. *Int J Eval & Res Educ*, 14(3), 2419–2437.
- Alvunger, D. (2024). Curriculum Making Across Sites Of Activity In Upper Secondary School Vocational Education And Training: A Review Of The Research In Sweden. In *International Journal For Research In Vocational Education And Training* (Vol. 11, Issue 3, Pp. 303–333). European Research Network Vocational Education And Training. <https://doi.org/10.13152/Ijrvet.11.3.1>
- Aparicio-Gómez, O. Y., Ostos-Ortiz, O. L., & Abadía-García, C. (2024). Convergence Between Emerging Technologies And Active Methodologies In The University. *Journal Of Technology And Science Education*, 14(1), 31–44. <https://doi.org/10.3926/Jotse.2508>
- Astuti, K. S., Zuchdi, D., Sayuti, S. A., Rusdewanti, P. P., & Bramantyo, T. (2022). Effectiveness Imitation, Creation, And Origination Focus Learning By Using Encore To Improve Musicality And Creativity Of Nasheed. *International Journal Of Instruction*, 15(2), 751–774. <https://doi.org/10.29333/Iji.2022.15241a>
- Cowan, A. C., Ratcliff, K., & Li, C.-Y. (2023). Using A Flipped Classroom To Teach Evidence-Based Practice To Entry-Level Occupational Therapy Students. *Journal Of Occupational Therapy Education*, 7(2). <https://doi.org/10.26681/Jote.2023.070217>
- Do, H. M. (2023). Pedagogical Benefits And Practical Concerns Of Writing Portfolio Assessment: Suggestions For Teaching L2 Writing. *Tesl-Ej*, 27(1). <https://doi.org/10.55593/Ej.27105a4>

- Fadilla, Z., Ketut Ngurah Ardiawan, M., Eka Sari Karimuddin Abdullah, M., Jannah Ummul Aiman, M., & Hasda, S. (2022). *Metodologi Penelitian Kuantitatif* (N. Saputra, Ed.; 1st Ed.). Yayasan Penerbit Muhammad Zaini. [Http://Penerbitzaini.Com](http://Penerbitzaini.Com)
- Fikri, A., Saputra, C., Boty, M., Rico, M., Ilmiawan, I., Assidiqi, M., & Setiawan, J. (2025). The Effectiveness of The Student Teams' Achievement Divisions in Social Studies Learning on Activeness and Learning Outcomes. *Journal Of Education and Learning (Edulearn)*, 19(2), 954–962. <https://doi.org/10.11591/edulearn.V19i2.21526>
- Gruber, N., & Kurahashi-Friedmann, T. (2024). Self-Efficacy, Motivation and Learning Strategies In Germany and Japan. *International Journal Of Psychology and Educational Studies*, 11(2), 136–144. <https://doi.org/10.52380/ijpes.2024.11.2.1216>
- Khaled Mohammad Salameh, E., Adel Mostafa Alkhateeb, N., & Almazniah College, N. (2025). *The Effectiveness Of Online Education On The Development Of Critical Thinking Skills Among Nursing Students In Al-Balqa Applied University: A Quasi-Experimental Study*.
- Mahanani, P., Akbar, S., Kamaruddin, A. Y. B., & Hussin, Z. B. (2022). Educational Analysis To Develop Character In Malaysia And Indonesia. *International Journal Of Instruction*, 15(3), 377–392. <https://doi.org/10.29333/iji.2022.15321a>
- Mulyono, H., Ismail Suardi Wekke, M., & Udin Syaefudin Sa, H. (2018). *Strategi Pembelajaran Di Abad Digital*.
- Mundir. (2021). *Buku Baru Pembelajaran Partisipatif* (Suheri, Ed.; 1st Ed.). Licensi.
- Nur'aini, S. (2021). Pendidikan Humanisme Dalalm Perspektif Islam. *Jurnal Ilmiah Pedagogy*.
- Nzuza, Z., & Chitiyo, M. (2024). Cooperative Learning As An Approach To Enhance The Implementation Of Inclusive Education. *International Journal Of Whole Schooling*, 20(2), 2024.
- Oudat, M. A., Al-Luwaici, N. M., & Yacoub, M. H. (2025). The Impact Of The Guided Discovery Strategy On Developing Creative Thinking Among Sports Students. *Educational Process: International Journal*, 14. <https://doi.org/10.22521/edupij.2025.14.23>
- Pondongnok, C., & Phrakhrusutheejarayawattana, P. (2024). Empowering Teachers' Learning Into Action To Enhance Active Learning In The Classroom. *World Journal Of Education*, 14(3), 43. <https://doi.org/10.5430/Wje.V14n3p43>
- Rasid, B. S., Sri, U. H., Rohman, F., & Yanuwidi, B. (2024). Development Of Microbiology E-Books Based On Laboratory Research Results As Teaching Materials To Improve Students' Science Process Skills. *Pegem Journal Of Education And Instruction*, 14(2). <https://doi.org/10.47750/pegegog.14.02.27>
- Rini, F. S., Zaki, M., & Gattuso, A. G. (2024). Efektivitas Metode Pembelajaran Partisipatif Terhadap Hasil Belajar Santri Kelas 3 Kmi Pada Mata Pelajaran Tarikh Islam Di Pondok Modern Arrisalah Ponorogo. *Proceedings Of International Conference On Islamic Civilization And Humanities*, 2, 48–60. <https://proceedings.uinsa.ac.id/index.php/iconfahum/article/view/1794>
- Rodis, O. (2024). The Student-Teacher Experience As A Model For Students As Partners (Sap) And For Enhancing Student Engagement Among Japanese Students. *International Journal For Students As Partners*, 8(2), 186–198. <https://doi.org/10.15173/ijsap.V8i2.5784>
- Ruijuan, L., Srikhoa, S., & Jantharajit, N. (2023). Blending Of Collaborative And Active Learning Instructional Methods To Improve Academic Performance And Self-Motivation Of Vocational Students. *Asian Journal Of Education And Training*, 9(4), 130–135. <https://doi.org/10.20448/edu.V9i4.5211>

- Somers, M.-A., Dixon, M., Solís-Román, C., Schwartz, M., Lalanne, O., Marshall, B., Lee, L., & Avila, O. (2025). *Evaluation Of Lifeskills Training In Minnesota: Implementation And Early Impact Findings*. www.mdrc.org.
- Tang, S., & Ruannakarn, P. (2024). Implementation Of Cooperative Learning Method To Enhance The Students' Learning Ability And Students' Core Competencies. *Higher Education Studies*, 14(3), 104. <https://doi.org/10.5539/hes.v14n3p104>
- Tupthong, K., & Chatwattana, P. (2024). Architecture of The Micro-Learning Platform Mixed With Gamification Via Metaverse To Promote Creative Problem-Solving Skills. *Higher Education Studies*, 15(1), 150. <https://doi.org/10.5539/hes.v15n1p150>
- Utomo, P., Asvio, N., & Prayogi, F. (2024). Metode Penelitian Tindakan Kelas (Ptk): Panduan Praktis Untuk Guru Dan Mahasiswa Di Institusi Pendidikan. *Pubmedia Jurnal Penelitian Tindakan Kelas Indonesia*, 1(4), 19. <https://doi.org/10.47134/ptk.v1i4.821>
- Williams, R., Zhu, B., Pardo, M., Aguilera, C., & Zuber, T. (2024). *Prosocial And Active Learning (Pal) Classrooms Evaluation Final Summative Report Acknowledgments Contents*.

Enhancing Knowledge Management Capabilities To Support Business Competitiveness In A Maritime Company

Armand A. Putra Utama¹, Achmad Fajar Hendarman¹

¹Master of Business Administration Program, Institut Teknologi Bandung, Indonesia,

Corresponding author e-mail: armand_utama@sbm-itb.ac.id

Article History: Received on 19 June 2025, Revised on 23 June 2025,
Published on 25 June 2025

Abstract: This study expands the maturity level of Knowledge Management (KM) at PT ADK and identifies challenges and strategic solutions to improve its implementation. A quantitative survey of 53 employees and qualitative interviews indicate that PT ADK is at the Initiation stage based on the APO KM framework, with the Technology element scoring the highest. Using the Analytical Hierarchy Process (AHP), the improvement priorities are Technology, Process, and Leadership. Key barriers include fragmented knowledge infrastructure, reliance on individuals, and lack of leadership alignment. To address these, two initiative strategies are proposed: developing integrated knowledge systems and procedures, and fostering a culture of knowledge sharing and continuous learning. These initiatives are expected to improve KM effectiveness, align organizational capabilities with competitive demands, and contribute to business sustainability performance. The study also highlights the long-term potential of KM in driving innovation, preserving institutional knowledge, and increasing employee engagement. The combination of the APO and AHP

frameworks offers a structured approach for maritime sector companies seeking to strengthen KM.

Keywords: Knowledge Management, APO Framework, AHP, Digital Transformation, Organizational Management

A. Introduction

As the largest archipelagic country in the world with more than 17,000 islands, Indonesia has a very strategic geographical position on the global maritime map. This potential makes Indonesia one of the important actors in the international maritime sector. The contribution of the maritime industry to the national economy is considerable, especially in terms of job creation for millions of people. However, based on the annual report of the Coordinating Ministry for Maritime Affairs and Investment in 2023, the sector's contribution to Gross Domestic Product (GDP) is still relatively low, which is only 7.9%, far behind other sectors.

The Government of Indonesia continues to encourage the strengthening of the maritime sector as part of the national strategy, one of which is through the "World Maritime Axis" program initiated during the previous administration. This program focuses on infrastructure development and improving operational efficiency to strengthen Indonesia's maritime competitiveness at the global level. In line with this, the national maritime industry is currently inhabited by various local and international companies, including PT Pelni, Samudera Indonesia, Meratus, and Soechi. Since the implementation of the Cabotage Principle in 2005, which requires domestic transportation to be carried out by flagged ships and manned by Indonesian crews, the number of nationally flagged vessels has increased significantly (INSA, 2023).

The maritime industry itself is classified as a knowledge-intensive industry, because it requires multidisciplinary expertise such as navigation, marine engineering, logistics, and maritime law. Unlike other industries, this sector is greatly influenced by external factors that are difficult to predict, such as weather conditions, regulatory changes, and geopolitical risks (Stopford, 2021). Therefore, knowledge management is a crucial aspect for maritime companies to maintain their competitive advantage.

In addition to external risks, maritime companies in Indonesia face increasing competitive pressures due to industry liberalization, growing presence of international operators with higher compliance standards, and customer demand for more integrated and technology-driven logistics services. Companies like PT ADK must also compete in terms of safety performance, operational efficiency, and ability to demonstrate regulatory and environmental compliance—areas where effective knowledge management can directly enhance organizational capability and reputation.

PT ADK is one of the national maritime companies engaged in shipping and logistics since 1973. Headquartered in Kuningan, Jakarta, the company provides ship management services, crew recruitment, and transportation of dry and oil and gas commodities. However, PT ADK faces serious challenges in the aspect of knowledge management, especially in ship management operational activities. This is reflected in the low assessment score in the *Tanker Management and Self-Assessment (TMSA)* program developed by the *Oil Companies International Marine Forum (OCIMF)*, which is only 1.08 out of a scale of 4.00. As a result, the company will have to hand over the management of its tankers to a certified third party for an additional fee of USD 8,000 per month from December 2024.

In addition, PT ADK also faces internal challenges in the form of an aging workforce, with 36.5% of employees over the age of 45,

including most of the top management. In the next decade, nearly 40% of the workforce will reach retirement age, posing a risk of losing implicit knowledge that has not been systematically documented. These challenges are exacerbated by outdated corporate digital infrastructure and information systems that run separately (silos), slowing down data-driven decision-making and hampering knowledge digitization efforts.

Based on these problems, a knowledge management strategy is needed that is structured and aligned with organizational goals. These efforts are not only important to maintain institutional knowledge and operational efficiency, but also to increase the chances of passing various industry assessments as well as strengthen the competitiveness of companies in the maritime sector. In this context, knowledge management is not only a tool for internal improvement, but also a strategic necessity for navigating the complex and highly competitive landscape of the maritime industry in Indonesia.

B. Method

This study employed a mixed-methods approach to evaluate the Knowledge Management (KM) maturity at PT ADK and identify strategic priorities for improvement. Quantitatively, a structured questionnaire based on the APO KM Framework was distributed to 63 employees in the Ship Management Business Unit, including top to middle management and administrative staff. The instrument used Likert-scale items (1–5) to assess seven KM dimensions leadership, processes, people, technology, knowledge processes, learning and innovation, and outcomes each consisting of six items, with a total maximum score of 210. The scores were used to determine the KM maturity level based on established APO benchmarks.

To complement the survey, the Analytic Hierarchy Process (AHP) was used to prioritize KM improvement areas. Five key personnel were purposively selected for their strategic roles and involvement in KM activities. Their functional diversity and hierarchical positions ensured a representative perspective on the organization's knowledge challenges. While the APO tool measures maturity levels, AHP added strategic weight by considering constraints like limited resources.

Qualitatively, in-depth interviews were conducted and transcribed using Soundtype.ai, then refined and coded using AI-assisted tools including ChatGPT. This process enhanced data quality and analytical efficiency. Themes were categorized based on the seven KM dimensions and triangulated with AHP results to identify priority challenges and solution areas. The application of a case study lens focused the analysis on KM practices within the Ship Management Division, providing contextual depth beyond the general survey and interview findings.

C. Result and Discussion

The validity test was conducted by comparing the correlation coefficient with the r-table value of 0.345, given a sample size of 55 and 5% significance level. As for the reliability test, the overall Cronbach's Alpha value must be higher than 0.7. For this questionnaire result, the calculated overall Cronbach's Alpha value is 0.97064.

After conducting the validity and reliability tests on the instrument, the next step is to provide an analysis of the Knowledge Management maturity based on the APO Framework. The questionnaire consists of seven KM categories with six questions in each category. Respondents should rate each question using a scale between 1 to 5,

resulting in a maximum score of 30 for each category and 210 for the maximum score for all categories. Based on the assessment results, PT ADK KM maturity level categorized in the Initiation stage with a score of 105, resulting in the same amount of score gap.

The average score from all categories is 17.7 with the highest score being the element of Technology with 20.51. The other categories' scores vary between 15 to 18 and provide insignificant differences with the average score. Interview Result This subchapter will present the qualitative responses gained from interview sessions with selected individuals in the company to gather important information related to the barriers and challenges in current Knowledge Management practices. The interview was also designed to complement the quantitative result from the APO KM maturity assessment.

In qualitative data analysis, seven elements of Knowledge Management (KM) were used as categories to group statements from interview results. This coding focuses on the challenges or obstacles faced by PT ADK in the implementation of KM. The results of the coding showed that most of the challenges identified by the respondents were concentrated in the *Process* and *People* elements, as many as 16 statements each. Furthermore, the *Leadership* and *Technology* elements rank next with 12 and 11 statements, respectively. This indicates that these three elements are seen as the main obstacles in the implementation of KM in the company.

To determine the priority of improvement, the analysis was carried out using the *Analytical Hierarchy Process* (AHP) method with a *pairwise comparison* approach. The results of the analysis of seven respondents show that the three elements of KM that are the top priorities are *Technology*, *Process*, and *Leadership*. This order of priorities shows that there is an alignment between the results of qualitative interviews and quantitative considerations, which

together highlight the importance of improving technology capabilities, process efficiency, and leadership effectiveness in supporting the success of knowledge management at PT ADK. The ranked KM element can be seen in Table 1.

Table 1. AHP Recapitulation

Element	Weights	Rank
Technology	0,257	1
Process	0,252	2
Leadership	0,194	3
People	0,124	4
Learning & Innovation	0,069	5
Knowledge Process	0,052	6
KM Outcomes	0,052	7

Each respondent filled a structured pairwise comparison between the seven KM elements. The generated each elements' weight were calculated using the means of personal judgements that processed through the AHP method. The overall consistency of the stakeholders was calculated using the Consistency Ratio (CR), which resulted in 1.4% where it is below the threshold of 10%. Indicating that the respondents' judgements are consistent. Moreover, the Eigenvalue indicators resulted in 7.109, a very close to the ideal value of 7.000 (Table 2).

Table 2. All Respondent's AHP Result

Element	R1	R2	R3	R4	R5	R6	R7
Leadership	0,096	0,491	0,413	0,095	0,061	0,370	0,121
Process	0,405	0,132	0,207	0,159	0,345	0,040	0,438
People	0,122	0,162	0,079	0,061	0,108	0,121	0,158
Technology	0,237	0,089	0,192	0,467	0,355	0,167	0,149

Knowledge Process	0,054	0,030	0,036	0,068	0,042	0,052	0,048
Learning & Innovation	0,047	0,065	0,042	0,073	0,044	0,199	0,044
KM Outcomes	0,038	0,030	0,031	0,077	0,044	0,052	0,042

Themed Grouping of KM Implementation Barriers

With the prioritization of the improvement of the KM Elements has been determined by the AHP, the next step is to create a themed grouping of barriers from the interview result. Each of these barriers are derived from the statements that represent the prioritized KM Elements: Technology, Process, Leadership. The detailed themed grouping can be seen in Table 3 below.

Table 3. Themed Grouping of KM Implementation Barriers

Barrier Theme	KM Element	Interviewee	Statement
Fragmented knowledge infrastructure & processes	Technology, Process	Technical Senior Manager	We often fall behind because there is no systematic evaluation...
		QHSE Dept Head	Most SOPs are still manual and in hard copy format...
		QHSE Dept Head	Ship data is still in hard copy, scanned, and sent by email it can't be processed directly yet...
		Oil & Gas Manager	We hope to have an integrated system between divisions, but it's still not clearly implemented.
		Senior Technical Superintendent	TS should focus on ship performance, but instead they're burdened with vendor and procurement tasks.
	People, Leadership	Oil & Gas Manager	Leadership relies heavily on the experience of senior personnel.

Dependency on Individuals		QHSE Dept Head	HR once initiated knowledge sharing it was great, but it stopped when the person in charge left.
		Senior Technical Superintendent	The TS knows who is developing, but they're not given authority to provide input.
		Senior Technical Superintendent	Leadership should give responsibility and authority only then can strong, knowledgeable teams emerge.
Unaligned Leadership Direction	Leadership	Technical Senior Manager	Right now, the top management seems to have different visions. It's confusing for us down here.
		VP of Oil & Gas	Knowledge sharing has not become a culture. Due to the top-down leadership style, interaction between division is also rare

Based on the data shown in the previous table, there are three main obstacles in the implementation of Knowledge Management (KM) in organizations, namely: (1) Fragmented knowledge infrastructure and processes, (2) Dependence on a specific individual (3) Misaligned leadership direction. As a follow-up, the next step is to identify improvement opportunities that can be proposed as business solutions in order to overcome these barriers.

This initiative is aimed at addressing the problem of fragmentation in infrastructure and knowledge processes in organizations. Based on the results of the interviews, it was found that outdated technologies and processes cause various obstacles in the transfer and documentation of knowledge, which should be the foundation for future improvements. The main goal of this initiative is to centralize the knowledge that organizations have and need through the implementation of updated systems—both third-party and

internally developed systems. Thus, organizations will have a single source of information that can be accessed in real-time.

While organizations have sufficient resources to perform infrastructure updates, key steps still need to be taken to ensure procedural alignment and system readiness. These measures include:

Procedure Revision and Audit

The responsibility for carrying out this audit lies with the QHSE Department, as the authorized unit in the management of the organization's official documents. The audit procedure will start from critical units directly related to PT ADK's main business processes, such as the Engineering Department and the Crew Department within the Ship Management Division. To maintain consistency, it is necessary to have regular discussions with a strict time commitment. For example, a "One Procedure per Week" commitment with a progress tracking mechanism will help ensure that audits run on schedule. Procedures directly related to KM practices and system utilization should be a top priority in this process.

Maritime Systems Software Deployment to Support Internal System Migration

Integrated maritime software generally offers comprehensive operational support, from parts procurement, planned maintenance systems, to crew management. With integrated processes, data and documentation management is made easier, and allows cross-departmental data access through efficient search features, thus encouraging cross-functional collaboration.

Most of these solutions allow partial installation of modules, which can be adjusted to the customer's needs and capacity. Given PT ADK's lack of exposure to external digital environments, partial installation makes sense. The most appropriate strategy is to start with one or two important modules installed in each type of ship owned by PT ADK, namely Bulk Carrier and Tanker. In addition to considering budget limitations, this partial approach is also useful as a means of learning and evaluation.

System Integration into Daily Operations

The next step is to integrate the system into the employees' daily activities. Without robust procedure development and adequate system integration, operational processes will remain fragmented and lack end-to-end workflows that can be replicated. This integration process must start from the leaders of units and divisions to provide an example in the implementation of systems and procedures. Without active leadership, employees are less likely to feel the urgency in using the system.

In addition to leadership that provides examples, another supporting initiative is the development of an onboarding module to assist employees in understanding and using the new system. While third-party system providers typically provide usage guidelines, they may not necessarily be appropriate in the context of your organization's internal needs. For example, the HRGA Division is currently migrating from an internally developed HR Information System (HRIS) system to an integrated software environment.

Knowledge Sharing Culture and Regular Reviews

The objective of this initiative is to reduce the over reliance on certain expert individuals by nurturing a habit of knowledge sharing and continuous learning. This initiative ensures that the tacit

knowledge from every employee (especially the experienced senior ones) are shared regularly and encourages the employees to use the socialized and externalized knowledge to learn and solve problems. The aim is to make knowledge sharing a habit, not just a regular activity done weekly or monthly. There are several activities and areas that can be used as point of improvement that aligned with the initiative, such as:

Friday Learning" Sharing Session

The program should continue with a new format, publication and evaluation process that can meet the objectives yet keep the informal and casual arrangements intact. This initiative should involve the HRGA team to arrange the theme of the learnings that align with the training needs. Currently, the sharing session from Technical Superintendents is being in trial.

Each session should be repeated regularly with upgraded modules in each topic, from the most basic to the most comprehensive over time. This sharing session initiative is expected to drive socialization process through tacit knowledge transfer and produce externalized knowledge such as presentations that can be documented in the organization's archive. The proposed learning roadmap is as follows:

Table 4. Proposed Learning Roadmap

Month	Session	Topic	Speaker
1	1	Product Knowledge Overview	Director
	2	Ship Owning & Chartering Services	VP of Commercial
2	3	Crew Management Basics	Crew Manager
	4	Port Agency Basics	

3	5	Ship Structure & Navigation Basic	VP of Ship Management
	6	Safety & Compliance	QHSE Manager
4	7	Spare parts, procurement & planning	VP of Ship Management
	8	Ship Maintenance & Docking	Technical Superintendent
5	9	Shipbuilding 101	VP of Ship Management
	10	Ship Operations Case Study	VP of Commercial
6	11	Indonesia & International Maritime Law	Legal
	12	Industry Update & Review	Director

Post-Activity Documentation and Review

As part of the knowledge sharing and retention process, the presence of well documented reports and analysis are critical. Currently, it is a rare occurrence in the organization to have a documented post-activity debrief or AARs (After-Action Reviews). The top management should implement a regular meeting with the related departments to discuss the lessons learned. The objective is to openly discuss both success and failures. All the reports should be documented in the integrated system that has been implemented in forms of learnings and recommendations. This practice will directly support the externalization process of the experiences of the team members, preserving the knowledge in the organization and reducing the dependency on individuals by utilizing the records written by other employees.

Implementing a Client Service Model

Other than executing routines of knowledge sharing and documentation of report, the organization must establish an organizational structure that supports knowledge transfer. The high hierarchy structure hinders the ability to let the employees gain experience from the business processes. Causing a siloed working environment with limited knowledge transfer. Figure 6 shows Proposed Client Service Model (FGD Result from Author, HR Dept. Head, Consultant & Managing Director).

Discussion

This study aims to evaluate the maturity level of Knowledge Management (KM) in PT ADK and identify challenges and strategic solutions in its implementation. The survey was conducted on 53 employees from various divisions, with the majority of respondents in the age range of 41–50 years and above 50 years old. Most respondents had a tenure of more than 7 years, demonstrating deep involvement in the organization. The validity and reliability of the questionnaire were tested with Cronbach's Alpha result of 0.97064, which indicates a very reliable instrument.

Based on the APO framework, PT ADK's KM maturity is positioned at the Initiation stage with a total score of 105 out of 210. While the Technology element received the highest score, the organization's overall position at the Initiation stage suggests that KM activities are still ad hoc, lack formal structure, and are largely dependent on individual initiative rather than institutional mechanisms.

This maturity level implies that knowledge is not yet systematically captured, shared, or reused across business units. Operationally, this leads to inefficiencies such as duplicated efforts, inconsistent documentation, and limited cross-functional collaboration. Strategically, it hinders the company's ability to respond quickly to

industry changes, innovate continuously, and meet international compliance standards such as those mandated in the TMSA.

In the context of the maritime sector, where rapid regulatory shifts and high safety standards are the norm, remaining at this early maturity level restricts PT ADK's ability to integrate digital compliance systems, leverage cross-voyage learning, or provide differentiated client service models.

The findings were strengthened by qualitative interviews that revealed the dominant KM barriers were in the Process and People elements, with supporting issues in Leadership and Technology. These barriers include fragmented knowledge flows, reliance on individual experience, and inconsistent leadership support for KM initiatives. The AHP method prioritized Technology (28.2%), Process (22.1%), and Leadership (18.0%) as the key focus areas for improvement, with high consistency (CR = 1.4%). To overcome these challenges, two strategic initiatives were proposed: (1) developing integrated digital knowledge systems and procedures, and (2) fostering a knowledge-sharing culture through periodic reviews, team-based learning, and structured documentation practices.

However, for these initiatives to succeed, they must be embedded within a broader change management framework. This includes establishing incentive mechanisms for knowledge contribution, setting clear leadership mandates, and aligning KM objectives with service excellence strategies—particularly in client-facing operations where responsiveness and knowledge accessibility are essential.

Compared with KM best practices in leading maritime companies—where structured KM systems are tied to safety protocols, innovation programs, and client service dashboards—PT ADK's current state shows a significant gap. This reinforces the urgency for transformation. Thus, the implementation of these initiatives should

not be seen as an isolated project, but as a step toward a long-term KM vision: a company-wide, technology-enabled knowledge ecosystem that supports operational agility, compliance leadership, and sustained competitive advantage.

D. Conclusion

The results of this study show that the KM maturity level at PT ADK is still at the Initiation stage, reflecting the need to strengthen both the system and cultural foundations of knowledge management. Key challenges are concentrated in the Process, People, and Leadership elements, highlighting the significance of human and governance factors in KM implementation. These three elements were consistently identified through both quantitative assessment and qualitative interviews as strategic priorities for improvement. Systematic efforts, such as auditing operational procedures and developing integrated digital systems, are required to build an effective KM infrastructure. Furthermore, leadership involvement is crucial in fostering a culture of knowledge sharing and guiding the strategic direction of KM initiatives.

In the long term, PT ADK should aspire to reach the Systematization or Optimization stage of KM maturity, where knowledge is institutionalized, accessible, and actively used in decision-making and innovation. The ideal state would involve real-time knowledge access across units, embedded learning practices, and an adaptive knowledge-sharing ecosystem. Such transformation will enable PT ADK to evolve into a knowledge-driven maritime organization—resilient, agile, and competitively positioned in facing regulatory changes, operational complexity, and global industry demands.

References

Argyris, C., & Schön, D. A. (1978). *Organizational Learning: A Theory of Action Perspective*. Addison-Wesley.

- Asian Productivity Organization (APO). (2010). *Knowledge Management: Facilitator's Guide*. Asian Productivity Organization.
- Cahyono, F., & Tjakraatmadja, J. H. (2022). Digitalization in knowledge management systems for project and operational management in software development to increase efficiency. *International Journal of Management, Entrepreneurship, Social Science and Humanities (IJMESH)*, 5(2), 181–200.
- Carter, E. (2024). The Impact of Communication Strategies on Employee Engagement: A Comprehensive Review. *Journal of Organizational Culture Communications and Conflict*, 28(S2), 1-3.
- Cheng, C.-H., Li, M.-H., Tang, B.-J., & Cheng, Y.-R. (2024). The impact of knowledge management and organizational learning promotion in SMEs learning for Industry 4.0 and competitiveness. *Administrative Sciences*, 14(8), 161. <https://doi.org/10.3390/admsci14080161>
- Fei, J., & Caesar, L. D. (2020). Knowledge management in the shipping industry. In J. Fei (Ed.), *Knowledge Management in the Shipping Industry* (pp. 101–118). IGI Global. <https://doi.org/10.4018/978-1-7998-2204-5.ch006>
- Fleron, F., & Stana, B. (2021). Enhancing maritime safety: A comprehensive review of challenges and opportunities in the domestic ferry sector. *Maritime Safety Review*. [DOI placeholder]
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1–2), 1–12.
- Indonesian National Shipowners' Association (INSA). (2024). *Asas Cabotage Demi Kedaulatan Negara*. Retrieved from <https://insa.or.id/asas-cabotage-demi-kedaulatan-negara/>
- Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology* (2nd ed.). Sage Publications.

- Mazzetti, G., & Schaufeli, W. B. (2022). The impact of engaging leadership on employee engagement and team effectiveness: A longitudinal, multi-level study on the mediating role of personal- and team resources. *PLOS ONE*, 17(6), e0269433. <https://doi.org/10.1371/journal.pone.0269433>
- MDPI Editors. (2022). Cyber security in the maritime industry: A systematic survey. *Information*, 13(1), 22. <https://doi.org/10.3390/info13010022>
- Morgan, D. L. (2023). Exploring the use of artificial intelligence for qualitative data analysis: The case of ChatGPT. *International Journal of Qualitative Methods*, 22, 1–10. <https://doi.org/10.1177/16094069231211248>
- Ngai, E. W. T., & Chan, E. W. C. (2005). Evaluation of knowledge management tools using AHP. *Expert Systems with Applications*, 29(4), 889–899.
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press.
- Prasetyo, B. A., & Hendarman, A. F. (2023). *Knowledge Management Readiness Level Analysis Using Asian Productivity Organization (APO) Framework Approach in PT TPPI*. *American International Journal of Business Management (AIJBM)*.
- Rajaram, P., Goh, M., & Zhou, J. (2022). Guidelines for cyber risk management in shipboard operational technology systems. *Maritime Policy & Management*. <https://doi.org/10.1080/03088839.2022.2031409>
- Review of Maritime Transport. (2021). Digital transformation and sustainability trends. United Nations Conference on Trade and Development (UNCTAD). <https://unctad.org/webflyer/review-maritime-transport-2021>
- Rowley, J. (2006). *The Wisdom Hierarchy: Representations of the DIKW Hierarchy*. *Journal of Information Science*, 33(2), 163–180.

- Saafi, S., Vikhrova, O., & Fodor, G. (2022). AI-aided integrated terrestrial and non-terrestrial 6G solutions for sustainable maritime networking. *IEEE Journal on Selected Areas in Communications*.
<https://doi.org/10.1109/JSAC.2022.3144755>
- Sen, A. (2024). Organizational knowledge and knowledge management – A new framework. *American Journal of Management Science and Engineering*, 9(1), 1–12.
<https://doi.org/10.11648/j.ajmse.20240901.11>
- Sporsem, H., & Hermes, N. (2023). Knowledge loss induced by organizational member turnover: A literature review. *Journal of Knowledge Management*. <https://doi.org/10.1108/JKM-04-2023-0412>
- Stopford, M. (2021). *Maritime Economics* (4th ed.). Routledge.
- Sushandoyo, D., Kencanasari, R., & Prasetyo, E. A. (2024). *Learning for Innovations in Digital Startups*. ITB Press.
- Utami, C. M., & Hendarman, A. F. (2023). Knowledge management as an enabler of innovation: A case study of an Indonesian interior design firm. *International Research Journal of Economics and Management Studies*, 1(1), 1–4.

Analysis of Determinants of Stock Returns in Transportation Sub-Sector Companies on the IDX

Yesita Astarina¹, Claudya Nurcahaya ¹, Dwi Riana¹

¹Department of Business Administration, Sriwijaya State
Polytechnic. Palembang, Indonesia

Corresponding author e-mail: yesita.atarina@polsri.ac.id

Article History: Received on 20 June 2025, Revised on 22 June 2025,
Published on 25 June 2025

Abstract: This study aims to determine whether financial risk and business risk can affect stock returns in transportation companies listed on the Indonesia Stock Exchange. This study is an associative study with a quantitative approach. The population in this study is all transportation companies listed on the IDX during the period 2019-2023. The sampling technique used the purposive sampling method with the number of samples obtained being 10 companies. This study uses secondary data and data analysis techniques using multiple linear regression analysis with SmartPLS program, and hypothesis testing using partial t-tests. The results of this research show that based on partial tests, financial risk and business risk do not have a significant effect on stock returns. The coefficient of determination value obtained was 3.2%, meaning that there are other variables that contribute to stock returns which were not examined in this research.

Keywords: Financial Risk, Business Risk, Stock Return, and
Transportation Companies

A. Introduction

To invest in stocks, investors must be aware of every desired stock development in the capital market. Before making an investment, investors need to know and choose which stocks can provide the most optimal returns for the funds they invest. In investing, there must be risks that must be faced by investors. Understanding the concept of investment risk will greatly help investors in analyzing the investments they will make. So that investors will not be trapped by the desire for high *returns* without looking at the reality of the existing risks.

Transportation companies have an important role in driving the wheels of a country's economy. In Indonesia, this sector not only provides transportation services, but also supports logistics and efficient distribution of goods. Shares of transportation companies on the IDX offer investment opportunities that have promising growth prospects. According to data from the Central Statistics Agency (BPS) in 2023, the transportation and warehousing sector contributes 15.93 percent to Indonesia's economic growth (www.bps.go.id). This shows how big the role of this sector is in the economy in Indonesia. From this, the transportation sector has enormous potential for investors who want to invest.

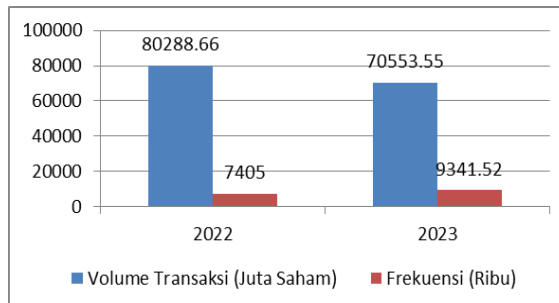


Figure 1. Transportation and Logistics Sector Stock Trading Recapitulation.
 Source: PT. EIB, 2024

The table above shows stock trading data for the transportation and logistics sector on the IDX during 2022-2023 which shows that when viewed from the volume of transactions that occurred for two years, it decreased, but the frequency of transactions increased by around two thousand transactions that occurred. This shows that investor interest in stocks in this sector has increased.

There are several studies that explain the influence of financial risk and business risk on stock returns, including, (Safara & Nekky, 2024) found that business risk has an insignificant effect on stock returns, (Idris, 2024) found that financial risk and business risk have no effect on stock returns. (Prasetyani, 2016) concluded that financial risk and business risk simultaneously have an effect but not significantly on stock returns. (Tumanggor, Salim, & Djumahir, 2019) explained that business risk has a significant positive influence on stock returns. (Palisungan, 2021) found that financial risk has a negative and insignificant effect on stock returns, while business risk has a positive and significant effect on stock returns. (Nazariah, 2020) explained that financial risk and business risk have a significant positive effect on stock returns.

Although several previous studies have examined the effect of financial and business risks on stock returns, findings across sectors have shown inconsistent and contradictory results, especially in the context of emerging markets such as Indonesia. However, limited research has specifically analyzed these risk factors in the transportation sub-sector, which is vital for national economic growth. This study aims to fill that gap by focusing on transportation companies listed on the IDX, using financial risk (proxied by Debt to Equity Ratio) and business risk (measured using the standard deviation of Return on Equity) as determinants of stock returns. By narrowing the industry focus and utilizing updated data from 2022–2023, this research contributes uniquely to the literature by offering

contextual insights and implications relevant for investors and policy-makers in sector-specific investment decision-making.

B. Method

In this research, the analysis method used is associative with quantitative analysis. The population in this study is a transportation company listed on the Indonesia Stock Exchange (IDX) during the 2019-2023 periodic. The method of sampling in this research is to use the sampling method. The criteria for sampling are; (1) Transportation companies listed on the IDX Periodic 2019-2023 (2) Transportation companies that publish financial statements for 5 consecutive years in 2019-2023.

Table 1. Research sample

No.	Company Name	Code
1.	Adi Sarana Armada Tbk.	ASSA
2.	Blue Bird Tbk.	BIRD
3.	Batavia Prosperindo Trans Tbk.	BPTR
4.	AirAsia Indonesia Tbk.	CMPP
5.	Garuda Indonesia (Persero) Tbk.	GIAA
6.	Jaya Trishindo Tbk.	HELI
7.	Eka Sari Lorena Transport Tbk.	LRNA
8.	Steady Safe Tbk.	SAFE
9.	Express Transindo Utama Tbk.	TAXI
10.	WEHA Transport Indonesia Tbk.	WEHA

Source: Data processed by the author, 2024

Research variables are attributes or elements in a study that possess varying values to be observed, analyzed, and concluded (Elveira & Yeisita Astarina, 2021). This research identifies two independent variables: financial risk and business risk, and one dependent variable: stock return. Financial risk is proxied by the Debt to Equity

Ratio (DER), and business risk is proxied by the standard deviation of Return on Equity (ROE) (Brigham & Houston, 2006). Stock return is calculated by finding the difference between the stock price at time t and the stock price at $t-1$. For a clearer understanding of the operational definitions: the financial risk variable (DER) is measured by dividing total liabilities by total equity, as reported in the companies' annual financial statements ($DER = \text{Total Liabilities} / \text{Equity}$). The business risk variable is measured using the standard deviation of Return on Equity (ROE), where ROE is calculated by dividing net income by shareholders' equity ($ROE = \text{Net Income} / \text{Equity}$). The standard deviation is calculated over a five-year period (2019–2023) to reflect the volatility of ROE, representing the company's business risk. This approach aims to capture both the level and stability of risk indicators relevant to investors in the transportation sub-sector.

This research uses multiple linear regression analysis with the help of the SmartPLS4 statistical program. The analysis of the Multiple Linear Regression was carried out to see the relationship between dependent variable and independent variable

$$Y = a + b_1X_1 + b_2X_2 + e$$

And= Return Stock

a = Constance

b_1 = Regression coefficient variable X_1

b_2 = Regression coefficient variable X_2

X_1 = Financial risk

X_2 = Business risk

e = Standard error

The hypothesis test in the research was carried out with a t test, which is a test to determine the number of variables from each variable of independent and to the variable of dependent. If the value of t is calculated $> t$ table or the $<$ sign value is 0.05, then the

hypothesis is accepted to mean that the variable independent is significant in a partial way to the variable of the dependent, and conversely.

C. Results and Discussion

Data collection with the help of the SmartPLS4 statistical program shows the results of the examination against the research data as follows. Descriptive statistical testing was carried out to describe the research data that had been produced. The results of data collection were used for a descriptive statistical test.

Table 2. Descriptive Statistical Test Results

Description	Mean	Median	Observed Min	Observed Max
Financial Risk	-0,678	0,315	-22,700	7,830
Business Risk	-0,370	0,020	-3,080	3,090
Return Saham	0,226	0,000	-0,770	5,150

Source: Data processing results, 2024

Table 2. presents the descriptive statistics of each research variable, including the mean, median, minimum, and maximum values observed. The financial risk variable shows a mean of -0.678 and a median of 0.315, with an observed minimum of -22.700 and a maximum of 7.830. These figures indicate the presence of extreme outliers, particularly on the lower end. A highly negative DER (Debt to Equity Ratio) is unusual and likely reflects companies with negative equity values—possibly due to accumulated deficits, financial restructuring, or ongoing losses—which distort the DER formula. Meanwhile, the extremely high DER value suggests a company with substantial reliance on debt financing, a condition

commonly found in capital-intensive industries or firms facing financial distress.

For the business risk variable, represented by the standard deviation of Return on Equity (ROE), the data show a mean of -0.370, a median of 0.020, a minimum of -3.080, and a maximum of 3.090. While negative means may result from the normalization or scaling process, the wide spread of values suggests substantial variability in earnings performance. The higher-end values (above 3.0) indicate firms with significant volatility in their equity returns—likely caused by unstable income, operational disruptions, or market shocks, especially during the pandemic period from 2020 to 2022.

The stock return variable has a mean of 0.226, a median of 0.000, a minimum of -0.770, and a maximum of 5.150. The zero median implies that half of the companies experienced non-positive returns, while the highest value suggests that a small number of firms had exceptionally high capital gains possibly due to short-term market sentiment or speculative activity, rather than consistent financial performance.

The implications of these extreme values are significant. Firstly, they indicate a high degree of heterogeneity among companies in the transportation sub-sector listed on the IDX. Secondly, such outliers may affect the assumptions of regression analysis particularly normality and homoscedasticity which could influence the accuracy of statistical inference. Hence, interpretation of the regression results must take into account these data anomalies, as they reflect not only statistical irregularities but also meaningful differences in firm characteristics and risk profiles. For investors, these findings reinforce the need to assess company-specific conditions when evaluating financial and business risks in this sector.

The results of the normality test can be seen in the skewness and kurtosis values on this table.

Table 3. Normality Test Results

Description	Standard Deviation	Excess Kurtosis	Skewness
Financial Risk	4,263	13,393	-2,836
Business Risk	1,036	3,008	-0,555
Return Saham	1,041	13,219	3,453

Source: Data processing results, 2024

Based on table 3, see the value of kurtosis and skewness in each variable of the value of kurtosis has a value of 2 and skewness each has a value of -2 which indicates an abnormal distribution. These results can be continued for multiple regeneration models with smartPLS as stated (Hair, Matthews, Matthews, & Sarstedt, 2017) when performing structural similarity modeling or using data processing with SmartPLS, not all data must be distributed in a normal way. Furthermore, Rigdon, Becker, and Sarstedt (2019) assert that PLS-SEM is not only tolerant to non-normality but is often the preferred approach when sample size is limited or data characteristics do not meet the assumptions of covariance-based SEM.

Table 4. Heteroskedasticity Test Results

	Test-Statistic	df	P Value
Breusch-Pagan Teist	8.159	2	0.170

Source: Data processing results, 2024

Based on the data, the value of the Breusch-Pagan Theist is calculated to be 0.170 instead of 0.05 until it can be concluded that this research does not result in a heteroscedasticity so that it can be used as a good model. The results of the multicollinearity test can be seen from the VIF value of the following.

Table 5. Multicollinearity Test Results

Description	VIVID
Financial Risk	1,042
Business Risk	1,042

Source: Data processing results, 2024

Based on the results of VIF on the two variables, the value of each is 1.042 (<10.00), meaning that it does not become multicollinearity. The results of the re-enactment exam with the help of the SmartPLS program are shown in the picture and table below.

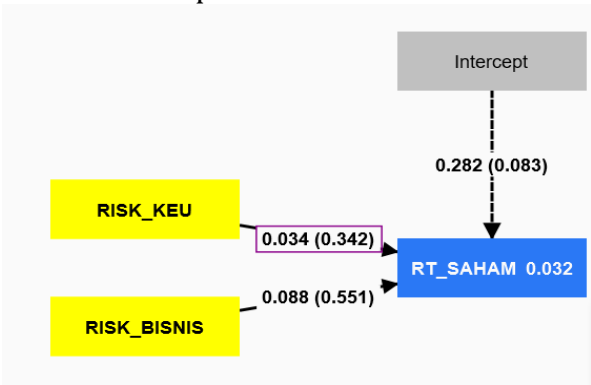


Figure 2. Multiple Linear Regression Test Results

Source: Data processing results, 2024

Based on the Multiple Linear Regression Test described in figure 2 above, this following is a table of the results of the Multiple Linear Regression Test

Table 6. Results of Multiple Linear Regression Test

	Unstandardized Coefficients
Fashion	B
(Constant)	0,282

Financial Risk	0,034
Business Risk	0,088

Source: Data processing results, 2024

Based on the results of the re-enactment test, the following are as follows: $\text{Return Stock} = 0.282 + 0.034 \text{ Risk\_Keiu} + 0.088 \text{ Risk\_Bussiness} + e$

The results of the regression analysis show that the coefficient for the financial risk variable is positive at 0.034 or 3.4%, while the coefficient for the business risk variable is also positive at 0.088 or 8.8%. This shows that there is a positive relationship between both independent variables—financial risk and business risk—on the dependent variable, stock return. This means that when financial or business risk increases, stock returns tend to increase as well.

From a theoretical standpoint, this finding supports the risk-return trade-off principle in modern financial theory, which asserts that investors demand higher returns as compensation for bearing higher risk (Zhou & Li, 2021). The positive coefficient of financial risk (measured using the Debt to Equity Ratio) may indicate that investors interpret higher leverage as a potential signal of expansion and growth, particularly in capital-intensive industries like transportation. Meanwhile, the positive coefficient of business risk (measured using the standard deviation of ROE) implies that greater volatility in company performance may be perceived as opportunity-bearing by risk-tolerant investors, especially in emerging markets (Ryu & Kim, 2020). Although the coefficients are not statistically significant, their direction aligns with fundamental financial theories regarding investor behavior under risk.

Partial and simultaneous testing is carried out to answer the research hypothesis that has been formulated.

Table 7. Partial Test Results

Fashion	Partial Test	
	t	Sig.
(Constant)	1,771	0.083
Financial Risk	0,959	0,342
Business Risk	0,601	0.551

Source: Data processing results, 2024

Partial tests in this study showed that the financial risk variable had a p-value or significance value of 0.342 (>0.05). This shows that financial risk does not have a significant impact on the stock return. It is also a variable of business risk that has a p-value of 0.551 instead of 0.05. This shows that business risks are not significantly affected by the stock return. These insignificant results may be theoretically justified by the nature of the transportation industry, which is highly capital-intensive. In such industries, a high level of debt (financial risk) is often expected and may not serve as a critical signal to investors regarding firm performance, thereby reducing its predictive power on returns (Zhou & Li, 2021). Furthermore, business risk, proxied by the standard deviation of ROE, may be perceived by investors as a form of diversifiable firm-specific risk, which under the assumptions of modern asset pricing models, does not significantly influence expected returns. In addition, during the 2019–2023 period, investor decision-making may have been more strongly influenced by macroeconomic uncertainty, post-pandemic recovery expectations, or behavioral biases rather than by fundamental firm-level risks (Ryu & Kim, 2020; Chavali & Rosario, 2021). These conditions may explain why neither financial nor business risk appeared to have a statistically significant effect on stock return in this context.

The data analysis of the test of the cohesion test to see to what extent the variables of the individual can influence the variable can be seen in the table below.

Table 8. Results of the Determination Equation Test

Fashion	R Square	Adjusted R Square
1	0,032	0,009

Source: Data processing results, 2024

Based on the table of the results of the determination cohesion test above, it is known that the value of R-Square is 0.032 or 3.2%. This means that while the total number of variables in financial risk and business risk only contributes 3.2% to this research model, while the remaining 96.8% is influenced by other variables that are not researched or included in this research model. The low explanatory power of the model and the non-significant results of the independent variables may be theoretically explained by the nature of capital markets, especially in emerging economies like Indonesia, where investor behavior is often driven more by macroeconomic conditions, speculative motives, or market sentiment than by firm-specific financial indicators (Ryu & Kim, 2020). Additionally, the Efficient Market Hypothesis suggests that all available public information, including risk ratios, is already reflected in stock prices, which can further weaken the statistical influence of isolated variables such as DER or ROE volatility (Zhou & Li, 2021). Therefore, while financial and business risks are theoretically relevant, their impact may be overshadowed by broader, unmeasured market dynamics in the observed period.

Discussion

The results of the analysis in this study show that the financial risk variables proxied by the DER do not have a significant impact on the *stock return* of transportation companies listed on the IDX. This indicates that the reduction of financial risks will not affect the return of the company's shares. The financial risk that exists in a company is very variable and has a lot of risks if it happens to a company. One of the financial risks that companies face along with it is liquidity risk. Liquidity risk is the most common and most pressing

problem for any company. The company runs out of cash due to insufficient income, poor income, and cannot provide the bank with a problem from the internal or external of the company. No less important is the risk of credit or cash belonging to a company, this can be uninvested in return to get the benefits. Theoretically, this phenomenon can be explained by the tendency of investors in emerging markets such as Indonesia to place greater emphasis on macroeconomic indicators, fiscal and monetary policy, as well as external factors such as fluctuations in global energy prices or national logistics subsidy schemes, rather than internal financial ratios when evaluating stocks in the transportation sector.

Signaling theory shows that a company with a high value will send signals in the form of a lot of debt. The use of debt shows that the company is not resilient to the risk of bankruptcy, so that the market valuation of the company will increase (Megginson, 1997). One way to show good performance is to show good performance, so according to this theory, if the business value is good, then the business can be said to be good (Apriani, Lupikawaty, & Purnamasari, 2024). According to Ang Dalam (Subalno, 2010) he argues that the high level of debt indicates that the interest burden of the company will be as high as the profit. The existence of this income is so that the investor does not include the DER in his investment consideration, so that the DER does not have to face the stock return.

An examination of the variables of business risk shows that business risk does not have a significant impact on the stock return. Business risk is one of the non-systemic risks experienced by many businesses because there is no certainty in the valuation of returns on invested capital. Each company will face business risks, for example, if the company does not have adequate funds to carry out its business activities. Business risks cause the company to be unable to meet the target or unable to achieve the company's goals.

Generally, companies are not able to provide adequate returns for investors. Uncertainty can also lead to business failure and even bankruptcy. Business risk has a more significant impact when the company has a high risk. This makes it difficult for companies to get cheap funds, because investors see that companies have a high risk of default. The combination of high business risk and leverage makes it difficult for businesses to meet their financial obligations at any time. When income falls, it is unable to pay the return on its debt, and it can lead to bankruptcy. Despite these theoretical implications, investors may place greater emphasis on broader indicators such as earnings momentum, dividend stability, or sector-wide performance trends, which are often seen as more predictive of return in the Indonesian equity market context) (Chavali & Rosario, 2021; Li & Wang, 2022).

In transportation companies that are listed on the IDX through this research, the results show that business risks are not related to the return of the company's shares. This shows that it is possible that the ROE is not proportional to the value of the DER, so that the profit earned will cover the interest burden of the loan incurred for the debt. The ROE deification is believed as real evidence to the investor to see whether the company's performance is balanced or not.

The results of this research are supported by the research conducted by (Suharli, 2005), (Prasetyani, 2016), and Seirta (Wiyati, Maryati, & Thamrin, 2022) who suggest that business risks do not affect stock returns. Furthermore, research (Nababan, Mangantar, & Maramis, 2019) is also consistent with the results of this research, business risk can be interpreted as a potential event that results in a decrease in the profitability of the company.

In this research, business risk does not impede the stock return, this means that the company's management is not able to use the assets properly to increase the stock price so that the stock return does not increase. This also shows that even though transportation

companies listed on the IDX have good business prospects, they are not a motivating factor to attract investors for investment. This lack of interest is what causes a decline in demand for shares which will later have an impact on the stock price that does not affect the company's stock return.

D. Conclusions

Based on the results of the research, it can be concluded that at least partially financial risk and business risk are not affected by the stock return. This shows that the investor has other considerations, apart from the risks that occur to the company, for example, the consideration of financial and business considerations carried out by the management of the company. The results of the determination test show that the risk of financial and business risk in the face of stock return is only 0.032 or 3.2%, meaning that 96.8% of the stock return is affected by other factors other than the variables in this research.

This research discusses stock return based on the influence of financial and business risk variables. The limited explanatory power of only 3.2% reflects a limitation of this study, which included only two variables related to financial and business risk. For future research, it is recommended to consider additional variables such as market sentiment, macroeconomic indicators (e.g., inflation, interest rates), ESG performance, corporate governance, or earnings per share (EPS), which may provide a more comprehensive understanding of the determinants of stock return in the transportation sector.

References

- Apriani, D., Lupikawaty, M., & Purnamasari, K. (2024). Faktor-Faktor yang Mempengaruhi Nilai Perusahaan pada Perusahaan Sub-Sektor Farmasi. *Jurnal Aplikasi Manajemen dan Bisnis*, 5(1), 52-64.

- Brigham, E. F., & Houston, J. F. (2006). *Dasar-Dasar Manajemen keuangan: Essentials of Financial Management Buku I Edisi 11*. Jakarta: Salemba Empat.
- Brigham, E. F., & Houston, J. F. (2019). *Dasar-Dasar Manajemen Keuangan* (14 ed., Vol. 2). Jakarta: Salemba Empat.
- Chavali, K., & Rosario, S. (2021). The impact of behavioral biases on investor decision-making during COVID-19: A study on Indian stock market. *International Journal of Economics and Financial Issues*, 11(3), 72–81.
- Elvera, S., & Yesita Astarina, S. (2021). *Metodologi Penelitian*. Yogyakarta: Penerbit Andi.
- Fahmi, I. (2018). *Analisis Kinerja Keuangan: Panduan bagi Akademisi, Manajer, dan Investor dan Menganalisis Bisnis dari Aspek Keuangan*. Bandung: Alfabeta.
- Hair, J. J., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Halim, P. M., & Widanaputra, A. A. (2018). Pengaruh Ukuran Perusahaan, Pertumbuhan Penjualan dan Risiko Bisnis Pada Struktur Modal. *E-Jurnal Akuntansi*, 23(3), 2391.
- Hartono, J. (2022). *Portofolio dan Analisis Investasi*. Yogyakarta: Penerbit Andi.
- Idris, H. (2024). Pengaruh Risiko Investasi terhadap Return Saham Perusahaan Farmasi Go Public di Bursa Efek Indonesia. *YUME: Journal of Management*, 7(2), 437–447.
- Li, W., & Wang, Y. (2022). Macroeconomic indicators and sectoral stock returns: Evidence from emerging markets. *Emerging Markets Finance and Trade*, 58(7), 1985–2002. <https://doi.org/10.1080/1540496X.2021.1992486>
- Meggison, W. L. (1997). *Corporate Finance Theory*. Addison Wesley Longman.
- Nababan, M., Mangantar, M., & Maramis, J. B. (2019). Dampak inflasi, suku bunga, struktur modal terhadap risiko bisnis, return

- saham asuransi di BEI. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 7(4).
- Nazariah, I. M. (2020). Pengaruh Risiko Investasi Terhadap Return Saham Pada Perusahaan Manufaktur Sektor Aneka Industri Tekstil Dan Garmen Yang Tercatat Di Bursa Efek Indonesia Tahun 2013-2017. *Jurnal Real Riset*, 2(1).
- Palisungan, W. (2021). Pengaruh Risiko Investasi Terhadap Return Saham Pada Perusahaan Otomotif Yang Terdaftar Di Bursa Efek Indonesia. *Doctoral dissertation*.
- Pandaya, P., Julianti, P. D., & Suprpta, I. (2020). Pengaruh faktor fundamental terhadap return saham. *Jurnal Akuntansi*, 9(2), 233-243.
- Prasetyani, D. (2016). Pengaruh Risiko Investasi terhadap Return Saham pada Perusahaan Manufaktur Sektor Food and Beverage yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2012. *Jurnal Profita*, 4(4), 1-14.
- Purba, M. C. (2017). Pengaruh Risiko Investasi Terhadap Return Saham Pada Perusahaan Otomotif Yang Terdaftar di BEI Tahun 2011 – 2015. *Fakultas Ekonomi dan Bisnis Program Studi Manajemen*.
- Ryu, D., & Kim, H. (2020). Investor risk tolerance and investment behavior: Evidence from Korean stock market. *Journal of Behavioral and Experimental Finance*, 28, 100402. <https://doi.org/10.1016/j.jbef.2020.100402>
- Safara, U., & Nekky, N. (2024). Analisis Pengaruh Risiko Bisnis, Likuiditas, dan Solvabilitas terhadap Return Saham dengan Profitabilitas Sebagai Variabel Intervening pada Perusahaan Transportasi Sub Sektor Logistics dan Deliveries. *Jurnal Pendidikan Tambusai*, 8(1), 7252-7259.
- Setiyono, W., Hariyani, D. S., Wijaya, A. L., & Apriyanti. (2018). Analisis Pengaruh Faktor Fundamental Terhadap Return Saham. *Jurnal Kajian Akuntansi*, 2(2), 123-133.
- Subalno. (2010). Analisis Pengaruh Faktor Fundamental dan Kondisi Ekonomi Terhadap Return Saham (Studi Kasus Pada

- Perusahaan Otomotif dan Komponen yang Listed di Bursa Efek Indonesia Periode 2003-2007). *Orbith*, 6(1), 1-8.
- Suharli, M. (2005). Studi Empiris Terhadap Dua Faktor yang Mempengaruhi Return Saham Pada Industri Food & Beverages Di Bursa Efek Jakarta. *Jurnal Akuntansi & Keuangan*, 7(2), 99-116.
- Tandelilin, E. (2017). *Pasar Modal (Manajemen Portofolio & Investasi)*. Yogyakarta: PT. Kanisius.
- Tumanggor, H. Y., Salim, U., & Djumahir. (2019). Pengaruh Risiko Bisnis, Solvabilitas Dan Likuiditas Terhadap Return Saham Dimoderasi Kebijakan Dividen (Studi Pada Perusahaan LQ45 Yang Terdaftar Di Bursa Efek Indonesia Tahun 2015-2017). *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology*, 224(11), 122-130.
- Widyastuti, T., & Andamari, B. G. (2013). Faktor Fundamental, Suku Bunga dan Nilai Tukar Terhadap Return Saham. *Jurnal Akuntansi dan Auditing*, 10(1), 13-28.
- Wiyati, R., Maryati, S., & Thamrin, M. (2022). Pengaruh Risiko Bisnis, Resiko Finacial Dan Ukuran Perusahaan Terhadap Return Saham Pada PT. Indofood Sukses Makmur Tbk Periode 2016-2019. *Jurnal Daya Saing*, 8(2), 144-152.

School Culture in Fostering Teachers' Work Motivation

Imawati¹, Ika Maryani¹, Muhammad Zuhaery¹

¹Ahmad Dahlan University, Yogyakarta, Indonesia

Corresponding author e-mail: Imawati2308046066@webmail.uad.ac.id

Article History: Received on 19 June 2025, Revised on 24 June 2025,
Published on 25 June 2025

Abstract: School culture is crucial in creating a supportive work environment, which directly affects teacher motivation. Teacher motivation, as a key element in the education system, has a significant impact on the effectiveness of teaching and the quality of student learning outcomes. This study analyzes how indicators of organizational culture in schools, such as innovation, attention to detail, outcome orientation, individual orientation, and team orientation, affect teacher motivation. Using a qualitative approach through case studies, data were collected through semi-structured interviews and focus group discussions. The results showed that a culture that encourages innovation and measured risk-taking has a positive impact on teacher motivation. A culture that emphasizes attention to detail encourages a focus on teaching quality. In addition, a result-oriented culture motivates teachers by aligning their efforts with clear achievement goals. The study also revealed that a culture that supports individual development and professional growth significantly increases teacher motivation. Another important factor is effective leadership, which plays a vital role in fostering a positive and collaborative work atmosphere.

Keywords: organizational culture, school, work motivation, teachers

A. Introduction

Low teacher motivation in Indonesia represents a complex and multifaceted issue, shaped by interrelated structural and psychological factors (Suncaka, 2023). One of the primary causes lies in inadequate levels of teacher welfare, particularly among honorary and private school teachers, many of whom still earn below the regional minimum wage (Amanah et al., 2022). This condition directly impacts job satisfaction and diminishes enthusiasm for fulfilling professional responsibilities.

Additionally, unsupportive work environments characterised by limited educational facilities, excessive workloads, and insufficient institutional support further exacerbate the issue (Satria et al., 2025). A lack of societal and governmental recognition for the teaching profession, along with restricted access to professional development programmes and competency-based training, also plays a significant role in weakening teacher morale (Hutasuhut et al., 2025). Inefficient bureaucratic systems, particularly in recruitment and teacher distribution, coupled with the demands of constantly evolving curricula, present further challenges that contribute to declining teacher motivation (Andina & Arifa, 2018).

The consequences of low teacher motivation are profound, affecting both the process and outcomes of education (Mubarok & Sutiyono, 2024). Unmotivated teachers tend to lack enthusiasm in the classroom, fail to adopt innovative teaching methods, and often exhibit low accountability in executing their duties (Burić & Moè, 2020). This inevitably leads to diminished student performance, as ineffective instruction impairs students' ability to grasp and engage with the material. Over time, this condition undermines the overall quality of education and may widen the disparities in educational standards across different regions and schools (Candrasa & Cen, 2023). Therefore, it is essential to design systemic strategies aimed at enhancing teacher motivation, including improvements to

welfare, the provision of supportive work environments, the reinforcement of professional recognition, and the continuous development of professional competencies.

Addressing the issue of low teacher motivation requires proactive and sustained efforts from educational institutions through strategic approaches (Rezai et al., 2025). Providing fair compensation, adequate facilities, and a comfortable working atmosphere contributes significantly to a sense of security and job satisfaction. A sense of belonging and collective enthusiasm can be fostered by involving teachers in school activities, including programme planning and collaborative evaluation processes (R. Sari et al., 2024). Equitable treatment both in terms of recognition and in participatory decision-making cultivates trust and a sense of appreciation. These efforts not only enhance performance but also strengthen teachers' commitment to their professional role.

This condition underscores that efforts to improve motivation must be embedded within the framework of school culture, which emerges through the interaction of shared values, norms, and beliefs (Suskawationo et al., 2021). School culture reflects a system of meaning shared among members of an educational organisation, shaping patterns of behaviour, habitual practices, and the overall atmosphere experienced in daily activities (Nurlina et al., 2022). Understanding these shared values, behavioural standards, and organisational climate serves as the foundation for directing the actions and attitudes of individuals. A strong and positive culture creates an environment conducive to the development of teacher motivation, thereby contributing to the achievement of broader educational goals.

Organisational culture is defined as a set of basic assumptions, norms, values, and shared behaviours that are transmitted to new members (Bogale & Debela, 2024). It encompasses a shared system of meanings held by members, distinguished by values, behaviours,

customs, attitudes, and beliefs (Carvalho et al., 2023). According to Robbins and Judge (2024), organisational culture is the collective meaning system that distinguishes one organisation from another, guiding members through a shared framework of values, beliefs, and norms.

Good, as cited in Umyati et al. (2019), explains that school culture is a complex network of interactions among actors within the school, manifested in traditions and rituals shared by teachers, students, parents, and administrators, designed to address challenges and achieve common objectives. Luthans, as cited in D. M. Sari et al. (2022), further elaborates that school culture involves the shared understanding of essential organisational values and norms that direct member behaviour. Key dimensions of school culture include observable behavioural patterns, work norms and standards, core shared values, governing rules, and the organisational climate as perceived by members.

Previous studies have demonstrated a positive correlation between school culture and teacher motivation. Stiawati and Maisaroh (2022) found that the values, norms, and rules that shape school culture contribute to a supportive working environment that fosters teacher commitment and enthusiasm. Similarly, Murni and Sulasmi (2021) reported that school culture, in conjunction with principal leadership, significantly enhances teacher motivation. Furthermore, Wahyuni et al. (2023) identified that school culture alone accounts for 63% of the variance in teacher motivation based on their regression analysis. These studies, while valuable, adopted predominantly quantitative approaches, focusing on statistical relationships and offering macro-level insights into the influence of school culture.

However, these studies have not sufficiently explored how specific dimensions of school culture such as innovation and risk-taking, attention to detail, results orientation, people orientation, and

ownership orientation are subjectively experienced by teachers and how they influence motivation. The general and quantitative nature of prior research limits understanding of the lived, contextual realities within the school environment. Addressing this gap, the present study employs a qualitative approach to gain an in-depth understanding of how these cultural indicators are internalised and interpreted by teachers in their professional practice. This inquiry is intended not only to enrich the theoretical discourse on school culture but also to provide practical insights for fostering an empowering and transformative organisational culture.

In response to the identified research gap, this study aims to analyse the implementation of key indicators of organisational culture in schools namely, innovation and risk-taking, attention to detail, results orientation, people orientation, and team orientation and to examine how these aspects influence teacher motivation. By applying a qualitative methodology that foregrounds teachers' perspectives and lived experiences, the study seeks to contribute both conceptually to the literature on school culture and practically to the development of strategic interventions that sustain teacher motivation in a meaningful and enduring manner.

B. Methods

This study employed a qualitative approach through interviews. This method was selected to systematically and measurably explore the influence of school culture on teacher motivation. The sample consisted of two teachers from a lower secondary school (junior high school). The findings of this analysis are expected to offer insight into the extent to which school culture contributes to shaping teacher motivation.

Data collection was conducted using semi-structured interviews designed to explore the key factors in the implementation of

organisational culture within schools that influence the enhancement of teacher motivation. The data gathered were categorised according to the organisational culture indicators proposed by Robbins and Judge (as cited in Oupen & Yudana, 2020), namely: innovation and risk-taking, attention to detail, results orientation, people orientation, and team orientation.

The focus of this research lies in examining the relationship between school culture and teachers' willingness to engage in their professional duties. The primary objective is to understand how elements of school culture such as shared values, institutional policies, daily practices, and overall workplace atmosphere influence teachers' motivation to perform their roles.

The participants of this study were teachers working at a junior high school. They were selected as respondents to provide insights into their perceptions of school culture and their intrinsic drive to fulfil the tasks and responsibilities assigned to them. Research on this topic may also be conducted by selecting specific educational levels such as primary, junior secondary, or senior secondary or by considering additional variables such as years of service or professional position.

C. Results and Discussion

The organisational culture indicators applied in this study are categorised into five main themes: innovation and risk-taking, attention to detail, results orientation, people orientation, and team orientation. Based on the analysis of the collected data, the following findings were obtained:

Innovation and Risk-Taking

The findings indicate that the school culture indicator of innovation and risk-taking is reflected in teachers' ability to integrate

technology into the teaching and learning process. Teachers are expected to continually innovate in developing instructional methods that align with student needs and contemporary educational demands. The use of modern technologies opens substantial opportunities for innovation, particularly in delivering content more interactively and accessibly. This is illustrated by the statement of Participant 1: "In my opinion, technology offers many opportunities for innovation in teaching methods. For example, I use online learning platforms such as Google Classroom and Edmodo to provide materials and assignments interactively. Additionally, with tools like Canva, I can create engaging presentations and infographics to explain complex concepts."

The integration of technology not only enhances instructional delivery but also fosters a collaborative and engaging learning environment. Teachers reported that technology supports their ability to monitor and assess student understanding in real time, as noted by Participant 2: "For me, technology helps create a more collaborative and engaging learning experience. It not only increases student enthusiasm but also allows me to evaluate their understanding in real time."

Furthermore, continuous innovation presents both challenges and opportunities for teachers to develop their creativity in the classroom. This dynamic significantly influences teacher motivation, particularly when institutional support allows for experimentation and innovation. Participant 3 explained: "Technology enables us to meet the diverse learning needs of students. With the data generated from using technology, I can analyse student progress and adjust my teaching strategies accordingly. Technology truly provides the flexibility to try things that were previously not possible." Participant 3 also added: "I feel that the encouragement to innovate gives me space to experiment and express creativity. When the school provides support, such as training or recognition for successful innovation, I feel valued and

more motivated to continue improving. Innovation also creates opportunities to collaborate with other teachers, share ideas, and develop new strategies that can be implemented in the classroom. This not only increases my enthusiasm but also enriches students' learning experiences."

In conclusion, the findings suggest that a school culture which encourages innovation and risk-taking contributes directly to enhancing teacher motivation. Consistent institutional support emerges as a crucial factor in creating a healthy and productive environment for professional growth and pedagogical experimentation.

Attention to Detail

The findings reveal that attention to detail, as a component of school culture, plays a significant role in shaping a professional and responsible work ethic among teachers. This cultural element encourages educators to place serious emphasis on the quality of each aspect of the teaching process, from lesson planning and instructional methods to implementation and evaluation. Rather than focusing solely on end results, teachers ensure that every step aligns with the intended learning objectives. As expressed by Participant 2: "I apply attention to detail by mapping students' needs before designing the materials. I adapt the content based on students' abilities so that all students can follow along effectively. In terms of teaching methods, I always make sure that each step I take is relevant to the learning goals."

A strong commitment to precision is also evident in teachers' habits of drafting lesson plans in a structured and systematic manner. Participant 1 stated: "In preparing materials, I always ensure that every detail is arranged neatly." Furthermore, this participant highlighted the motivational impact of being recognised for diligence and precision: "Recognition for accuracy and attention to

detail is very motivating because I feel that my efforts in designing lesson plans are appreciated,” and “In my opinion, informal recognition such as a thank-you or being acknowledged in front of colleagues is highly effective. When the principal or colleagues appreciate my work during meetings or school events, I feel valued and more motivated.”

These findings suggest that both formal and informal forms of recognition significantly influence teacher motivation, especially when grounded in objective performance assessments. As emphasised by Participant 3: “...the recognition was based on objective performance.” In sum, attention to detail not only enhances the quality of instructional delivery but also serves as a key foundation for fostering a motivating and professionally supportive work environment for teachers.

Results Orientation

The findings indicate that results orientation has a significant impact on teacher motivation. A strong focus on achieving clear and measurable outcomes drives teachers to design instructional strategies that are not only effective but also responsive to the individual needs of students. Teachers prioritise student learning outcomes, beginning with a deep understanding of the challenges each student faces. As noted by Participant 2: “For me, focusing on student outcomes begins with understanding their individual needs and challenges. This way, I can provide early interventions for students who need additional support, ensuring they stay on track to meet the learning objectives.”

A commitment to results also encourages teachers to actively involve students in the learning process and to establish constructive communication with parents to foster synergy between home and school environments. Participant 3 shared: “I always prioritise student outcomes by involving them in the

learning process. I use strategies such as project-based learning, where Students complete real-life tasks related to the lesson content. This not only enhances their engagement but also allows me to evaluate their achievement more holistically. Additionally, I make efforts to maintain good communication with parents to ensure they support the learning process at home.”

Teachers’ efforts to achieve optimal learning outcomes are positively correlated with appropriate forms of recognition from the school. Acknowledgement of teachers’ dedication and success in advancing student performance has been shown to enhance their motivation to innovate further in designing instructional approaches. Participant 2 affirmed this: “It also makes me more enthusiastic about trying new, more detailed approaches, such as integrating technology into lesson planning,” and further added, “I am more inspired by formal recognition, such as a promotion or a certificate. It provides official acknowledgment of my hard work and serves as concrete evidence of my contribution to the school.”

In conclusion, results orientation not only reinforces the direction and focus of teaching practices but also emerges as a key factor in cultivating teacher motivation, encouraging continuous professional development and optimal performance.

People Orientation

The findings indicate that people orientation within school culture is reflected in the attention given to teacher development, well-being, and individual aspirations. This focus not only aims to address teachers’ professional needs but also serves as a key factor in fostering sustainable work motivation. School support for enhancing teacher competence whether through formal education or non-formal training stands as a tangible expression of this orientation. As noted by Participant 3: My school provides opportunities to pursue further education by supporting teachers

who wish to enrol in postgraduate programmes. In addition, the school frequently organises internal workshops featuring expert speakers in the field of education. Such programmes not only help me update my knowledge but also motivate me to continue learning and improving my skills.

Competence development is also realised through mentoring programmes, especially for newly appointed teachers. Collaboration between senior and junior teachers creates a conducive learning ecosystem for knowledge and experience sharing. Participant 2 explained: At my school, support for continuous learning is offered through a mentoring programme. Senior teachers assist those of us who are newer in developing teaching methods and sharing their experiences. Moreover, the school provides access to learning resources such as academic journals and e-learning platforms. This greatly facilitates my ongoing learning and skill development without having to leave the work environment.

Beyond individual initiatives, people orientation is also evident in the collaborative spaces created by the school to encourage the exchange of ideas among teachers. A work environment that actively promotes collaboration contributes to building intrinsic motivation for continuous growth. This was highlighted by Participant 3: The school provides space for collaboration among teachers. For example, regular meetings are held to share teaching experiences and new ideas. This environment keeps me motivated to learn from my colleagues.

In summary, people orientation within school culture goes beyond administrative concerns for welfare; it cultivates an atmosphere that encourages personal growth, active engagement, and ongoing collaboration essential elements in enhancing the quality of teaching and professional fulfilment.

Team Orientation

The findings indicate that team orientation within the school environment plays a vital role in enhancing teacher motivation by fostering a positive, collaborative, and supportive workplace culture. The role of the principal as a leader is crucial in establishing a healthy and productive team-based work dynamic. Principals not only facilitate collaborative meetings but also define shared goals and ensure the availability of necessary resources to help teams achieve them. As Participant 1 stated: The principal plays a crucial role in building teamwork at our school. They regularly organise collaborative meetings where all teachers can share ideas and experiences. Moreover, the principal ensures that each team has clear objectives and provides the resources needed to achieve them. This helps us feel more organised and motivated to work together toward the best outcomes.

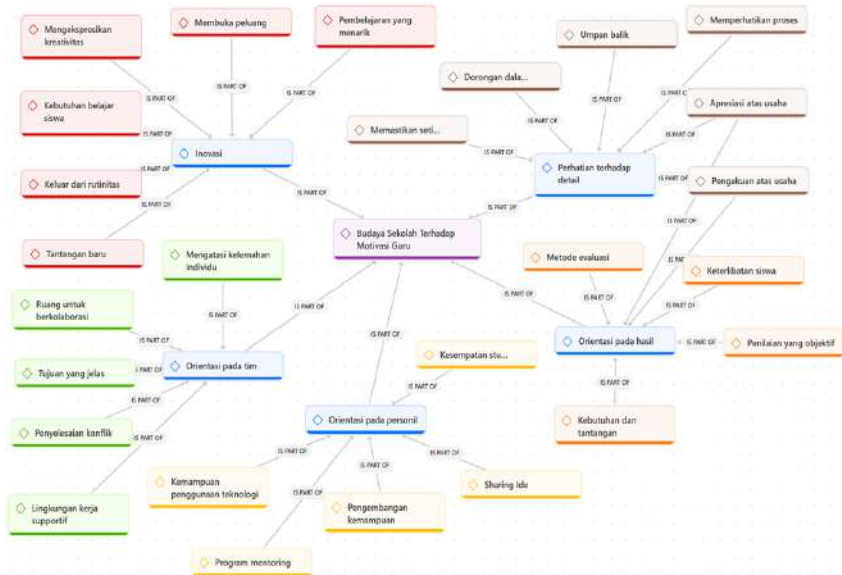
Inclusive leadership that values the input and aspirations of all team members also fosters a sense of recognition and belonging, thereby strengthening collective morale. As noted by Participant 3: Our principal plays a major role in ensuring that teamwork functions effectively. They often act as a mediator when conflicts arise between team members, allowing issues to be resolved fairly. The principal also leads by example through inclusive leadership, where every team member feels heard. This makes us feel appreciated and more motivated to work together toward common goals.

Teamwork serves as a strategic space for teachers to compensate for individual weaknesses and enrich instructional practices through idea exchange and collaborative problem-solving. Collaboration among teachers and support staff enables the development of more innovative and contextually relevant teaching methods. Participant 1 observed: "I see collaboration among teachers and staff as a key factor in improving learning outcomes.

Within teams, we can share ideas and proven teaching strategies. For example, when discussing how to teach difficult topics, insights from other teachers often offer new perspectives that are extremely helpful. Through collaboration, we can also design more integrated and effective learning approaches for students.

Similarly, Participant 2 added: Team collaboration allows us to overcome individual limitations with shared strengths. For instance, I worked with another teacher to develop a cross-disciplinary project involving mathematics and science. The students became more engaged because the content felt relevant and interesting. Moreover, collaborating with staff such as librarians or IT personnel helped us make the most of school resources to support learning.

These findings affirm that team orientation is not merely about fostering camaraderie but also makes a tangible contribution to increasing teacher motivation and improving the overall effectiveness of the teaching and learning process. Organisational Culture Indicators Affecting Teacher Motivation



Discussion

This study explores the organisational culture indicators within schools that contribute to shaping teacher motivation, which in turn significantly influences their performance and the overall quality of learning outcomes. According to Widianingsih et al. (2023), employee performance is influenced by habitual practices within an organisation that, when maintained over time, evolve into organisational culture. A strong organisational culture enhances motivation by fostering a sense of ownership and commitment to institutional goals (Maseko, 2017). Within this context, the present study examined five key indicators: innovation and risk-taking, attention to detail, results orientation, people orientation, and team orientation.

Findings indicate that innovation and risk-taking are essential components in motivating teachers, especially in adapting to and integrating modern technology into instructional practices. The use

of digital tools opens up new possibilities for creating engaging, student-centred learning environments and enables teachers to monitor student understanding in real time. Teachers who are encouraged to innovate particularly when supported through professional development and institutional recognition report higher levels of motivation and creativity. As Shabtay et al. (2019) note, teachers working in innovation-oriented environments are more likely to transform their pedagogical practices.

Similarly, Fidan and Oztürk (2015) found that school environments that support risk-taking and novel ideas positively impact intrinsic teacher motivation. Henriksen et al. (2021) also assert that organisational cultures that promote risk-taking and tolerate failure foster greater self-confidence and motivation among teachers. Collectively, these findings confirm that schools fostering innovation and experimentation provide the psychological space for teachers to explore new methods, collaborate, and enhance student learning experiences factors that significantly strengthen teacher dedication and professional performance.

Equally important is the role of attention to detail. Teachers operating within a culture that emphasises precision are more likely to focus on the quality of each stage of instruction from planning and content delivery to assessment. They do not merely concentrate on outcomes but ensure that each instructional process aligns with established learning objectives and addresses the needs of diverse learners. A detail-oriented culture enhances teacher performance by promoting thoroughness and professional discipline. Mardhani et al. (2023) argue that such cultural emphasis in school management and evaluation creates an environment that fosters professionalism. Ujiarto et al. (2017) and Siahaan et al. (2022) similarly highlight that a culture committed to detail contributes to both higher motivation and stronger instructional quality. When embedded in daily practice, attention to detail helps

establish a structured, supportive environment that cultivates not only teacher performance but also job satisfaction.

Results orientation emerged as another influential factor, as it directs teachers to focus on achieving clearly defined and measurable learning targets. Teachers prioritise student achievement by identifying individual needs and challenges early, implementing appropriate interventions, and designing targeted strategies such as project-based learning. This results-oriented approach not only enhances student engagement but also encourages parental involvement, creating a more holistic support system. Recognition whether in formal forms such as promotions and certificates or informal appreciation further reinforces teacher motivation. As Rivai et al. (2019) observe, organisational cultures that emphasise achievement goals improve teacher motivation and drive performance. Rofifah et al. (2021) similarly found that goal-oriented cultures positively influence teacher commitment and enthusiasm. According to Uçar and İpek (2019), environments where result attainment is prioritised shape teachers' perceptions of organisational purpose and increase their dedication to instructional responsibilities. The data demonstrate that results orientation, when aligned with institutional support and learning objectives, contributes significantly to teacher motivation and instructional effectiveness.

People orientation within school culture is reflected in the institutional focus on individual well-being, professional needs, and aspirational growth. The findings suggest that such a focus must be operationalised through capacity-building initiatives ranging from formal education support (e.g., postgraduate programmes) to non-formal activities such as internal workshops and peer mentoring. These programmes offer teachers both motivation and opportunity to improve their competencies.

Continuous learning is further supported through access to academic journals and digital learning platforms, which enhance teacher skill development without disrupting their teaching roles. In addition, collaborative forums, where teachers regularly exchange ideas and experiences, foster a learning culture that is both empowering and motivational. Gherkenashvili and Machavariani (2024) note that organisational cultures attuned to personal needs improve motivation by creating a conducive work environment. Support structures like mentoring, training, and collaboration not only promote skill enhancement but also validate individual contributions. Lewis et al. (2023) highlight that structural support for collaboration among teachers significantly boosts motivation. Thus, a people-oriented culture encourages sustained professional growth, job satisfaction, and improved teaching quality through continuous development and institutional recognition.

Lastly, team orientation plays a central role in shaping a supportive work environment. The study reveals that effective leadership particularly from school principals is instrumental in cultivating a collaborative organisational culture. Principals support teamwork by facilitating meetings, clarifying team goals, ensuring resource availability, and mediating conflicts. Inclusive leadership that acknowledges the voices of all team members strengthens collective morale and deepens motivation. Within collaborative teams, teachers are able to compensate for individual weaknesses by leveraging collective strengths, thereby creating more effective and innovative instructional approaches.

Cross-disciplinary collaboration, such as joint project design, enhances the relevance of instructional content and boosts student engagement. Additionally, cooperation with non-teaching staff such as librarians and IT personnel enables schools to optimise available resources in support of instructional goals. Effective leadership is thus a critical enabler of collaborative culture. As Soim et al. (2022)

argue, leadership that promotes both professional and personal support creates the conditions necessary for teacher motivation and innovation. Thoonen et al. (2011) add that effective leadership and teacher motivation operate synergistically to enhance instructional practice. Yalçinkaya et al. (2021) similarly found that motivational leadership characterised by recognition, transparent communication, and constructive feedback fosters both intrinsic and extrinsic motivation. Teachers who feel valued and supported are more likely to perform their duties with enthusiasm, resilience, and commitment.

In summary, the findings demonstrate that each indicator of organisational culture when embedded meaningfully into school life plays a distinct and complementary role in influencing teacher motivation. Schools that nurture innovation, precision, achievement, personal growth, and collaboration cultivate not only effective teaching environments but also sustainable professional commitment. These elements are essential for elevating instructional quality and achieving educational goals in a rapidly changing learning landscape.

D. Conclusions

This study focused on analysing the implementation of organisational culture indicators within schools that contribute to enhancing teacher motivation. The findings reveal that a school culture which promotes innovation and risk-taking has a positive impact on teacher motivation. A culture that emphasises attention to detail encourages teachers to focus on the quality of every aspect of their instructional practice. The results also indicate that a results-oriented culture enhances motivation by aligning teaching efforts with clearly defined achievement targets. In terms of people orientation, an organisational culture that supports the development of teachers' potential and competencies proves effective in increasing motivation. Another influential factor

identified is effective leadership, which plays a crucial role in fostering a supportive and positive work environment conducive to professional growth and sustained motivation.

E. Acknowledgement

The author gratefully acknowledges the support received from all participants involved in this study. No financial support was provided for the completion of this research.

References

- Amanah, S., Tania, R. S., Putri, A., Mahendra, J. P. J., & Hakim, L. (2022). Paradigma Pemerintah Terhadap Upah Guru Honorer Dalam Persepektif Hukum. *Jurnal Pro Hukum: Jurnal Penelitian Bidang Hukum Universitas Gresik*, 11(4), 308–318. <https://journal.unigres.ac.id/index.php/JurnalProHukum/article/view/2076>
- Andina, E., & Arifa, F. N. (2018). Problematika Tata Kelola Guru dalam Implementasi Undang-Undang Guru dan Dosen. *Aspirasi: Jurnal Masalah-Masalah Sosial*, 9(1), 121–143. <https://doi.org/10.46807/ASPIRASI.V9I1.1011>
- Bogale, A. T., & Debela, K. L. (2024). Organizational Culture: a Systematic Review. *Cogent Business & Management*, 11(1), 1–23. <https://doi.org/10.1080/23311975.2024.2340129>
- Burić, I., & Moè, A. (2020). What makes teachers enthusiastic: The interplay of positive affect, self-efficacy and job satisfaction. *Teaching and Teacher Education*, 89, 103008. <https://doi.org/https://doi.org/10.1016/j.tate.2019.103008>
- Candrasa, L., & Cen, C. C. (2023). The effect of teacher teaching, learning methods and students' perceptions on the student's learning achievement in Medan city. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 9(1), 449–456. <https://doi.org/10.29210/020221737>
- Carvalho, A. M., Sampaio, P., Rebentisch, E., McManus, H., Carvalho, J. Á., & Saraiva, P. (2023). Operational Excellence,

- Organizational Culture, And Agility: Bridging The Gap Between Quality And Adaptability. *Total Quality Management & Business Excellence*, 34(11-12), 1598-1628. <https://doi.org/10.1080/14783363.2023.2191844>
- Fidan, T., & Oztürk, I. (2015). The Relationship of the Creativity of Public and Private School Teachers to their Intrinsic Motivation and the School Climate for Innovation. *Procedia - Social and Behavioral Sciences*, 195, 905-914. <https://doi.org/10.1016/j.sbspro.2015.06.370>
- Gherkenashvili, T., & Machavariani, S. (2024). Study of Innovative Approach for Implementing Personnel-Fit Organizational Culture at Universities (Case of Georgia) and the Role of Digitalization. In R. C. Geibel & S. Machavariani (Eds.), *Digital Management to Shape the Future* (pp. 1-14). Springer Nature Switzerland.
- Henriksen, D., Henderson, M., Creely, E., Carvalho, A. A., Cernochova, M., Dash, D., Davis, T., & Mishra, P. (2021). Creativity and risk-taking in teaching and learning settings: Insights from six international narratives. *International Journal of Educational Research Open*, 2, 100024. <https://doi.org/10.1016/j.ijedro.2020.100024>
- Hutasuhut, S., Siagian, I., Silaban, H., Sitio, F., Silalahi, H. H., Naibaho, H. S. D., & Lahagu, P. H. (2025). Kesejahteraan Guru di Indonesia. *Future Academia : The Journal of Multidisciplinary Research on Scientific and Advanced*, 3(1), 227-235. <https://doi.org/10.61579/FUTURE.V3I1.277>
- Lewis, M. M., Modeste, M. E., & Johnson, R. M. (2023). The Rise of the School District Chief Equity Officer: Moving Beyond Mimetic Isomorphism and Promoting Anti-Racist Systemic Change. *Educational Administration Quarterly*, 59(1), 143-178. <https://doi.org/10.1177/0013161X231153404>
- Mardhani, L., Dewi, R., & Purba, S. (2023). The Influence Of Organizational Culture, Transformational Leadership Of School Principals And Work Motivation On The Performance Of Public Elementary School Teachers In Binjai Kota Sub-

- District. *Proceedings of the 8th Annual International Seminar on Transformative Education and Educational Leadership, AISTEEL* 2023. <https://doi.org/10.4108/eai.19-9-2023.2340490>
- Maseko, T. (2017). Strong vs. Weak Organizational Culture: Assessing the Impact on Employee Motivation. *Arabian Journal of Business and Management Review*, 7(1), 1–5. <https://doi.org/10.4172/2223-5833.1000287>
- Mubarok, M. Z. C., & Sutiyono. (2024). Dampak Motivasi Guru Terhadap Prestasi Belajar Siswa di SD NU Galur. *Journal of Primary Education Research*, 2(2), 172–179. <https://e-journal.unu-jogja.ac.id/pgsd/index.php/primer/article/view/36>
- Murni, T., & Sulasmi, E. (2021). Pengaruh Kepemimpinan Dan Budaya Sekolah Terhadap Motivasi Kerja Guru Yayasan Sinar Husni Medan. *Jurnal Manajemen Pendidikan Dasar, Menengah Dan Tinggi [JMP-DMT]*, 2(3), 119–136. <https://doi.org/10.30596/JMP-DMT.V2I3.7699>
- Nurlina, N., Rosani, M., Lestari, N. D., Valianti, R. M., & Kristiawan, M. (2022). The influence of organizational culture and leadership on principal's organizational commitment. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 8(1), 82. <https://doi.org/10.29210/020221610>
- Oupen, S. M., & Yudana, I. M. (2020). Kontribusi Kepemimpinan Transformasional, Budaya Organisasi, Disiplin Kerja, Dan Motivasi Kerja, Terhadap Komitmen Organisasional Guru Sd. *Jurnal Administrasi Pendidikan Indonesia*, 11(1), 34–43. <https://doi.org/10.23887/japi.v11i1.3167>
- Rezai, A., Ahmadi, R., Ashkani, P., & Hosseini, G. H. (2025). Implementing active learning approach to promote motivation, reduce anxiety, and shape positive attitudes: A case study of EFL learners. *Acta Psychologica*, 253, 1–13. <https://doi.org/10.1016/j.ACTPSY.2025.104704>
- Rivai, Mursalim, U. G., & Moh, Z. M. (2019). Cultura Organizacional y Clima Organizacional como Determinante de la Motivación y

- el Desempeño Docente. *Advances in Social Sciences Research Journal*, 6(2), 555–566.
- Robbins, S. P., & Judge, T. A. (2024). *Organizational Behavior* (19th ed.). Pearson Education Limited.
<https://doi.org/10.5860/choice.43-0421>
- Rofifah, S., Sirojuddin, A., Ma'arif, M. A., & Mitra Zuana, M. M. (2021). The Influence of Organizational Culture and Work Motivation on Teacher Performance at the International Standard School, Amanatul Ummah Mojokerto. *Nidhomul Haq: Jurnal Manajemen Pendidikan Islam*, 6(1), 27–40.
<https://doi.org/10.31538/ndh.v6i1.899>
- Sari, D. M., Khairani, E. P., Naufal, A., & Ritonga, G. (2022). Pengembangan budaya organisasi di sekolah. *Jurnal Pendidikan Tambusai*, 6(2), 13413–13418.
- Sari, R., Fauzan, A., & Bedi, F. (2024). Faktor-Faktor Yang Mempengaruhi Kepuasan Kerja Guru. *Jurnal Ilmiah Wahana Pendidikan*, 10(18), 866–876.
<https://doi.org/10.5281/ZENODO.13983581>
- Satria, D., Kusasih, I. H., & Gusmaneli, G. (2025). Analisis Rendahnya Kualitas Pendidikan di Indonesia Saat Ini: Suatu Kajian Literatur. *Jurnal Bintang Pendidikan Indonesia*, 3(2), 292–309.
<https://doi.org/10.55606/JUBPI.V3I2.3838>
- Shabtay, A., Carter, M. R., & Mreiwed, H. (2019). A dramatic collage: becoming pedagogical through collaborative playbuilding. *Qualitative Research Journal*, 19(4), 403–414.
<https://doi.org/10.1108/QRJ-02-2019-0020>
- Siahaan, A., Rafida, T., & Mawaddah, R. (2022). The Influence Of Organizational Culture, Leadership Style of The Head of The Madrasah, and Work Motivation on The Professional Teachers of Private Ibtidaiyah Madrasahs In *Eduotec: Journal of Education and Technology*, 5(3), 705–721.
- Soim, S., Haryanti, N., Mufron, A., & Erfiana, N. A. N. E. (2022). The Influence of Teacher Motivation and Skills on Performance through Leadership Intervening Variables. *Al-Hayat: Journal*

- of Islamic Education, 6(2), 71.
<https://doi.org/10.35723/ajie.v6i2.298>
- Stiawati, T., & Maisaroh, I. (2022). Pengaruh Budaya Sekolah Terhadap Motivasi Kerja Guru di MAN 1 Kota Cilegon. *Jurnal Pendidikan Dan Konseling (JPDK)*, 4(6), 952–959.
<https://doi.org/10.31004/JPDK.V4I6.8300>
- Suncaka, E. (2023). Meninjau Permasalahan Rendahnya Kualitas Pendidikan di Indonesia. *UNISAN JURNAL*, 2(3), 36–49.
<https://journal.an-nur.ac.id/index.php/unisanjournal/article/view/1234>
- Suskawationo, M., Lian, B., & Eddy, S. (2021). The Effect of Principal Leadership and Teacher Motivation on Teacher Performance. *Proceedings of the International Conference on Education Universitas PGRI Palembang (INCoEPP 2021)*, 565, 1041–1046.
<https://doi.org/10.2991/ASSEHR.K.210716.207>
- Thoonen, E. E. J., Slegers, P. J. C., Oort, F. J., Peetsma, T. T. D., & Geijssel, F. P. (2011). How to improve teaching practices: The role of teacher motivation, organizational factors, and leadership practices. *Educational Administration Quarterly*, 47(3), 496–536.
<https://doi.org/10.1177/0013161X11400185>
- Uçar, R., & İpek, C. (2019). The Relationship Between High School Teachers' Perceptions of Organizational Culture and Motivation. *Journal of Education and Training Studies*, 7(7), 102. <https://doi.org/10.11114/jets.v7i7.4198>
- Ujiarto, T., Rusdarti, Rifai, R. C., & Raharjo, T. J. (2017). Effect of the School Principal ' s Management , Academic Supervision , Organizational Culture , and Work Motivation to the Teacher ' s Professionalism. *The Journal of Educational Development*, 5(3), 414–424.
- Umyati, U., Sumardi, S., & Suhardi, E. (2019). Hubungan Antara Budaya Sekolah Dan Kompetensi Pedagogik Dengan Kreativitas Guru. *Jurnal Manajemen Pendidikan*, 7(2), 816–824. <https://doi.org/10.33751/jmp.v7i2.1331>

- Wahyuni, S., Prasetya, I., & Sulasmi, E. (2023). Pengaruh Budaya Sekolah, Kompetensi, Dan Kualitas Kehidupan Kerja Terhadap Motivasi Kerja Guru SMA Di Kecamatan Talawi Kabupaten Batu Bara. *EduTech: Jurnal Ilmu Pendidikan Dan Ilmu Sosial*, 9(1), 61–72. <https://doi.org/10.30596/EDUTECH.V9I1.12173>
- Widianingsih, T., Santoso, D., & Saddewisasi, W. (2023). Pengaruh Pelatihan, Budaya Organisasi Dan Kompetensi Kerja Terhadap Kinerja Karyawan. *Sustainable Business Journal*, 2(1), 76. <https://doi.org/10.26623/sbj.v2i1.7013>
- Yalçinkaya, S., Dağlı, G., Aksal, F. A., Gazi, Z. A., & Kalkan, Ü. (2021). The effect of leadership styles and initiative behaviors of school principals on teacher motivation. *Sustainability (Switzerland)*, 13(5), 1–19. <https://doi.org/10.3390/su13052711>

Democratic Leadership Profile of The Principal in Improving Interpersonal Relations of Teachers at SMP Negeri 3 Welahan

Noor Ali Fauzi¹, Bunyamin¹, Ngurah Ayu Nyoman Murniati¹

¹Universitas Persatuan Guru Republik Indonesia Semarang,
Indonesia

Corresponding author e-mail: ngurahayunyoman@upgris.ac.id

Article History: Received on 06 June 2025, Revised on 25 June 2025,
Published on 27 June 2025

Abstract: This qualitative case study research examines the implementation of democratic leadership by the principal in improving interpersonal relationships at SMP Negeri 3 Welahan. Data were collected through interviews, observations, and documentation studies with the principal and five teachers as key informants. The principal developed an open, effective, and inclusive communication pattern, characterized by constructive two-way communication. The strategies implemented include regular meetings, group discussions, utilization of digital platforms, and communication skills training for teachers. The principal also understands teachers' obstacles through an empathetic approach and direct communication, using observations, personal interviews, and periodic surveys, then follows up with special assistance or training. In maintaining group cooperation, the principal carries out collaborative coaching through the development of a school community of practitioners with a teamwork pattern, as well as strengthening communication skills. This coaching pattern includes structured discussions, peer guidance, and collaborative activities. The principal provides systematic feedback on the analysis of the needs of the school community of practitioners through direct

discussions and written documents, usually during evaluations or regular discussion forums. The recommendation of this study is to develop an inclusive participatory decision-making strategy by facilitating effective and empathetic collaboration and interaction.

Keywords: *Democratic Leadership, Principal Profile, Improving, Interpersonal Relationships*

A. Introduction

SMP Negeri 3 Welahan was established and has an operational permit based on Regent Regulation No. 181 of 2003 dated September 6, 2003. Currently, there are at least 3 public junior high schools in Welahan District. Based on the characteristics of each school, SMP Negeri 3 Welahan is a popular school. The number of students is > 600 people with a study group of 20 people. SMP Negeri 3 Welahan is accredited A and has an ISO 9001:2000 certificate. This school has many achievements. One of them is becoming a school with the largest number of leading teachers in Welahan District in 2024 and 2025. The Leading Teacher Program is a new government program that aims to create agents of change. The role of this Leading Teacher will concretely interact with the leadership style of the principal. Leading Teachers are expected to be catalysts. If the principal's leadership does not support or is not in line with the spirit of the Leading Teacher or vice versa, then their potential to encourage collaboration and positive interpersonal relationships may not be optimal.

The principal of SMP Negeri 3 Welahan applies democratic leadership in carrying out his duties. The same thing was also done by the previous principal. This democratic leadership approach has proven its success as an effective method to influence, guide, and regulate the actions of organizational members towards desired goals (Andani et al., 2024). The effectiveness of democratic leadership is reflected in the increase in performance and overall

satisfaction levels of the organization. This approach has succeeded in creating a positive work climate, encouraging active involvement, and supporting individual capacity development (Rachmadhani & Manafe, 2023). However, intuitively, principals with democratic leadership and driving teachers are able to improve interpersonal relationships. The problem that arises is the existence of causal mechanisms such as policies, practices, and interactions of the principal and the initiatives of the Driving Teacher which should foster mutual trust, open communication, and collaboration between teachers. But in reality, based on the results of preliminary observations, there is a lack of open communication and collaboration between teachers.

The findings of preliminary observations indicate a lack of participatory policies in decision-making (often some groups feel one-sided or different parties), and routine discussion forums or other collaborative activities are often initiated by the principal and/or vice principal. This is what creates a gap between the democratic leadership of the principal and the role of the driving teacher itself. Is there a mistake in democratic leadership so that it is less able to build interpersonal interactions or is the role of the driving teacher not optimal.

There are many factors in examining the problems that arise further because the role of the teacher is very vital. If the teacher feels unsupported or the initiative is not relevant, it will have an impact on minimal interpersonal relationships. This requires the ability and awareness of the principal and driving teacher to design targeted interventions. Therefore, this study will explore how the democratic leadership of the principal improves interpersonal relationships of driving teachers, especially communication patterns, collaboration, and interaction.

Democratic leadership according to Tambunan (2015), is a leadership style that involves employees in decision-making,

delegates authority, encourages participation in determining work methods and targets, and utilizes feedback as a means of employee development. Susanto (2016) argues that democratic leadership is a leadership style that respects the desires and ideas of subordinates. This approach views each group member as an important contributor in making final decisions. Sulasmi (2020) states that democratic leadership is a leadership style that positions the leader as part of the group, not as a ruler.

Leaders who actively encourage member participation, create a collaborative atmosphere, and are jointly responsible for achieving common goals productively (Priansa, 2017). Based on several opinions above, it can be concluded that democratic leadership is a leadership style characterized by the involvement of team members in the decision-making process. Democratic leaders position themselves as part of the group, not as absolute rulers, with a primary focus on active participation, open communication, and collaboration. In this model, leaders proactively encourage members to convey ideas, thoughts, and input, while maintaining final responsibility for decision-making. The main goal is to create an inclusive, productive, and supportive work environment, where each team member is considered an important contributor in achieving common goals.

Factors that support democratic leadership include good communication (Aisyah et al, 2023), good communication between leaders and employees, as well as between colleagues and the creation of a positive, inclusive, and collaborative work environment to support employee performance (Wahyudi, 2023), effective principal strategies and good relationships and closeness with school residents (Rohmah, Markhamah and Utama 2023), and high commitment in mobilizing school residents (Hidayat 2024). Based on the description above, improving interpersonal relationships is very important (Zaenal, 2017) because it will fill the gap in specific knowledge about the internal dynamics of the

school. Research not only provides an understanding of how principals with their democratic leadership are able to improve interactions with driving teachers but also produces practical recommendations that can be used to create a collaborative, harmonious, and productive work environment for teachers, which will ultimately have a positive impact on the quality of student learning.

Principals are expected to be able to develop empathy for various teacher professionalism problems and be able to maintain cooperative relationships both individually and in groups. Another positive impact that is expected to emerge in this study is increasing motivation through teacher reflection which allows for an understanding of potential and can determine areas of improvement that encourage innovation in the future. Communication in the interactions built by the principal with the driving teacher is the key to effective empowerment in the school he leads.

B. Methods

This study uses a qualitative case study approach (Sugiyono, 2018). The research location is at SMP Negeri 03 Welahan, Jepara Regency. According to Murdiyanto (2020), qualitative research consists of several stages, namely the pre-field stage (preparation of research design, selection of research location, licensing, exploration and field assessment and selection of informants), the field implementation stage (data collection through interviews, observation and documentation), and the data analysis stage.

The research instrument is the researcher himself (Sugiyono, 2018) with several supporting instruments including interview guides, field notes, recording devices (audio/video recorders), other documents such as diaries, RKT, RKAS, etc. as additional data sources. The researcher as an instrument has tasks including

determining the focus of the research, selecting informants, collecting data directly, assessing data quality (validation), analyzing data, interpreting data, and concluding findings. As an instrument, the researcher is able to adapt and be flexible, utilize all senses, and maintain sensitivity and reactivity to various stimuli from the research environment, the quality of qualitative research results is highly dependent on the ability and sensitivity of the researcher as the main instrument.

Research data is divided into two types, namely primary data and secondary data (Siyoto & Sodik, 2015). Data collection techniques use interviews, observations, and documentation. Informants in this study were the principal, vice principal, and driving teachers. To obtain in-depth interview results, all driving teachers at SMP Negeri 3 were involved as informants.

Data analysis techniques are a systematic process for processing, researching, and understanding research data critically and in depth through the stages of data collection, data condensation, data presentation, and drawing conclusions (Sirajuddin, 2017). The stages begin with data collection through observation, interviews, and document analysis. In the condensation stage, researchers will condense, simplify, and select the core of a large amount of raw data that has been collected. (data condensation is a way to extract the most important and relevant parts). The stage of presenting data in an organized and concise form. This can be a narrative display (descriptive text), images, or diagrams. Researchers organize the condensed data into a visual or narrative format that allows researchers to see relationships, patterns, and structures between data more clearly. The final stage is drawing conclusions and verification.

This stage involves interpreting the meaning of the data that has been presented and drawing conclusions based on the patterns and themes found. Initial conclusions may still be temporary and need

to be verified. Data validity techniques include credibility testing (internal validity), transferability testing (external validity), dependability testing (reliability), and confirmability testing (objectivity).

C. Results and Discussion

1. Building Effective Two-Way Communication

The principal develops a communication pattern in mentoring the school community of practitioners by implementing open, effective, and inclusive communication. The characteristics of the communication pattern developed include: (1) open, namely all teachers have the opportunity to express their opinions; (2) two-way, namely encouraging feedback from teachers and the principal; (3) constructive, namely communication that focuses on solutions and development. The communication development strategies implemented include: (1) holding regular meetings and group discussions; (2) utilizing digital platforms for fast and collaborative communication; (3) providing communication skills training to teachers. (Interview results 04/02/2025). The driving teachers who were informants emphasized that the communication pattern implemented by the principal is inclusive and flexible, and adapts to the various communication styles of members of the school community of practitioners.

The communication development strategy also includes improving communication skills by utilizing various communication channels to expand interactions, as well as creating a safe space for open discussions without hierarchical barriers. With this strategy, communication in the community of practitioners can take place effectively, professionally, and remain focused on common goals. (Summary of interview results with the group of driving teachers 22-24/02/2025). The principal seeks to create constructive dialogue to support the progress of the school's practitioner

community by developing solution-based communication. The dialogue approaches used include: (1) appreciative criticism, which provides feedback by emphasizing appreciation before criticism; (2) participatory, which encourages all participants to express their opinions equally; and (3) data-based, which uses the results of observations and program evaluations as a basis. Dialogue management is carried out through: (1) regular discussions with alternating facilitators; (2) application of discussion rules that uphold communication ethics; and (3) joint reflection after the discussion to review the results and follow up on them. (Results of the principal's interview 04/02/2025).

The results of the interview with the group of driving teachers on 23/02/2025 explained that the principal built constructive dialogue with an appreciative approach, which emphasizes solution-based feedback and appreciation for the efforts that have been made. The dialogue is managed with a facilitator rotation system to avoid the dominance of certain individuals so that all perspectives can be heard equally. This approach ensures that dialogue becomes more productive, development-oriented, and produces better solutions for the school's community of practitioners. This is reinforced by teacher informant 2 that "the formation of constructive communication is carried out using an appreciative criticism model, where feedback is presented with a focus on solutions and appreciation for existing contributions" (WGP2/22/02/2025), and teacher informant 1 "The Principal of SMP Negeri 3 Welahan builds effective interactions in sharing experiences by applying the principles of openness, mutual respect, and continuous learning.

The principles applied in this interaction include: (1) openness, which provides space for all teachers to share experiences; (2) mutual respect, which implements communication that values differences of opinion; and (3) continuous learning, which encourages reflection and application of the results of sharing in

daily practice. Evaluation mechanisms for the interactions applied include: (1) the use of questionnaires to assess the effectiveness of the interaction; (2) observation during the experience sharing session; (3) reflective discussion to review the impact of the results of sharing on teaching practice.

The teachers who were informants also stated that the interaction in sharing experiences in the school community of practitioners was developed with the principles of mutual respect and continuous learning. The mechanisms used include structured sharing sessions, professionally facilitated group discussions, and post-activity reflections. Evaluation of the effectiveness of the interaction was carried out through participant perception surveys, analysis of participation levels, and assessment of the extent to which shared experiences were applied in daily practice.” (WGP1-5/22/02/2025).

SMP Negeri 3 Welahan implements a morning habit culture and welcoming students. Morning habit is carried out by implementing the 3S culture (Smile, Greet, Greeting) providing positive energy in building interaction between school residents. The results of observations before school activities began (morning habit), the principal conducted individual dialogue activities with driving teachers or other teachers who were members of the school practitioner community (02/05/03/2025).

The principal actively took time out of his busy schedule to listen to the aspirations and obstacles faced by teachers in a comfortable and informal atmosphere. The principal also applied active listening skills and tried to find solutions that motivated and empowered the potential of teachers. In addition, a documentation study of the internal communication media of the school practitioner community (D1/05/03/2025) showed that WhatsApp groups were used as the main means of sharing information and coordination between members of the school practitioner

community. WhatsApp groups, although practical for fast coordination and information, have several fundamental weaknesses that are often overlooked.

These weaknesses significantly affect the quality of interpersonal interactions, which ideally require nuances and depth that is difficult to achieve in the digital realm. In this communication, the biggest weakness is in non-verbal gestures such as facial expressions, tone of voice, body language, and eye contact. Communication that is carried out without seeing expressions or hearing tone of voice, text messages are often misinterpreted or cause misunderstandings. Another fact found in the group is that there are responses that tend to be shallow, such as just "be patient" or emoji, without real emotional depth.

Conflicts often tend to heat up because each party cannot see or feel the direct impact of the communication that is carried out so that it can damage the relationship. Overall, WhatsApp groups are indeed effective in building communication for communities of Education practitioners in schools, however, this group is a poor substitute for meaningful interpersonal interaction. Awareness of these weaknesses is essential in order to use the platform more wisely, and to better appreciate the importance of face-to-face communication to build and maintain deep relationships (Devito, 1997).

Based on the results of interviews, observations, and documentation studies, it can be concluded that the principal developed an effective, open, and constructive communication pattern in guiding the school community of practitioners. However, although the communication implemented is open and two-way, there are identified weaknesses, namely the effectiveness of digital communication in supporting the involvement of all members of the community is not optimal. The use of WhatsApp groups does facilitate coordination, but risks a lack of in-depth interaction

needed in reflective discussions. In addition, the absence of a more systematic evaluation mechanism for the effectiveness of communication strategies can be an obstacle in ensuring that each teacher gets maximum benefit from interactions in the school community of practitioners.

Some input or delivery of information by members of the community of practitioners is difficult to manage because of the large number of messages that can overlap so that they are ignored or missed if the group admin is not observant or unable to manage each input or delivery of information properly. Two-way communication in democratic leadership is very much in line with the concept put forward by Iswahyudi et al. (2024: 65-68) which emphasizes the importance of developing leader communication skills, which include: the ability to listen well, facilitate productive discussions, and explain the objectives and context of decisions clearly. Chaerudin (2019: 97-98) also identified the characteristics of democratic leadership that support two-way communication, including: the creation of a dynamic two-way interaction pattern in the organization, the opening of aspiration channels for all elements of the organization, and the development of a culture of mutual respect between members.

2. Demonstrating Empathy for Members' Problems

The principal understands the obstacles faced by the driving teacher in mobilizing the school practitioner community through an empathetic approach and direct communication. The approaches used include: (1) direct observation, namely monitoring the activities of superior teachers in the school practitioner community; (2) personal interviews, namely conducting individual discussions to explore obstacles in depth; and (3) periodic surveys, namely collecting data on the challenges and needs of superior teachers. The follow-up provided includes: (1) special assistance for superior teachers who face difficulties; (2) providing additional

training as needed; and evaluating and adjusting the program based on the obstacles found. This is based on the results of the interview, (WKS/04/02/2025).

Teachers who were informants at SMP Negeri 3 Welahan also stated that the principal showed empathy by conducting direct observations, personal dialogues, and routine consultations. The assistance provided not only addressed the symptoms, but also resolved the root of the problem, either through the provision of resources, assistance by experienced teachers, or revision of policies that hindered teacher effectiveness. (WGP1-5/25/02/2025).

Strategies to overcome these obstacles include: (1) additional training related to experience sharing techniques; (2) provision of easily accessible guides and sharing media; (3) increased coordination through routine forums to find joint solutions. (WKS/04/02/2025). Meanwhile, the opinions of teachers who were informants stated that the principal identified obstacles through direct observations, periodic surveys, and reflective discussions. Problem solving is carried out collaboratively by involving various perspectives so that the resulting solutions are more comprehensive and sustainable. (WGP1-5/25/02/2025).

The results of observations of mentoring activities between teachers in the school's practitioner community environment (03/19/02/2025) show that the principal facilitates a mentoring system between senior teachers and junior teachers, as well as between driving teachers and mentored teachers, with an approach that respects each other. Observations were carried out during break time in the teacher's room (03/19/02/2025). Senior teachers actively guide junior teachers in learning planning, developing teaching materials, and implementing innovative learning media. The mentoring system aims to build working relationships that support and improve the quality of learning in

schools. However, the results of a study of documentation of counseling guidance activities for teachers who are members of the school's academic community (D3/05/03/2025) show that although there are efforts by the principal to help teachers and provide solutions to the obstacles faced, many activities are not well documented such as attendance lists, reporting, minutes, etc.

Based on the results of interviews, observations, and documentation studies, it can be concluded that the principal has shown empathy for the problems of members well by developing an effective communication and mentoring system to understand and resolve the obstacles faced by the school's academic community teachers. However, weaknesses in documenting activities need to be fixed so that every intervention carried out can be recorded, evaluated more systematically, and documented well.

The principal understands the obstacles faced by the driving teachers in moving the school's academic community through an empathetic approach and direct communication. The approaches used include: (1) direct observation, namely monitoring the activities of the driving teachers of the school's academic community; (2) personal interviews, namely conducting individual discussions to explore obstacles in depth; and (3) periodic surveys, namely collecting data on the challenges and needs of teachers. The follow-up provided includes: (1) special mentoring for teacher leaders who face difficulties; (2) providing additional training as needed; and evaluating and adjusting the program based on the obstacles found. The principal shows concern for the difficulties in implementing the school's academic community program by being proactive and responsive. The forms of attention given include: (1) periodic monitoring to detect potential difficulties; (2) open discussion to hear directly about obstacles from teacher leaders; and (3) moral and technical support when facing obstacles.

This is supported by the opinion of Teacher Informant 1 who stated: "... the principal identifies obstacles in sharing good practices through direct observation, periodic surveys, and open discussion forums. Strategies to overcome them are carried out collaboratively by involving various perspectives, so that the resulting solutions are more comprehensive and have a good level of sustainability..." (WGP1/25/02/2025). Teacher Informant 3 stated: "The principal identifies various obstacles in sharing activities of the school community of practitioners through routine monitoring and overcomes them through collaborative problem-solving strategies, involving all members of the community of practitioners to find joint solutions" (WGP3/25/02/2025).

The results of observations of mentoring activities between teachers in the school community of practitioners (04/19/02/2025) show that the principal facilitates a mentoring system between senior teachers and junior teachers, as well as between mentor teachers and mentored teachers, with an approach that respects each other. Senior teachers actively guide junior teachers in preparing lesson plans, developing teaching materials, and implementing media innovative learning. This mentoring system aims to build a mutually supportive working relationship and improve the quality of learning in schools. However, the results of a documentation study of guidance and counseling activities for teachers who are members of the school practitioner community (D4/05/03/2025) show that although there are efforts by the principal to help teachers and provide solutions to the obstacles faced, the documentation of these activities is still inadequate.

There is no systematic documentation regarding these guidance and counseling activities, with no documentation or photos of activities, thus reducing transparency and making it difficult to be used as evidence of this activity, as well as one of the supporting document archives for the activities of the school practitioner community.

Based on the results of interviews, observations, and documentation studies, it can be concluded that the principal has shown empathy for the problems of his members well by developing an effective communication and mentoring system to understand and resolve the obstacles faced by teachers in the school academic community. However, weaknesses in documenting activities need to be fixed so that every intervention carried out can be recorded, evaluated more systematically, and documented properly so that the efforts that have been made can be documented and can be accessed if needed and can be used as a reference in improving the quality of the school's academic community in the future.

This is in accordance with the opinion of Utomo et al. (2023: 185-193) who stated that the principal needs to: identify potential teachers, understand their enthusiasm and dedication, and conduct direct observations and dialogues to understand their needs. Wisnanda & Putra (2024: 141) also emphasize teacher empowerment through: education that is appropriate to individual needs, tiered training, and internal personal coaching.

3. Maintaining collaborative relationships in groups

The principal's efforts in maintaining collaborative relationships in groups are by conducting collaborative coaching in developing a community of school practitioners with a teamwork pattern and strengthening communication skills. The coaching pattern includes: (1) structured discussions, namely holding regular meetings to share experiences and plan joint activities; (2) peer mentoring, which encourages teachers to accompany other teachers in sharing good practices in the school community of practitioners; and (3) collaborative activities, which involve all teachers in joint projects, such as classroom action research or learning innovations. The expected achievement targets include: (1) increasing cooperation and synergy between teachers; (2) improving the quality of

learning through collaboration; and (3) forming an active and sustainable school community of practitioners. (WKS/04/02/2025). Supporting this statement, the informant teacher stated that the principal provides collaborative coaching in the community of practitioners which is carried out by strengthening teamwork, developing communication skills, and ensuring the sustainability of collaborative initiatives without relying on continuous supervision. (WGP1-5/25/02/2025).

In addition, the principal strengthens teamwork in experience sharing activities through clear role divisions and collaborative evaluation systems in the school community of practitioners. Indicators of success include: (1) increased coordination and communication between team members; (2) better quality of work results, such as increased effectiveness in sharing good practices; (3) team member satisfaction, as reflected in positive reflections or feedback related to collaboration; (4) increased involvement of community members, as demonstrated by active participation in community of practice activities; and (5) timeliness in program implementation, demonstrating effective coordination and teamwork." (WKS/04/02/2025).

Supporting this statement, informant teacher 1 stated: "...the principal strengthens teamwork with a comprehensive approach, including team building activities, clear role divisions, and a collaborative evaluation system that measures processes and outcomes. Indicators of success are increased communication effectiveness, consistent quality of work results, active involvement in discussions, the formation of a culture of mutual support, and reduced need for management intervention in the tasks of the school community of practitioners team..." (WGP1/25/02/2025).

Maintaining professional relationships within the school community of practitioners is also a focus of the principal. The strategy implemented based on the interview results, the principal

stated: "...maintaining professional relationships in the school practitioner community, I do this by building open communication and healthy cooperation. The maintenance strategy is carried out through: (1) regular meetings, namely holding periodic discussions to maintain interaction and cohesion of the school practitioner community team; (2) non-formal activities, namely holding joint activities to strengthen personal relationships; and (3) through awards and appreciation, namely giving awards for the contributions of school practitioners. I manage the dynamics of these relationships by detecting potential conflicts through observation and discussion, providing mediation if there is tension between members, and implementing a culture of mutual respect and support in every activity of the school practitioner community..." (WKS/04/02/2025).

The results of observations of collaborative activities in the school practitioner community (05/19/02/2025) show that teachers actively work in groups to evaluate learning practices and strengthen teamwork. The results of the study of photo documentation of mentoring and mentoring activities for members of the school practitioner community (D5/19/02/2025) also show that there is a good cooperative relationship between members of the school practitioner community. Based on the results of interviews, observations, and documentation studies, it can be concluded that the principal has made various efforts to maintain good group cooperation relationships. However, even though various efforts have been made, there are still several problems. One of them is the effectiveness of the sustainability of the school practitioner community.

Several interviews showed that the success of collaboration and coaching is highly dependent on the involvement of the principal, so it is still doubtful whether the school practitioner community can continue to develop independently without intensive support from the principal. In addition, although collaborative evaluations

have been carried out, there is no clear mechanism to measure the extent to which teamwork has had a real impact on improving the quality of learning.

4. Providing positive feedback

The principal provides systematic feedback on the analysis of the needs of the school practitioner community. The feedback mechanism is carried out after the presentation of the analysis results, either through direct discussion or written documents. The substance of the feedback includes validation of the analysis results, suggestions for improving methods, and recommendations for developing programs/activities for the school practitioner community. The time for providing feedback is usually done in evaluation meetings or periodic discussion forums. (WKS/04/02/2025).

The informant teacher stated that the principal provided feedback through data-based evaluations and reflective discussion. This mechanism includes reviewing reports on the needs of the school's community of practitioners, discussions with the driving teachers, and compiling recommendations for improvement. The substance of the feedback includes validation of needs, suggestions for strengthening the program, and solutions to obstacles faced. Feedback is given periodically, for example in meetings of the community of practitioners or mentoring sessions. This feedback builds self-confidence and reinforces positive behavior. Usually the principal will remind you to increase self-awareness, motivation and self-confidence. (WGP1-5/25/02/2025).

According to the principal, the feedback given focuses on the impact of behavior, providing a supportive environment so that people who receive feedback remain comfortable, and focus on efforts and processes. (WKS/04/02/2025). The principal tries to listen carefully to every conversation between teachers and other school

residents, then summarizes the key points to ensure understanding. The principal develops assertive communication, conflict resolution and builds relationships in a friendly and pleasant atmosphere. (WGP1-4/22/02/2025). By consistently, the principal provides positive feedback that is specific and impactful. This helps others grow in interpersonal skills, but also strengthens relationships and creates a healthier and more productive communication environment.

Supporting this statement, the informant teacher emphasized that the delivery of the school community of practitioner program evaluation was carried out with an approach that began with appreciation of the achievements of the community of practitioners, then objectively conveyed things that needed to be improved, ending with encouragement for further development. The evaluation was also carried out with a participatory and collaborative approach to increase teacher involvement in improving the community of practitioners program. (WGP1-5/25/02/2025). The principal provided input through structured evaluations and direct communication for documentation of the school community of practitioners activities. Aspects that were improved included completeness of data, document structure, and supporting evidence.

Delivery was carried out through evaluation meetings or direct discussions with the documentation team to ensure that the documentation was documented systematically and easily accessible. This was reinforced by the informant teacher by stating that the principal provided input that emphasized the aspects of completeness, systematicity, and relevance of the documentation content. The principal also provided examples of good documentation, provided corrections if there were deficiencies, and encouraged the use of a more systematic format so that it was easy to access and use (WGP1-5/25/02/2025).

The results of observations on post-activity evaluation activities and feedback on supervision of teachers who are members of the school practitioner community (07/19/02/2025) showed that the principal provided data-based feedback on the results of supervision of teachers who are members of the school practitioner community to improve the effectiveness of learning. A review of the documentation of feedback records for supervision of teachers who are members of the school practitioner community (D7/19/02/2025) also showed an objective evaluation of the performance of teachers who are members of the school practitioner community.

Based on the results of interviews, observations, and documentation studies, it can be concluded that the principal has implemented a systematic and data-based feedback system in the school practitioner community. The feedback mechanism is carried out through direct discussions, written documents, and periodic evaluation forums. The substance of the feedback includes validation of needs analysis, suggestions for improving methods, and recommendations for developing school practitioner programs. The evaluation delivery technique is carried out openly, participatory, and based on appreciation of community achievements, which is then followed by objective identification of areas for improvement.

However, even though the feedback mechanism is structured, there are still challenges related to the follow-up of its realization in the future. Documentation studies show that although evaluation records have been well documented, there is no mechanism to ensure that improvement recommendations are actually implemented sustainably. A tighter monitoring system is still needed to ensure that improvement proposals are not only recorded, but also implemented properly and have an impact on the development of the school's community of practitioners. The principal has provided space for participation for the driving

teachers, there are still several challenges that need to be fixed so that each input can be implemented more optimally. This is in accordance with the opinion of Andani et al. (2024), effective democratic leadership requires leaders to actively interact with all members and provide sufficient space for members to contribute. Integrating the school community of practitioners program into the school's strategic plan.

Providing objective feedback is one of the crucial democratic leadership strategies in developing teacher professionalism and encouraging the growth of the school organization. This is in line with the opinion of Syahril, Said, & Abidin (2023: 62-65) who emphasize the importance of conducting regular performance evaluations and providing constructive feedback for improvement. In the context of this study, the principal has implemented a comprehensive and constructive feedback mechanism to support the development of a sustainable school community of practitioners.

Robani & Mustofa (2024) support this approach by emphasizing the importance of monitoring and evaluating performance through coaching and collaborative problem solving. The feedback mechanism developed by the principal shows a systematic and data-based approach. This process not only provides assessment, but creates a productive dialogue space between the principal and teachers. Iswahyudi et al. (2024) support this with the concept of periodic evaluation and learning to analyze the success of decisions and integrate learning into future decision-making processes.

D. Conclusions

The principal has developed an effective, open, and constructive communication pattern, showing empathy for member problems, and maintaining group working relationships. However, the study found that the effectiveness of digital communication is not yet fully

optimal, with the risk of a lack of in-depth interaction in reflective discussions. The success of collaboration and coaching also depends heavily on the involvement of the principal, raising doubts about whether the school community of practitioners can continue to develop independently. In the long term, the communication pattern that is built will build a conducive two-way communication pattern, full of empathy, maintaining relationships in collaborative tolerance, and as feedback. The principal has improved the intrapersonal communication competence of teachers, implemented performance-based awards, become a role model in work behavior, and maintain credibility for the sustainability of the organization.

E. Acknowledgement

The Principal of SMP Negeri 3 Welahan, along with all the teachers, especially the driving teacher, and the Administration staff for all their input, cooperation, and assistance in the research.

References

- Aisyah, I., Ujang Cepi Barlian, Dahlia Puspitasari, & Teri Yanto. (2023). Penerapan Gaya Kepemimpinan Demokratis Untuk Peningkatan Kinerja Guru Di SDN Manggahang 02 Kabupaten Bandung, *Al-Afkar: Journal for Islamic Studies*, 6 (3), hal. 166-178.
- Andani, H., Fira Putri Renggani, Ryan Seftiansyah, Zahra Yeza Sabila, & Afmi afrilian. (2024). Indikator Keberhasilan Gaya Kepemimpinan Demokratis, *Karimah Tauhid*, 3 (2), hal. 1932-1940.
- Chaerudin, A. (2019). *Manajemen Pendidikan dan Pelatihan SDM*. Sukabumi: Jejak.
- Devito, Joseph. (1997). *Komunikasi Antarmanusia*. Jakarta: Professional Books

- Hidayat, F. (2024). Model Kepemimpinan Demokrasi Kepala Sekolah Dalam Meningkatkan Kinerja Guru, *Unisan Jurnal: Jurnal Manajemen dan Pendidikan*, 3 (4), hal. 753-765.
- Iswahyudi, M. S, Umalihayati, Kasanusi, Fatma Sarie, Mohammad Subhan, Zulkifli, Hasmirati, I Nyoman Gejir, I Putu Suiroaka, & Rusdin Djibu. (2024). *Gaya Kepemimpinan*. Batam: Yayasan Cendikia Mulia Mandiri.
- Murdiyanto, E. (2020). *Penelitian Kualitatif (Teori dan Aplikasi disertai Contoh Proposal)*. Yogyakarta: Lembaga Penelitian dan Pengabdian Pada Masyarakat UPN "Veteran" Yogyakarta Press.
- Priansa, D. J. (2017). *Menjadi Kepala Sekolah dan Guru Profesional: Konsep Peran Strategis dan Pengembangannya*. Bandung: Pustaka Setia.
- Rachmadhani, S. & Leonard Adrie Manafe. (2023). Analisis Gaya Kepemimpinan Demokratis, *DEMAAnD: Digital Economic, Management and Accounting Knowledge Development*, 5 (1), hal. 82-98.
- Robani, R. & Triono Ali Mustofa. (2024). Implementasi Gaya Kepemimpinan Demokratis Kepala Sekolah untuk Meningkatkan Kinerja Guru di SMA Negeri 1 Wonogiri, *Ideguru: Jurnal Karya Ilmiah Guru*, 9 (3), hal. 1930-1938.
- Rohmah, N. N. S., Markhamah, & Utama. (2023). *Jurnal Ilmiah Mitra Swara Ganesha*, 10 (1), hal. 8-14.
- Siyoto, S. & M. Ali Sodik. (2015). *Dasar Metodologi Penelitian*. Yogyakarta: Literasi Media Publishing.
- Sirajuddin, S. (2017). *Analisis Data Kualitatif*. Bandung: Pustaka Ramadhan.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Sulasmi, E. (2020). *Manajemen dan Kepemimpinan*. Depok: Rajagrafindo Persada.
- Susanto, A. (2016). *Konsep, Strategi, dan Implementasi Manajemen Peningkatan Kinerja Guru*. Jakarta: Prenadamedia Group.

- Syahril, M, M. Mas'ud Said, & Agus Zainal Abidin. (2023). Implementasi Gaya Kepemimpinan Demokratis Dalam Meningkatkan Kinerja Pelayanan Publik (Studi Pada Kantor Kecamatan Sape Kabupaten Bima Nusa Tenggara Barat), *Jurnal Respon Publik*, 17 (8), hal: 58-66.
- Tambunan, T. S. (2015). *Pemimpin dan Kepemimpinan*, Yogyakarta: Graha Ilmu.
- Utomo, A. P. Y., Ngabiyanto, Isnarto, Didi Pramono, Arka Yanitama, & Galih Suci Pratama. (2023). Bentuk Optimalisasi Guru Penggerak di Sekolah Dasar Negeri 3 Sadeng, *Jurnal Pengabdian Masyarakat Sains dan Teknologi*, 2 (3), hal. 181-196.
- Wahyudi, Y. (2023). Gaya Kepemimpinan Demokratis Dalam Meningkatkan Kinerja Pegawai Kantor Urusan Agama Kecamatan Padjarakan Kabupaten Probolinggo. Skripsi, Universitas Islam Negeri Kiai Haji Achmad Siddiq Jember Fakultas Dakwah. Jember: Universitas Islam Negeri Kiai Haji Achmad Siddiq Jember.
- Wisnanda, B. & Riki Anggara Putra. (2024). Pemberdayaan Guru dan Tenaga Kependidikan Dalam Rangka Peningkatan Mutu Pendidikan di Indonesia, *Jurnal Ilmu Pendidikan (JIP)*, 2 (1), hal. 136-142.
- Zainal, V. R. (2017). *Kepemimpinan dan Perilaku Organisasi Bisnis*. Jakarta: Raja Grafindo Persada.

The Influence of the Principal's Leadership Style on Teacher Performance and Organizational Culture in Primary Schools Sindangkasih District

Ois Mukhlisin¹, Syarip Hidayat¹, Elan¹

¹Universitas Pendidikan Indonesia, Indonesia

Corresponding author e-mail: oismukhlisin@upi.edu

Article History: Received on 14 June 2025, Revised on 27 June 2025,
Published on 27 June 2025

Abstract: The purpose of this research is to determine the influence of the principal's leadership style on teacher performance and organizational culture. This research uses a quantitative approach with an explanatory survey method, and the type of data used in this study is primary data. The object of this research is teachers who are ASN (Civil Servants) in Primary Schools located in the Sindangkasih sub-district, with the sampling technique using the saturated sampling method. The data analysis technique used is Structural Equation Modeling (SEM) analysis. The research results show that the influence of the principal's leadership style on teacher performance is 25.1% and the influence of the principal's leadership style on organizational culture is 55.2%.

Keywords: Principal's Leadership Style, Teacher's Performance, Organizational Culture.

A. Introduction

Education plays a strategic role in shaping high-quality, competitive, and character-driven human resources. As the initial foundation in the formal education system, primary schools play a

crucial role in shaping children's basic skills, social attitudes, and moral values. The implementation of a quality education system, of course, requires the involvement of teachers who have an important role in transferring knowledge and are expected to provide character education to students. Thus, teachers become the frontline in creating quality and competitive human resources in accordance with the demands of the times. Basic education is not only a place for the transfer of knowledge but also a means of character formation and life values. (Sudjana, 2017).

The principal in leading the school is closely related to leadership style. Leadership style is the way a leader interacts with and influences others in achieving the organization's goals. The leadership style applied by the principal can encourage the realization of the vision, mission, goals, and objectives through various programs implemented in a planned manner. Therefore, the principal must possess extensive knowledge, management skills, and leadership abilities. Leadership skills aim to enable the principal to make quick decisions and to control, influence, and motivate their members in carrying out tasks with honesty, responsibility, effectiveness, and efficiency. The role of leadership has a central role in an organization, which becomes one of the determinants of success in achieving the organization's vision, mission, and goals.

Therefore, the challenge in developing organizational strategies heavily depends on its leaders. Leadership is the ability of a person to influence others in such a way that they are willing to carry out the leader's will. (Wijono in Purwanggono (2020). An effective leader must be responsive to change, able to analyze the strengths and weaknesses of human resources, and capable of optimizing organizational performance as well as addressing problems appropriately (Atatsi et al., 2019). A teacher's performance is determined by how a teacher plans lessons, implements lessons, assesses learning, masters the subject matter, maintains self-

motivation to continuously provide better learning, adapts to the environment, and communicates well with students, parents, and other human resources in the school environment.

The organizational culture in primary schools reflects the values, beliefs, behaviors, and characteristics that shape the identity, changes, and development of school life, creating a safe and comfortable learning atmosphere, full of inspiration, and supporting the holistic development of students. As the main foundation, the organizational culture in schools not only influences interactions between teachers and students but also shapes positive relationships with parents and the surrounding community.

The facts on the ground, based on interviews with the education district coordinator of Sindangkasih Subdistrict, reveal that many principals have not yet maximized their leadership functions. Teachers complain about the lack of direction, minimal involvement in decision-making, and the weak attention of the principal towards the performance of teachers. The organizational culture in several schools has not yet developed optimally, marked by low collaboration among teachers. This issue must be addressed immediately to prevent it from becoming a complex problem later and to achieve the organizational goals at the primary schools in Sindangkasih District, Ciamis Regency.

Based on the background that has been presented, this research aims to determine the extent of the influence of the principal's leadership style on teacher performance and organizational culture in primary schools. This research is expected to provide a novel contribution to improving teacher performance and organizational culture by enhancing the role of leadership. In addition, the results of this study can serve as a strategic reference for school principals, supervisors, and the education office in designing policies that support the continuous improvement of education quality.

B. Methods

This research uses a quantitative approach with an explanatory survey method. The purpose of this research is to determine the influence of the principal's leadership style on teacher performance and organizational culture in primary schools. The quantitative approach allows researchers to process data in numerical form objectively and draw statistical conclusions. Additionally, the quantitative method is so named because the research data used is in numerical form, and data analysis employs statistical techniques (Sugiyono, 2019, p. 19).

This research was conducted in the Sindangkasih District, Ciamis Regency. This location was chosen based on preliminary studies that showed variations in school principals' leadership styles as well as challenges in building teacher performance and organizational culture. The subjects in this study are all ASN teachers at the Sindangkasih District Primary School in Ciamis Regency, totaling 137 people. Because the population size is not too large and can be fully reached by the researcher, this study uses a saturated sampling technique (census).

Data collection was conducted through the distribution of questionnaires presented via Google Forms. During the data collection, the researchers were also present directly at the schools to deliver the instruments to the respondents, ensure their understanding of the questions, and facilitate the independent and objective completion of the questionnaires. The presence of the researcher also aims to document the context and field conditions that can be used as reflective notes during the analysis stage.

Before the questionnaire is widely used, the research instrument is tested for validity and reliability. Content validity is obtained through expert judgment from three lecturers specializing in

educational management. Next, construct validity and reliability tests were conducted using Confirmatory Factor Analysis (CFA) with IBM SPSS AMOS version 24 software. The results of the validity and reliability tests showed that all item questions in the instrument had loading factor values above 0.5 and Cronbach's Alpha values for each construct above 0.7, which means the item questions in the research instrument can be used in the study.

The collected data were analyzed using Structural Equation Modeling (SEM) based on AMOS (Analysis of Moment Structure). This technique was chosen because it can simultaneously analyze the influence between latent variables and provide a deep understanding of the complex relationship structure.

C. Results and Discussion

Results

Concept of Leadership Style

Leadership Style is the process of influencing others to understand and agree on what needs to be done and how the task should be carried out effectively, as well as the process of facilitating individual and collective efforts to achieve common goals. (Rosalina and Wati, 2020). Leadership style is a pattern of behavior used by leaders to influence their subordinates. (Robbins and Judge, 2017)

Diverse leadership styles, ranging from authoritarian to participative, have the potential to significantly influence the decision-making process. Each leadership style reflects the values, attitudes, and preferences of the leader towards interactions with subordinates, which in turn can shape the decisions made. (Badia Perizade et al., 2022)

Leadership is not only defined as a formal position within a hierarchical structure but also as a quality that can motivate, direct,

and empower individuals or teams to achieve optimal results. Rasal, 2016)

Concept of Teacher Performance

Teacher performance is the achievement of a teacher's work results that align with the duties and responsibilities they bear in an educational institution. Especially in the world of primary schools, the education system must be taken into account. Why is that? Because primary school is the initial stage of education that must be undertaken by the great generations who will be the successors of the nation. So it is very important to pay attention to the performance of primary school teachers, so that teachers with professional performance are born (Munawir, 2022).

Performance is a measure of a teacher's success in carrying out their duties. A teacher who has good performance can be assured of succeeding in fulfilling their responsibilities as a teacher (Rosmawati, 2020). Performance is a goal-oriented process aimed at ensuring that organizational processes are in place to maximize the productivity of teachers, teams, and ultimately, the organization (Kadiyono et al., 2020).

Concept of Organizational Culture

Organizational culture is a manifestation of basic assumptions created, discovered, or developed within an organization as a system of shared meaning, considered valuable, and embraced by its members, distinguishing the organization from others, with indicators: solidarity, stability, innovation, customer service, attention to details, valuing people, and results orientation. (Ainanur, 2018) Organizational Culture is the general perspective held by each member of the organization based on values that will be mutually agreed upon (Soelistya, 2022).

Organizational culture is a set of values, beliefs, norms, and practices adopted by members of an organization that shape the way they think, behave, and work (Nugroho, 2022). Organizational culture consists of a set of beliefs, values, and norms developed within an organization. These values and norms significantly impact the behavior of organizational members in fulfilling their responsibilities, and their performance can influence the organization's success in achieving its established goals (Amalia & Astuti, 2020) (Amalia & Astuti, 2020).

Results of the Structural Equation Model (SEM)

The first step is to establish relationships with path diagrams and structural equations as shown in Figure 2.

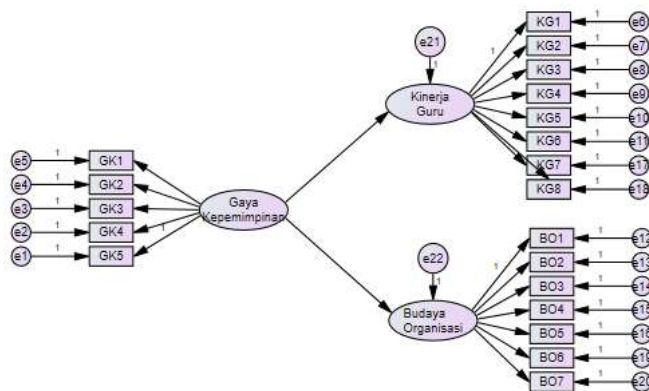


Figure 1. Measurement Model Path Diagram

In Figure 1, the structural model arrangement connects both endogenous and exogenous latent constructs and determines the model, namely connecting endogenous and exogenous latent constructs with the indicator variables of transformational leadership style, teacher performance, and organizational culture.

Normality Test of Data

The distribution of data needs to be analyzed to determine whether the data meets the assumption of normality. Normality is the most fundamental assumption in multivariate analysis, as it represents a form of data distribution on a single metric variable in producing a normal distribution (Hair et al., 2021). The following are the results of the data analysis presented in the form of a table as follows:

Table 1 Normality Test
Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
KG8	1,000	10,000	-1,120	-5,333	,860	2,048
KG7	1,000	10,000	-1,662	-7,913	3,769	8,972
KG6	1,000	10,000	-,396	-1,887	-1,372	-3,266
KG5	1,000	10,000	-,569	-2,710	-1,276	-3,036
KG4	1,000	10,000	-1,434	-6,828	1,044	2,484
KG3	1,000	10,000	-1,873	-8,917	3,862	9,194
KG2	1,000	10,000	-2,266	-10,788	8,929	20,256
KG1	1,000	10,000	-2,661	-12,668	9,819	13,374
BO7	1,000	10,000	-2,373	-11,297	8,972	10,358
BO6	5,000	10,000	-,092	-,439	-,491	-1,170
BO5	4,000	10,000	-,658	-3,134	,382	,909
BO4	4,000	10,000	-1,140	-5,428	1,978	4,708
BO3	4,000	10,000	-1,373	-6,535	1,968	4,685
BO2	4,000	10,000	-,667	-3,174	1,162	2,766
BO1	4,000	10,000	-,672	-3,198	,135	,320
GK5	1,000	10,000	-1,874	-8,924	2,958	7,042
GK4	1,000	10,000	,162	,769	,522	1,242
GK3	1,000	10,000	-1,474	-7,018	1,630	3,880
GK2	2,000	10,000	-,902	-4,296	,339	,807
GK1	4,000	10,000	-,671	-3,192	-,285	-,677
Multivariate					72,062	1,165

Based on Table 1, the univariate normality test shows a normal distribution because the critical ratio (c.r) values for kurtosis and skewness are within the range of -2.58 to +2.58. Multivariately, the data also meets the normality assumption because the value of 1.165 is within the ± 2.58 range.

Outlier Test

In this study, an outlier test was conducted using the Mahalanobis Distance criterion at a significance level of $p < 0.01$. From the 20 indicators used, the CHIINV value obtained from Excel by entering the probability and the number of variables is 37.566. Here are the results of the outlier test in this study.

Table 2 Results of the Multivariate Outliers

Observation number	Mahalanobis d-squared	p1	p2
92	35,247	,019	,000
30	34,833	,021	,000
100	34,597	,022	,000
33	34,306	,024	,000
67	34,086	,026	,000
10	32,015	,043	,000
89	31,151	,053	,001
35	31,119	,054	,000
77	30,988	,055	,000
23	30,735	,059	,000

Table 2 shows the results of Observations farthest from the centroid (Mahalanobis distance), but only includes the top 10 rows out of a total of 100 observed rows. The Mahalanobis Distance test shows that no values exceed the critical value of 37.566. Thus, it can be concluded that there are no outlier data in this analysis.

Evaluating Goodness of Fit Criteria

There are several statistical goodness-of-fit tests, here are some commonly obtained criteria.

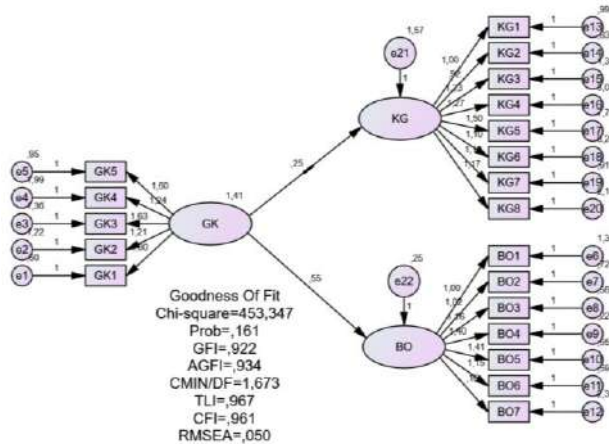


Figure 2 Goodness of Fit

Based on Figure 2, it shows a statistical model in accordance with the observed data. The correspondence between the sample covariance matrix and the estimated population covariance matrix produced, as well as the variance present in the sample and the variance present in the population.

Table 3
Evaluate Goodness of Fit

Goodness of fit index	Cut-off value	Model Penelitian	Model
Chi-Square	Expected to be small	453,347	Good Fit
Probability	> 0,05	0,161	Good Fit
AGFI	≥ 0,90	0,934	Good Fit
GFI	≥ 0,90	0,922	Good Fit
CFI	≥ 0,90	0,961	Good Fit
TLI	≥ 0,90	0,967	Good Fit
CMIN/DF	≤ 2,0	1,673	Good Fit
RMSEA	≤ 0,90	0,050	Good Fit

Based on the results in Table 3, it can be seen that the research model mostly meets the criteria for a good fit. Out of the 8 (eight) criteria, namely, Chi-Square, RMSEA, CMIN/DF, TLI, CFI, Significant probability, GFI, and AGFI. The results indicate that the overall model can be considered fit, meaning the model proposed in this study is accepted.

Discussion

Based on statistical analysis using the AMOS 22 program, the results of the hypothesis test indicate a positive relationship between variables if C.R shows a value above 1.96 and below 0.05 for the p-value (Ghozali, 2018), the research will be presented in the following table:

Table 4. Results of Direct Influence Hypothesis Testing

			Estimate	S.E.	C.R.	P	Label
KG	<---	GK	,251	,067	4,765	***	par_18
BO	<---	GK	,552	,086	6,445	***	par_19

The Influence of the Principal's Leadership Style on Teacher Performance at Primary Schools in Sindangkasih District

Based on the statistical test results in table 4, the standard regression coefficient was obtained at 0.251, indicating that the principal's leadership style affects teacher performance by 25.1%. This shows that the greater the principal's leadership role in influencing teachers, the higher the improvement in teacher performance.

The principal, as a leader in primary school, is responsible for directing and guiding teachers to achieve the organization's goals. The leadership style includes a person's capacity for persuasion and providing guidance to individuals to achieve their goals. An ideal leader must possess a good leadership style so that they can improve employee performance. A leader must pay close attention

to their leadership style in the process of influencing, directing the activities of their group members, and coordinating organizational goals so that both can be achieved (Rahmawati et al., 2023).

The determining factor of employee performance in the institution is the leadership style used. The standard behavior of a leader is their leadership style, which shapes the actions of others to align with the leader's preferences. A successful leader is someone who possesses good personal qualities, both in terms of character and talent. (Veitzhal & Mulyadi in Turmono, 2020) An effective leader needs to possess four main characteristics, one of which is integrity, a clear vision, the ability to inspire followers, and adequate competence, which will garner support from their followers. For that reason, leadership has a broader responsibility than merely providing direction; a solid organization must possess a deep understanding of existing problems and solutions. However, the role of leadership must adapt to the context of ongoing change. Good performance is reflected in work results that meet organizational standards and are capable of achieving the company's goals (Septyarini, 2024).

The results of this study are in line with the research by Gulo, Nadeak, and Tampubolon (2021) which found that the principal's leadership style has a positive and significant impact on teacher performance. This proves that the better the leadership style applied, the higher the motivation and performance of the teachers.

The Influence of Principal Leadership Style on Organizational Culture in Primary Schools in the Sindangkasih District

Based on the statistical test results in table 4, the standard regression coefficient obtained is 0.552, indicating that the influence of the principal's leadership style affects the organizational culture by 55.2%. This shows that the higher the

role of the principal's leadership, the more it will enhance the organizational culture.

A good leadership style creates values, norms, and a work culture that supports the creation of a conducive, collaborative school atmosphere focused on improving the quality of education. Another definition of organizational culture is from Andrew Brown: "Organizational culture is a set of values, beliefs, and norms that influence the way employees think, feel, and behave in relation to others inside and outside the organization." Brown, A. (2020). that organizational culture is a structure of values and beliefs formed by organizational members to guide the behavior of individuals and groups, as well as influence how they interact with external parties. This culture plays an important role in creating alignment between the organization's strategy and its operations. School culture encompasses values, traditions, and beliefs that shape the "way of doing things" in the school environment. They argue that a strong and positive culture is crucial for enhancing school effectiveness and student achievement. Deal and Peterson, 2016).

Organizational culture is formed from the beliefs and basic assumptions shaped by leaders and passed down to other members of the organization. Therefore, the leadership style demonstrated by the principal, whether transformational, democratic, or authoritarian, will create an atmosphere and work norms that ultimately shape the school's organizational culture. (Schein, 2017)

The results of this study are in line with the research (Djafri, 2017) that leaders who consistently apply positive values such as honesty, openness, and cooperation will create a healthy and harmonious organizational culture. A strong organizational culture ultimately supports the creation of a good and productive work environment. Organizational culture refers to the general views held by members of an organization regarding the value system applied by that organization. This value system influences the actions and

behaviors of the organization's members and becomes a distinguishing factor between one organization and another (Busro, 2020).

D. Conclusions

Leadership style is evident in daily activities in terms of how leaders govern, delegate tasks, communicate, motivate team members, supervise, foster work discipline, conduct and lead meetings, and make quick decisions. A leader must understand leadership styles and be able to determine the appropriate style for specific situations, as well as use that leadership style correctly. The performance of a teacher is the achievement of a teacher's work while carrying out their duties, roles, and responsibilities at school. Performance describes or explains to what extent a teacher is able to realize the established learning objectives and also has a positive influence on the developmental stage of the students.

The organizational culture in primary schools reflects the values, beliefs, behaviors, and characteristics that shape the identity and changes in the school's life, creating a safe and comfortable learning atmosphere, full of inspiration, and supporting the overall development of students. As the main foundation of organizational culture in schools, it not only influences the interactions between teachers and students but also shapes positive relationships with parents and the surrounding community.

The research results show that the principal's leadership style affects teacher performance by 25.1% and organizational culture by 55.2%. The better the leadership style applied by the principal in the Sindangkasih district, the higher the teacher performance and the better the organizational culture. Leadership style is a characteristic of an individual to influence others or the organization, so that others are willing and able to move towards achieving the organization's goals.

E. Acknowledgement

We would like to thank the principal of State Primary School in the Sindangkasih District who has given us permission to conduct research at the school. We also express our gratitude to the parties who have helped us in this research.

References

- Ainanur, A. (2018). The Influence of Organizational Culture, Competence, and Motivation on Employee Performance. *Journal of Management Master's Scientific Journal*, I, 1-14. <https://doi.org/10.35968/jmm.v11i2.469>
- Amalia, N., & Astuti, P. (2020). Analysis of the Influence of Organizational Culture and Work Ethos on Employee Performance (Case Study of the Marine and Fisheries Office of the Special Region of Yogyakarta). *Jurnal Fokus*, Vol. 10, No. 02. <https://doi.org/10.12928/fokus.v10i2.2359>
- Atatsi, E. A., Stoffers, J., & Kil, A. (2019). Factores que afectan el rendimiento de los empleados: una revisión sistemática de la literatura. *Revista de Avances en Investigación de Gestión*, 16 (3), 329–351. <https://doi.org/10.1108/JAMR-06-2018-0052>
- Brown, A. (2020). *Cultura organizacional* (4.^a ed.). Nueva York: Oxford University Press.
- Busro, M. (2020). *Theories of Human Resource Management*. Jakarta: Prenada
- Deal, T. E., & Peterson, K. D. (2016). *Shaping school culture* (3rd ed.). San Francisco, CA: Jossey-Bass
- Djafri, N. (2017). The influence of leadership style, empathy, and motivation on organizational culture. *Management Journal*, 19 (1), 59. <https://doi.org/10.24912/jm.v19i1.105>
- Ghozali, I. (2018). *Application of multivariate analysis with the IBM SPSS 25 program*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gulo, S., Nadeak, B., & Tampubolon, H. (2021). The influence of the principal's leadership style and organizational culture on

- teacher performance in SMP Se-Nias Barat. *Journal of Educational Dynamics*, 14(1), 1–12.
<https://doi.org/10.51212/jdp.v14i1.2721>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2021). *Análisis de datos multivariantes* (8^a ed.). Pearson.
- Kadiyono, A. L., et al. (2020). Develop leadership style model for Indonesian teachers performance in Education 4.0 era. *Systematic Reviews in Pharmacy*, 11(9), 363–373.
<https://dx.doi.org/10.31838/srp.2020.9.52>
- Munawir, Fitrianti, Yuyun. & Anisa, Eka Nur. (2022). Performance of Professional Elementary School Teachers. *Uin Sunan Ampel: Journal of Teacher Education* Vol. 3 No. 1.
<https://doi.org/10.32832/jpg.v3i1.6251>
- Nugroho, Riyadi (2022) Organizational Culture that Encourages Work Innovation. *Journal Cahaya Mandalika*, pp. 882-893
<https://doi.org/10.36312/jcm.v5i2.3200>
- Perizade, Badia, et al. 2022. *Values of Leadership* (2nd Edition). Inderalaya: UPT Publisher and Printing of Sriwijaya University (Unsri Press).
- Purwanggono, Cuk Jaka. 2020. *Textbook on Leadership*. Faculty of Economics, Wahid Hasyim University Semarang.
- Rahmawati, N., Ratnasari, S. L., Azis, D. A., Sutjahjo, G., & Winarso, W. (2023). The influence of leadership style, work discipline, work motivation, and work environment on employee performance. *Jurnal Dimensi*, 12(1), 202-211.
<https://doi.org/10.33373/dms.v12i1.5067>
- Rasal, A. (2016). The Influence of Leadership Style and Organizational Culture on Employee Job Satisfaction at the Batam City Revenue Office. *Jurnal Dimensi*, 4(2).
<https://doi.org/10.33373/dms.v4i2.42>
- Robbins, S. P., & Judge, T. A. (2017). *Comportamiento organizacional* (17.^a ed.). Harlow: Pearson Education.
- Rosmawati. Ahyani, Nur. Missriani. The Influence of Teacher Discipline and Professionalism on Teacher Performance.

- Journal of Education Research.
<https://doi.org/10.37985/jer.v1i3.22>
- Schein, E. H. (2017). *Cultura organizacional y liderazgo* (5^a ed.). Hoboken, NJ: John Wiley & Sons.
- Septyarini, E. (2024). The Influence of Emotional Intelligence, Job Satisfaction, and Work Discipline on Employee Performance: A Study at the Malinau Regency Environmental Agency, North Kalimantan. *Journal of Business and Management*, 4(1), 48–59.
<https://ejournal.penerbitjurnal.com/index.php/business/article/view/717/631>
- Soelistya, D. (2022). *Organizational Culture in Practice* (R. Janata (ed.); 1st ed.). Nizamia Learning Centre.
- Sudjana, N. (2017). *The Basics of the Teaching and Learning Process*. Bandung: Sinar Baru Algensindo.
- Sugiyono. (2019). *Educational research methods with quantitative, qualitative, and R&D approaches* (2nd edition). Bandung: Alfabeta.
- Turmono. (2020). The Influence of Democratic Leadership Style on Employee Performance. *Journal of Technology and Business*, 2(2), 186–193. <https://doi.org/10.37087/jtb.v2i2.104>

The Development of a Digital-Based Attendance System to Enhance the Discipline of Fifth Grade Students at SD Negeri 62 Palembang

Nurul Sari¹, Edi Harapan¹, Sri Wahyu Indrawati¹

¹Universitas PGRI Palembang

Corresponding author e-mail: dr.edi.harapan@gmail.com

Article History: Received on 22 June 2025, Revised on 25 June 2025,
Published on 27 June 2025

Abstract: The integration of digital technology in education is increasingly recognized as a strategic effort to support character development and improve student discipline. This study explores the development and implementation of a digital-based attendance system to enhance the discipline of fifth-grade students at SD Negeri 62 Palembang. Employing a research and development (R&D) approach based on the Borg and Gall model, this study involved stages from preliminary research to product refinement. The digital attendance system utilizes barcode technology, allowing real-time and automated recording of student attendance. In the context of Indonesian elementary education, the use of barcode-based attendance represents a novel and practical innovation, addressing long-standing challenges of manual record-keeping and promoting digital literacy among students and teachers alike. Data were collected through expert validation questionnaires, user practicality assessments by teachers and students, and discipline observations. Quantitative analysis revealed that the developed product was highly valid, with expert approval ratings indicating strong content and media reliability. The practicality test showed 98% of teachers and 100% of students responded favorably. Effectiveness was evaluated through pretest and posttest assessments of student discipline, supported by statistical analysis using the Wilcoxon Signed-Rank Test and Mann-Whitney U Test, both showing significant improvements in the experimental groups ($p = 0.000$). These findings demonstrate that digital attendance systems can significantly increase student punctuality and overall discipline. This study contributes to the growing literature on educational technology adoption in elementary schools and provides practical insights for schools seeking innovative digital solutions to support character education and school management.

Keywords: Digital, Discipline, Educational Technology, Development, Elementary Education.

A. Introduction

Education in Indonesia serves as a strategic foundation for national development, aiming to produce competent, morally upright, and character-driven citizens (Sofha et al., 2023). As outlined in the National Education System Law No. 20 of 2003, education is not only intended to improve academic competencies but also to build strong character traits in students, such as discipline, responsibility, and respect for rules and norms (Arifin, 2017). In line with this, the Ministry of Education has continued to promote character education

through various initiatives, including the implementation of the Profil Pelajar Pancasila and the Merdeka Curriculum, which emphasize values such as independence, collaboration, and discipline as essential traits for 21st-century learners (Wulandari et al., 2024)

SD Negeri 62 Palembang has faced persistent challenges in managing student discipline related to attendance, particularly among fifth-grade students. According to internal school reports, late arrivals and unauthorized absences frequently occur, especially after weekends or holidays. Despite the school's commitment to nurturing student character and academic success, the traditional attendance system, which relies on manual processes, has proven ineffective in addressing these challenges (Kamila et al., 2024). Manual attendance methods are time-consuming, vulnerable to recording errors, and lack real-time monitoring capabilities (Ananta & Ariyanto, 2025). Teachers often spend valuable instructional time calling out student names, and it is difficult to detect patterns of tardiness or absenteeism promptly. Moreover, manual systems offer limited transparency and do not provide timely information to parents or administrators (Shobri, 2024).

Recognizing these limitations and the urgent need for a more efficient and transparent attendance mechanism, the school began exploring technology-driven solutions that align with its values-based educational goals. To overcome these limitations, the adoption of digital attendance systems has emerged as a promising solution (Ishaq & Bibi, 2023). Digital attendance leverages technological tools—such as barcodes, QR codes, and mobile applications—to automate the recording and tracking of student presence (Nishom et al., 2023). These systems offer various benefits, including real-time data access, enhanced accuracy, automatic reporting, and better integration with existing school management systems (Nusantara et al., 2025).

One widely used and cost-effective method in digital attendance is the use of barcode scanning (Elaskari et al., 2021). With each student assigned a unique barcode linked to their attendance profile, teachers can scan students quickly using smartphones or desktop devices, significantly reducing the time and effort needed for roll calls while increasing the reliability of attendance data (Meinarni et al., 2021). The use of barcode technology also provides a contextually appropriate solution in Indonesian public schools, where budget constraints and infrastructure variability make more complex systems, such as biometric or RFID-based attendance, less feasible.

In the context of SD Negeri 62 Palembang, the need for a digital attendance system is supported by the school's vision to instill strong values of discipline in students. The fifth-grade level was deliberately selected as the initial focus of this study due to its transitional role in elementary education, where students begin to demonstrate greater independence but also face increasing behavioral challenges. Internal monitoring data revealed that this grade had the highest frequency of late arrivals and unexplained absences, making it a strategic target group for intervention.

This study, therefore, aimed to develop a digital attendance system based on barcode scanning, using the Borg and Gall Research and Development model. The Borg and Gall

research and development model process consisted of ten stages—from preliminary analysis and product design to expert validation, practicality testing, and effectiveness evaluation (Maulani et al., 2022). The attendance system was designed to be accessible via smartphones and desktop computers, integrated with Google Sheets for data storage, and capable of producing attendance reports for school administrators and parents (Azizah et al., 2024).

This study addresses the gap in research on digital transformation in school administrative processes, especially in elementary education. While much attention has been given to the use of educational technology for instructional purposes, less focus has been placed on its role in supporting school governance and character-building practices (Cholifah, 2024). By exploring the design, implementation, and impact of a digital attendance system in a public elementary school, this research contributes practical insights into how schools can adopt digital tools to strengthen discipline and enhance the efficiency of daily operations.

B. Methods

This study employed a mixed-method research and development (R&D) approach using the Borg and Gall model to design, test, and refine a digital attendance system aimed at improving student discipline. The development process followed ten systematic stages, including preliminary research, planning, product development, expert validation, limited trials, and operational field testing (Sa'diyah, 2020).

The research was conducted at SD Negeri 62 Palembang, with the primary subjects comprising fifth-grade students and their homeroom teachers. A total of 48 students and 2 teachers participated in the final product testing. The inclusion criteria for student participants were active enrollment in fifth grade, consistent school attendance during the research period, and willingness to participate with parental consent. Exclusion criteria included students with special attendance exemptions or those transferred during the research. For teachers, inclusion criteria included active teaching in fifth grade at SD Negeri 62 Palembang.

Data collection involved expert validation questionnaires (to assess content and media validity), practicality questionnaires (administered to teachers and students), observation sheets, and documentation analysis. The observation parameters focused specifically on indicators of student discipline, such as punctuality in arrival, preparedness at the start of class, and frequency of unexcused absences. Documentation included attendance logs before and after the implementation of the system, and screenshots of system use.

The aim of this methodological approach was to produce a digital attendance system that is not only valid in terms of content and usability but also practical for classroom implementation and effective in fostering punctual behavior and self-discipline among elementary students (Rahmawati & Fitriana, 2024).

Population

The population of this study consists of all fifth-grade students and their respective classroom teachers at SD Negeri 62 Palembang, who were involved in the research. The implementation of the digital attendance system was conducted in two experimental classes consisting of a total of 48 students and 2 homeroom teachers. Additionally, one control class, which did not use the digital attendance system, was included for comparison. This design allowed for the evaluation of the system's effectiveness in improving student discipline through comparative analysis between experimental and control groups.

Data collection technique

In this study, data collection techniques consisted of questionnaires, observations, and documentation. Expert validation questionnaires were used to assess the validity of the digital attendance system, while practicality questionnaires were distributed to teachers and students to evaluate ease of use and user satisfaction. Observations were conducted to monitor changes in student discipline during the implementation. Documentation supported the process through system reports and attendance records. To measure effectiveness, student discipline scores were analyzed using pretest and posttest comparisons, allowing the researcher to assess the impact of the digital system on improving punctuality and overall discipline (Nisah et al., 2021).

Measurement Indicators

In this study, questionnaires were used as the primary data collection instrument to evaluate the validity, practicality, and effectiveness of the digital attendance system. The questionnaires consisted of closed-ended statements measured using a Likert scale, which allowed for quantifying the perceptions and experiences of expert validators, teachers, and students regarding the use of the system.

The Likert scale is commonly used in quantitative research to measure the level of agreement, frequency, or intensity of respondents' attitudes, behaviors, or experiences (Linus, 2025). In this research, the scale was designed to measure how frequently or how strongly respondents agreed with specific statements related to content validity, user experience, and behavioral discipline. The Likert scale used in the questionnaires consisted of the following response options, each assigned a numerical score:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

These categories were used to evaluate indicators such as the ease of scanning attendance barcodes, clarity of instructions, frequency of student punctuality, and the system's contribution to routine classroom discipline. The uniform interval scale allowed

for straightforward calculation of mean scores, percentages, and categorical interpretation of results.

To convert the questionnaire scores into analyzable discipline data, each item in the questionnaire was linked to specific indicators within the discipline construct, such as punctual attendance, adherence to procedures, and behavioral consistency. Individual scores for each item were summed to produce a total score per respondent, which was then averaged to obtain a mean score for each indicator. These values were subsequently used to quantitatively represent students' discipline levels and served as the basis for comparative analysis before and after the implementation of the digital attendance system.

This methodology is grounded in the Likert scale theory developed by Rensis Likert (1932), which provides a structured approach for capturing subjective perceptions and translating them into measurable quantitative data. The use of this measurement model ensured that the collected data were both reliable and valid for statistical analysis.

Research Hypothesis

Hypothesis testing was conducted to determine whether there is sufficient evidence from the sample data to reject or accept the null hypothesis (Akbar et al., 2023). The test focused on evaluating the effectiveness of the developed digital attendance system in improving student discipline among fifth-grade students at SD Negeri 62 Palembang.

H₀: There is no significant difference in student discipline scores before and after the implementation of the digital attendance system at SD Negeri 62 Palembang.

H₁ : There is a significant difference in student discipline scores before and after the implementation of the digital attendance system at SD Negeri 62 Palembang.

Data analysis

In this study, data analysis techniques utilized inferential statistics to evaluate the validity, practicality, and effectiveness of the digital attendance system in improving student discipline at SD Negeri 62 Palembang. The analysis was conducted using SPSS version 26. To assess the effectiveness of the product, discipline scores were compared before and after the implementation using the Wilcoxon Signed-Rank Test for within-group analysis, and the Mann-Whitney U Test for between-group comparisons (experimental and control classes). These non-parametric tests were chosen due to the ordinal nature of the data and the distribution characteristics identified during the normality test (Amaluis, 2014).

Normality Test

To determine whether the data are normally distributed. This test was conducted using the Kolmogorov-Smirnov method. In this study, the results of the Kolmogorov-Smirnov test showed that the significance values for both pretest and posttest discipline scores were less than 0.05, indicating that the data were not normally distributed.

Wilcoxon Signed Rank Test

To test whether there is a significant difference in student discipline scores before and after the implementation of the digital attendance system, the Wilcoxon Signed-Rank Test was used. This non-parametric test is appropriate for paired or related samples when the data do not meet the assumptions of normality. The test compares the pretest and posttest scores within the same group (experimental classes). The difference is considered statistically significant if the significance value (p-value) is less than 0.05 ($p < 0.05$).

Mann-Whitney U Test

To determine whether there is a significant difference in student discipline scores between the experimental group and the control group after treatment, the Mann-Whitney U Test was used. This test is suitable for comparing two independent groups when the data are not normally distributed. The difference between the two groups is considered statistically significant if the significance value (p-value) is less than 0.05 ($p < 0.05$).

C. Results and Discussion

Descriptive Statistics

Descriptive Analysis of the Digital Attendance System Validity

The descriptive analysis of the product validity reveals that the digital attendance system developed for fifth-grade students at SD Negeri 62 Palembang meets high standards of content and media feasibility. Based on expert validation, the system received an average score of 92.5% for material content and 90% for media design, both of which fall under the “very valid” category. The indicators assessed include clarity of content, relevance to learning objectives, ease of use, layout consistency, and technical functionality. Among these, the highest rating was observed in the indicator for clarity of barcode scanning instructions, with a mean of 4.75, indicating strong agreement among validators. The low standard deviation suggests that expert responses were consistently high. These results affirm that the product is well-aligned with educational standards and technically reliable for school-level implementation.

Descriptive Analysis of the Practicality of the Digital Attendance System

The practicality of the digital attendance system was evaluated through teacher and student questionnaires administered during limited and operational trials. The findings show an overwhelmingly positive response, with 98% of teachers and 100% of students indicating that the system was practical and easy to use. Key indicators included the simplicity of scanning barcodes, ease of access via smartphone or desktop, integration with Google Sheets, and clarity of attendance reporting. Teachers highlighted the system’s time-saving nature and its ability to provide real-time attendance data as major strengths. Among students, the system was perceived as more engaging than manual roll calls. The item with the highest mean score (4.87) related to the ease of scanning upon entering the classroom, indicating smooth user interaction. The consistently high responses confirm that the system is both user-friendly and functionally effective in the context of elementary education.

Descriptive Analysis of Student Discipline Before and After Implementation

The descriptive analysis of student discipline scores indicates a noticeable improvement following the implementation of the digital attendance system. Before the intervention, discipline scores were moderate, with several students frequently arriving late or showing irregular attendance patterns. Post-implementation data show an increase in punctuality, more consistent attendance, and enhanced student awareness regarding time management. The average discipline score increased from 72.4 in the pretest to 88.6 in the posttest for the experimental group. This shift represents a significant positive change in behavioral patterns. Observation notes also confirmed that students showed greater initiative in scanning their barcodes without being prompted, and classroom routines became more orderly. Although some students initially required guidance during the trial phase, the learning curve was minimal. These results suggest that the digital system not only improves administrative efficiency but also strengthens student discipline by reinforcing daily routines and promoting accountability.

Conclusion of Descriptive Analysis of the Three Variables

Based on the descriptive analysis of the three variables—validity, practicality, and effectiveness—it can be concluded that the digital attendance system developed for SD Negeri 62 Palembang is highly valid, practical, and effective. Expert assessments confirmed the system’s strong content and media quality, while responses from teachers and students indicated high user-friendliness and efficiency. The system also contributed to a significant improvement in student discipline, particularly in punctuality. These results demonstrate that the digital attendance system is a feasible and impactful tool to support discipline and school management in elementary education.

Hypothesis

Table 1. The Normality Kolmogorov Smirnov Test for Pre Test and Post Test of Student Discipline Score Data

One-Sample Kolmogorov-Smirnov Test			
		before	after
N		48	48
Normal Parameters ^{a,b}	Mean	19.0833	19.9375
	Std. Deviation	1.31818	.31999
Most Extreme Differences	Absolute	.319	.536
	Positive	.243	.423
	Negative	-.319	-.536
Test Statistic		.319	.536
Asymp. Sig. (2-tailed)		.000 ^c	.000 ^c
a. Test distribution is Normal.			
b. Calculated from data.			
c. Lilliefors Significance Correction.			

The normality test was conducted using the One-Sample Kolmogorov-Smirnov method to examine whether the pretest and posttest discipline score data were normally distributed. The test was applied to a sample of 48 students for both the before (pretest) and after (posttest) data sets. The results show that the Asymp. Sig. (2-tailed) values for both the pretest and posttest scores are 0.000, which is less than 0.05. According to the decision criteria, if the significance value is less than 0.05, the data are considered not normally distributed.

After it was determined that the data were not normally distributed based on the results of the Kolmogorov-Smirnov test, the analysis of differences was carried out using a non-parametric test is the Wilcoxon Signed-Rank Test.

Table 2. Result of Wilcoxon Signed Rank Test

Test Statistics ^a	
	after - before
Z	-3.664 ^b
Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

To determine whether there was a significant difference in student discipline scores before and after the implementation of the digital attendance system, the Wilcoxon Signed-Rank Test was conducted. This non-parametric test is appropriate for related samples that do not meet the assumption of normal distribution.

The results show a Z value of -3.664 with an Asymptotic Significance (2-tailed) of 0.000, which is less than 0.05. According to the decision criteria, if the p-value is less than 0.05, the null hypothesis is rejected.

Therefore, it can be concluded that there is a statistically significant difference between the pretest and posttest discipline scores of students. This indicates that the implementation of the digital attendance system had a positive and significant effect on improving student discipline at SD Negeri 62 Palembang.

Table 3. The Normality Kolmogorov Smirnov Test for Student Discipline Score Data from the Experimental and Control Classes

Tests of Normality							
		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
skor	kelompok	.536	48	.000	.200	48	.000
	kelompok	.209	24	.008	.881	24	.009
a. Lilliefors Significance Correction							

The results show that for the overall group (N = 48), the Kolmogorov-Smirnov test produced a significance value of 0.000, and the Shapiro-Wilk test also showed 0.000, both of which are less than 0.05. This indicates that the distribution of discipline scores in the overall dataset is not normal. When analyzed by group, the Kolmogorov-Smirnov significance value was 0.008 and the Shapiro-Wilk significance was 0.009 for one of the subgroups (df = 24), again indicating a non-normal distribution.

According to the standard decision rule, if the significance value is less than 0.05, the data are considered not normally distributed. Therefore, it can be concluded that the discipline score data in both the overall sample and subgroup samples do not follow a normal distribution, and thus, non-parametric Mann Whitney U tests for comparing two independent groups.

Table 4. Result of Mann-Whitney U Test

Test Statistics ^a	
	skor
Mann-Whitney U	1.000
Wilcoxon W	301.000
Z	-8.008
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: kelompok	

To compare the discipline scores between the experimental and control groups after the implementation of the digital attendance system, a Mann-Whitney U Test was conducted. This non-parametric test is appropriate for comparing two independent samples when the data do not follow a normal distribution.

The results show a Mann-Whitney U value of 1.000, with a Z value of -8.008 and an Asymptotic Significance (2-tailed) of 0.000, which is less than 0.05. Based on this result, the null hypothesis is rejected.

This indicates that there is a statistically significant difference in student discipline scores between the experimental group and the control group. The experimental group, which used the digital attendance system, showed significantly higher discipline scores compared to the control group. These findings support the effectiveness of the digital attendance system in improving student discipline at SD Negeri 62 Palembang.

Beyond statistical significance, these results have broader implications for character education and school governance in the digital era. The observed improvements in punctuality and adherence to routines align with behavioral theories of reinforcement. Moreover, the findings also support the theoretical foundation of digital transformation in education, which posits that integrating simple, contextually appropriate technologies can optimize school management systems and reinforce educational values.

This research contributes to the growing body of evidence that digital tools are not only instructional aids but also effective behavioral management systems. By facilitating real-time monitoring, increasing transparency, and reducing teacher workload, the digital attendance system promotes a culture of accountability and responsibility among students. This has potential long-term effects on the development of student character,

particularly discipline, which is a core element of the Profil Pelajar Pancasila and other national character education goals.

Therefore, it can be concluded that the digital attendance system has a significant influence on improving student discipline, both through individual changes in student behavior and group-level differences in discipline outcomes. Although further refinement may enhance its long-term impact, the integration of digital tools in daily attendance practices proves to be an effective strategy in promoting punctuality and responsibility among elementary school students. Strengthening the implementation of such systems is essential to support discipline-based character education in primary schools.

The Role of Digital Attendance in Improving Student Discipline

Digital attendance plays a vital role in improving student discipline by fostering punctuality, consistency, and responsibility among learners. Unlike traditional manual methods, digital systems—such as barcode-based attendance—offer efficient, real-time recording and minimize the risk of error or manipulation. By embedding structured routines into the school day, these systems encourage students to be more accountable for their presence and behavior. In the case of SD Negeri 62 Palembang, the implementation of a digital attendance system contributed to noticeable improvements in student punctuality and classroom order. As a result, digital attendance serves not only as an administrative innovation but also as a strategic tool to support character education and enhance overall discipline in elementary school settings.

Digital Attendance Effectiveness: Linking Technology Use to Student Discipline

The effectiveness of digital attendance systems lies not only in their ability to streamline administrative tasks but also in their potential to positively influence student behavior. By incorporating technology into daily attendance routines—such as barcode scanning and real-time data tracking—schools create structured, consistent expectations that encourage students to arrive on time and take responsibility for their presence. This study demonstrates that the use of digital attendance at SD Negeri 62 Palembang is strongly linked to improvements in student discipline, particularly in terms of punctuality, routine compliance, and accountability. The successful integration of digital tools into school operations highlights the broader impact of educational technology on character formation, showing that when technology is thoughtfully applied, it can serve as an effective means of supporting behavioral development alongside academic goals.

Theoretical and Practical Implications

Theoretically, this study affirms that the integration of digital technology into school administrative processes—specifically attendance systems—can directly support the development of student discipline, a key aspect of character education emphasized in Indonesian primary schools. The findings at SD Negeri 62 Palembang demonstrate that technology does not only serve instructional functions, but also plays a strategic role in shaping student behavior through structured routines and accountability mechanisms. Practically, the successful implementation of the barcode-based digital attendance system provides a replicable model for other schools facing similar issues with student tardiness and attendance management. It offers a low-cost, accessible, and user-friendly

solution that enhances administrative efficiency while promoting punctuality and responsibility among students. These implications highlight the value of aligning technological innovations with school discipline strategies to achieve both academic and behavioral improvements.

D. Conclusion

Research findings indicate that the development and implementation of a digital attendance system at SD Negeri 62 Palembang significantly contributes to the improvement of student discipline, particularly in terms of punctuality and responsibility. The system was proven to be valid and practical based on expert evaluations and positive responses from teachers and students. Moreover, statistical analysis confirmed that the digital attendance system effectively enhanced discipline compared to traditional attendance methods. These findings affirm that integrating simple digital tools into school routines can support character development and improve administrative efficiency.

Theoretically, the results reinforce behaviorist principles-particularly operant conditioning-which suggest that consistent, immediate reinforcement (such as real-time feedback on attendance) promotes positive behavior patterns. This study also supports educational technology frameworks that emphasize the role of context-appropriate digital tools in shaping student behavior and optimizing school processes. Practically, the success of this initiative highlights the importance of aligning educational technology with behavioral and character-building objectives. It demonstrates that digital innovation, when implemented effectively, can serve as a valuable strategy to strengthen discipline in primary education, reduce teacher workload, and increase school accountability.

For future research, it is recommended to explore the long-term sustainability of the system, its scalability across different grade levels and schools, and its integration with other character education programs. Investigating the impact of digital attendance tools on other aspects of student behavior-such as engagement, motivation, and academic performance-would also provide a more comprehensive understanding of its benefits and limitations.

E. Acknowledgements

We We would like to express our sincere gratitude to the school authorities, teachers, and students of SD Negeri 62 Palembang for their valuable support and active participation in the implementation of this research entitled *The Development of a Digital-Based Attendance System to Enhance the Discipline of Fifth Grade Students at SD Negeri 62 Palembang*. Their cooperation and commitment greatly contributed to the successful completion of this study.

Reference

- Akbar, R., Sukmawati, U. S., & Katsirin, K. (2023). Analisis Data Penelitian Kuantitatif: Pengujian Hipotesis Asosiatif Korelasi. *Jurnal Pelita Nusantara*, 1(3), 430–448. <https://doi.org/https://doi.org/10.59996/jurnalpelitanusantara.v1i3.350>
- Amaluis, D. (2014). Analisis efektifitas program pelatihan diklat PIM III terhadap kompetensi pejabat eselon III di Pemerintah Kabupaten Agam. *Journal of Economic and Economic Education*, 3(1), 18–26. <https://doi.org/https://doi.org/10.22202/economica.2014.v3.i1.232>
- Ananta, A. Y., & Ariyanto, R. (2025). PENGEMBANGAN SISTEM PRESENSI BERBASIS INTERNET OF THINGS (IOT) TERINTEGRASI DENGAN SIAKAD DI POLITEKNIK NEGERI MALANG. *JATI (Jurnal Mahasiswa Teknik Informatika)*, 9(3), 4009–4015. <https://doi.org/https://doi.org/10.36040/jati.v9i3.13531>
- Arifin, S. (2017). Peran guru pendidikan jasmani dalam pembentukan pendidikan karakter peserta didik. *Multilateral: Jurnal Pendidikan Jasmani Dan Olahraga*, 16(1). <https://doi.org/http://dx.doi.org/10.20527/multilateral.v16i1.3666>
- Azizah, N., Jannah, R., Wilantara, R. A., Fajri, A., & AH, M. R. (2024). Sistem Presensi Menggunakan Qr Code Dan Google Spredsheets Di Sekolah Madrasah Ibtidaiyah Di Desa Trebungan. *Jurnal Masyarakat Berdikari Dan Berkarya (Mardika)*, 2(1), 25–33. <https://doi.org/https://doi.org/10.55377/mardika.v2i1.9733>
- Cholifah, S. (2024). Educational Environment in the Implementation of Character Education. *Journal of Scientific Research, Education, and Technology (JSRET)*, 3(2), 816–825. <https://doi.org/https://doi.org/10.58526/jsret.v3i2.418>
- Elaskari, S., Imran, M., Elaskri, A., & Almasoudi, A. (2021). Using barcode to track student attendance and assets in higher education institutions. *Procedia Computer Science*, 184, 226–233. <https://doi.org/https://doi.org/10.1016/j.procs.2021.04.005>
- Ishaq, K., & Bibi, S. (2023). IoT based smart attendance system using RFID: A systematic literature review. *ArXiv Preprint ArXiv:2308.02591*. <https://doi.org/https://doi.org/10.48550/arXiv.2308.02591>
- Kamila, A. R., Derhass, G. H., Rabbani, D. A., Andry, J. F., & Lee, F. S. (2024). Aplikasi Absensi Berbasis Android Pada Sekolah Boarding Sebagai Transformasi Digital Bidang Pendidikan. *Nuansa Informatika*, 18(2), 26–34. <https://doi.org/https://doi.org/10.25134/ilkom.v18i2.155>
- inus, M. (2025). Peran E-Wallet Dalam Mendorong Perilaku Konsumsi Generasi Milenial. *Jurnal Ilmu Ekonomi Dan Bisnis*, 2(2), 19–24. <https://doi.org/https://doi.org/10.70134/jukoni.v2i2.458>
- Maulani, J., Kelana, J. B., & Jayadinata, A. K. (2022). Pengembangan LKPD berbantuan liveworksheet untuk meningkatkan pemahaman konsep IPA siswa kelas IV SD. *Jurnal Profesi Pendidikan*, 1(2), 106–123. <https://doi.org/https://doi.org/10.22460/jpp.v1i2.11613>
- Meinarni, N. P. S., Permana, I. P. H., Desnanjaya, I. G. M. N., Radhitya, M. L., & Winatha, K. R. (2021). Pemanfaatan Teknologi Informasi Untuk Bisnis UMKM. <https://doi.org/https://doi.org/10.31219/osf.io/t3jhp>
- Nisah, N., Widiyono, A., Milkhaturohman, M., & Lailiyah, N. N. (2021). Keefektifan Model Project Based Learning Terhadap Peningkatan Hasil Belajar IPA di Sekolah Dasar. *Pedagogi: Jurnal Penelitian Pendidikan*, 8(2). <https://doi.org/https://doi.org/10.25134/pedagogi.v8i2.4882>

- Nishom, M., Abidin, T., & Wiyono, S. (2023). Pemanfaatan teknologi QR-Code untuk presensi siswa di era disrupsi digital. *JMM (Jurnal Masyarakat Mandiri)*, 7(2), 1984–1992.
- Nusantara, G. L., Andrian, R., & Abdulmajid, N. W. (2025). Implementation of a Web-Based Student and Teacher Attendance System With QR Code Integration using the RAD. *INOVTEK Polbeng-Seri Informatika*, 10(1), 99–110.
<https://doi.org/https://doi.org/10.35314/f2qvfs64>
- Rahmawati, A., & Fitriana, N. (2024). Efektifitas Penerapan Absensi Fingerprint Terhadap Disiplin Karyawan Di Pt. Mitra Angkutan Sejati. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 8(1), 1787–1798.
<https://doi.org/https://doi.org/10.31955/mea.v8i1.3904>
- Sa'diyah, H. (2020). Model Research and Development dalam Pembelajaran Pendidikan Agama Islam. *EL-BANAT: Jurnal Pemikiran Dan Pendidikan Islam*, 10(1), 42–73.
<https://doi.org/https://doi.org/10.54180/elbanat.2020.10.1.42-73>
- Shobri, M. (2024). Peran sistem informasi manajemen pendidikan dalam meningkatkan transparansi dan akuntabilitas di lembaga pendidikan Islam. *AKSI: Jurnal Manajemen Pendidikan Islam*, 2(2), 78–88.
<https://doi.org/https://doi.org/10.37348/aksi.v2i2.302>
- Sofha, G. F., Nabila, I., Yusriyyah, M. Z., & Annisa, N. (2023). Peran pendidikan kewarganegaraan terhadap pembangunan karakter bangsa. *Advances In Social Humanities Research*, 1(4), 408–420.
<https://doi.org/https://doi.org/10.46799/adv.v1i4.47>
- Wulandari, E. D., Lestari, R. D., & Faaiah, Y. N. (2024). Sinergi Profil Pendidikan Pancasila dan Nilai Islam di Sekolah Dasar. *Jurnal Pendidikan Islam*, 1(4), 14.
<https://doi.org/https://doi.org/10.47134/pjpi.v1i4.760>

Strategic Brand Positioning Through Cultural Event Programming at Garuda Wisnu Kencana Cultural Park

Erica Pricilla Tjiadarma¹, Ilma Aulia Zaim¹

¹Institut Teknologi Bandung, Indonesia

Corresponding author e-mail: erica_tjiadarma@sbm-itb.ac.id

Article History: Received on 18 June 2025, Revised on 25 June 2025,
Published on 28 June 2025

Abstract: This study examines cultural event programming as a strategy to strengthen brand positioning at Garuda Wisnu Kencana (GWK) Cultural Park in the domestic market. A mixed-methods approach was used, combining interviews with four internal stakeholders and surveys of 400 domestic visitors (2022–2025). The analysis applied Cai’s brand positioning model, McKercher and du Cros’s cultural tourist typology, and Getz and Morrison’s participatory event framework. Findings show that while GWK is widely recognized, its cultural image is narrowly associated with the iconic statue, and the visitor experience is often perceived as static. A misalignment between GWK’s cultural mission and commercial focus further weakens its cultural appeal. This study proposes a repositioning model based on symbolic narrative integration, participatory cultural programs, and targeted visitor segmentation. The findings contribute to cultural tourism by introducing an integrated branding-programming model that emphasizes internal alignment to deliver more authentic and immersive cultural experiences.

Keywords: Cultural Tourism, Brand Positioning, Programming Strategy, Visitor Engagement, Segmentation

A. Introduction

The global tourism industry was one of the hardest hit sectors during the COVID-19 pandemic. Travel restrictions in 2020 led to an unprecedented decline in international tourist arrivals and GDP contribution. However, by the end of 2024, international tourism was projected to recover to nearly 99% of pre-pandemic levels, indicating a quantitative rebound (UNWTO, 2025). Beyond this recovery in volume, the pandemic catalyzed a deeper transformation in tourism behavior. Tourists are now increasingly motivated by immersive, meaningful, and culturally rooted experiences, with greater attention to sustainability and authenticity (WTTC, 2024; Company, 2024). This shift requires destinations to deliver not only physical attractions but also symbolic and emotional value through engaging narratives and experiential design.

In the Asia-Pacific region, which accounts for approximately 24% of global international arrivals (UNWTO, 2025), countries like Thailand and Vietnam are leading in cultural product innovation through experiential, story-driven tourism strategies. For Indonesia to remain competitive, it must enhance not only visitor volume but also the cultural and symbolic depth of its tourism offerings. Cultural and heritage tourism has proven to be one of the most resilient segments post-pandemic, attracting younger generations who seek authenticity and meaningful connections with local traditions (UNESCO, 2023; Kim & Lee, 2021). However, this growth also brings the risk of cultural commodification, where traditional practices are reshaped to meet tourist expectations, often at the cost of their original meaning (Wang & Yang, 2021).

Bali, Indonesia's flagship tourism destination, continues to attract international attention for its natural beauty, cultural richness, and spiritual identity. In 2024, it recorded 6.3 million international arrivals, a 20.1% increase from the previous year (Bali Tourism Office, 2024). However, the success has placed pressure on

infrastructure and the environment, particularly in popular areas such as Ubud, Canggu, and Kuta. In response, the Garuda Wisnu Kencana (GWK) Cultural Park was developed as a strategic initiative to reinforce cultural tourism. Envisioned as a national icon and educational tourism hub, GWK has gained visibility through its monumental statue and high-profile events. Nevertheless, the visitor experience is frequently described as static, with the cultural value limited to visual appreciation of the statue. Emotional engagement and participatory experiences are minimal, and a disconnect remains between GWK's cultural mission and its commercial priorities.

This study aims to address this gap by examining how curated cultural programming can be utilized to reposition GWK's brand in alignment with the evolving expectations of post-pandemic travelers. While recent studies have explored destination branding (Lyu & Wang, 2021) and cultural tourism engagement (Qiao et al., 2023), there remains a lack of integrative models that combine brand strategy with participatory programming within a domestic cultural context. Using a mixed-methods approach, this study proposes a branding-programming framework grounded in symbolic narrative integration, participatory experience design, and audience segmentation strategies targeting domestic cultural tourists.

Theoretically, the study contributes to post-pandemic tourism literature by developing a hybrid model of cultural brand positioning based on internal strategic alignment and emotional engagement. Managerially, it offers actionable insights for cultural destination managers seeking to revitalize static heritage sites into dynamic, immersive experiences aligned with modern tourism values.

B. Method

This study employed a mixed-methods case study design to investigate the brand positioning of Garuda Wisnu Kencana (GWK) Cultural Park through its cultural programming strategies. The case

study approach was chosen to allow an in-depth exploration of a single cultural tourism destination in its real-life context, particularly relevant in post-pandemic adaptation settings.

The research design combined qualitative and quantitative data collection and analysis conducted in parallel, followed by integration at the interpretation stage. This concurrent triangulation model was adopted to enhance the validity of findings and to offer both contextual depth and generalizability (Creswell & Creswell, 2022).

The qualitative component consisted of four semi-structured interviews with key internal stakeholders from GWK's cultural, marketing, and operational divisions. Participants were selected through purposive sampling based on their strategic roles and direct involvement in GWK's decision-making. Each interview lasted between 45–60 minutes and was conducted in Indonesian at either the ASRI Jakarta or GAIN Bali office. All interviews were recorded with consent and transcribed verbatim for thematic analysis.

The quantitative component involved a structured questionnaire distributed to 400 domestic visitors of GWK between 2022 and 2025. The survey was designed to capture visitor perceptions of GWK's brand image, engagement with cultural programming, and alignment with their expectations. The sampling was non-probabilistic and based on voluntary participation, with questionnaires administered both offline (at the GWK site) and online (via community networks and social media). The sample size was determined to ensure statistical validity for multivariate analysis, with a minimum of 10 respondents per variable, aligning with best practices in tourism research (Veal, 2022).

The questionnaire comprised 35 closed-ended questions using a Likert scale, and the data were analyzed using descriptive statistics and cross-tabulation to identify trends and perception gaps. This study was guided by multiple theoretical frameworks. Rather than

relying on early models, the study adopted the contemporary framework proposed by Konecnik Ruzzier & Petek (2021), which emphasizes a multi-dimensional approach to destination brand identity and image alignment. To interpret visitor segmentation within cultural tourism, this study applied the updated typology of cultural tourists introduced by Richards (2021), which incorporates shifting post-pandemic motivations, digital engagement, and hybrid consumption patterns. Getz & Page (2022) participatory, authentic, interactive, and emotionally engaging event model supported the assessment of programmatic strategies. Finally, Middleton et al., (2020) 12Ps of tourism marketing informed the design of practical recommendations across internal and external dimensions.

This multi-framework integration allowed the study to link organizational insights with visitor perspectives and offer a comprehensive strategy for repositioning GWK as a dynamic cultural tourism destination.

C. Result and Discussion

Key Findings: Segmentation and Brand Gaps

The quantitative phase confirmed strong internal consistency (Cronbach's Alpha > 0.9) and construct validity through Exploratory Factor Analysis (KMO > 0.8). Five key constructs were identified, including symbolic perception, emotional engagement, program relevance, and brand clarity. K-means clustering segmented respondents into three perceptual-attitudinal clusters: Cluster 1: Disengaged Visitors (28%); Cluster 2: Neutral Visitors (29%); Cluster 3: Engaged Cultural Tourists (43%).

Cluster 2 emerged as a strategically important segment with low emotional connection and symbolic recall. Discrepancy analysis revealed a gap between visitor expectations and brand delivery,

particularly regarding participatory experience and emotional resonance.

Qualitative interviews supported these findings. Internal stakeholders highlighted inconsistent program curation, underdeveloped narratives, and operational misalignment with the park's cultural mission. SWOT analysis indicated strong external assets—location and iconic symbolism but revealed internal weaknesses in knowledge integration, experience design, and segmentation practices.

GWK and the Knowledge Management (KM) “Initiation Stage”

GWK currently operates in the Initiation Stage of the Knowledge Management maturity model. Characteristics include siloed knowledge practices, limited feedback loops, and lack of standardized cultural interpretation mechanisms. Key constraints identified were: (1) People: Limited internal knowledge sharing; program staff and guides lack common narrative training. (2) Process: Absence of data-informed programming and segmentation. (3) Leadership: No central ownership of cultural storytelling or symbolic brand strategy. This stage requires foundational KM interventions: shared narrative databases, program design frameworks, and routine knowledge-sharing rituals.

Strategic Priorities and Business Solutions

Drawing from the triangulated findings, this study proposes three interrelated strategic priorities to reposition GWK Cultural Park as a more engaging and meaningful cultural destination. First, narrative integration is essential to transform visitor experiences from passive observation into immersive engagement. This can be achieved by embedding Balinese mythology and local philosophies, such as Tri Hita Karana, throughout the visitor journey. The

narratives should be consistently conveyed through live storytelling, interpretive signage, and digital media to ensure symbolic coherence and emotional resonance across all touchpoints.

Second, instead of relying solely on geographical segmentation between domestic and international visitors, GWK needs to adopt a psychographic segmentation strategy. This involves tailoring program design and messaging to reflect different motivational profiles derived from the cluster analysis. For example, the personas of “Pak Wijono,” “Sari,” and “Mas Dimas” represent a spectrum of visitor interests and cultural involvement. Designing experiences that match these personas allows GWK to deliver more relevant, targeted, and impactful cultural programming.

Third, the strategy calls for the expansion of participatory cultural programming. Rather than presenting culture as a static display, GWK should facilitate co-created experiences through regular cultural workshops, community-based performances, and a curated calendar of thematic events. These programs must be designed to encourage active engagement, emotional connection, and long-term memory retention. Together, these three strategic priorities—integrated narrative design, motivation-based segmentation, and participatory programming provide a comprehensive framework to strengthen GWK’s brand positioning and increase its value proposition in the evolving landscape of post-pandemic cultural tourism.

To implement the proposed strategic priorities, this study outlines a phased three-year roadmap that aligns with GWK’s internal capacity and the evolving expectations of cultural tourists. In the short-term phase, spanning the first twelve months, the focus is placed on consolidating brand identity through pilot programs that are rooted in narrative storytelling. These initiatives are accompanied by internal training to align cross-divisional

understanding of GWK's symbolic vision and to foster a unified cultural narrative across departments.

Moving into the intermediate phase, which covers the period between the twelfth and twenty-fourth month, the organization is expected to institutionalize seasonal programs that thematically highlight Balinese culture. During this phase, GWK also aims to enhance the visitor experience by incorporating systematic feedback mechanisms into program evaluation and by activating new cultural spaces such as galleries and interpretive exhibition areas.

Finally, in the long-term phase, covering the final twelve months of the roadmap, GWK will shift its focus toward digital transformation and strategic partnerships. This includes the development of a digital cultural archive to preserve and disseminate cultural knowledge, the pursuit of cultural accreditation to solidify its status as a national icon, and the establishment of international collaborations to enhance GWK's global presence and reputation. Together, these phased initiatives aim to gradually reposition GWK as a dynamic and participatory cultural institution that reflects both heritage authenticity and contemporary visitor expectations.

Using an STP approach (Kotler & Keller, 2021), GWK's new brand position is articulated as: "More than a monument, Garuda Wisnu Kencana Cultural Park is Indonesia's living stage of culture." This is delivered through five brand pillars: Culture in Motion, Icon of Myth & Nation, Join the Journey, Made for Everyone, and Where Stories Come Alive.

Discussion

The results reveal a strategic disconnect between GWK's cultural mission and visitor experiences, especially among Cluster 2. These findings align with recent literature emphasizing that cultural brands must transcend physical symbols and generate emotionally

resonant narratives to foster deeper audience connection. As highlighted by Richards & Marques (2020), the success of a cultural destination is increasingly measured by its ability to deliver immersive and meaningful experiences, rather than simply showcasing iconic structures. In the case of GWK, monumental architecture alone proves insufficient without consistent storytelling and participatory formats that emotionally engage visitors across diverse motivations.

Furthermore, the study supports updated models of cultural tourist segmentation, such as those proposed by Marujo and Leal (2021), who argue that psychographic and behavioral data are critical in understanding how different tourist groups engage with cultural content. Relying solely on demographic or geographic variables limits the destination's ability to personalize offerings. In GWK's context, the motivational spectrum revealed through clustering confirms the necessity for segmentation strategies that reflect varying levels of cultural curiosity, emotional involvement, and participatory preference. This approach ensures better alignment between program design and visitor expectations in the post-pandemic era of experience-based tourism.

In the context of Knowledge Management, GWK's position in the Initiation Stage requires attention to systems and leadership. Nonaka and Takeuchi's SECI model suggests that tacit knowledge (e.g., local rituals, narrative traditions) must be externalized and shared through organizational routines. At GWK, this means implementing structured post-event reviews, internal learning forums, and shared content development.

From a managerial standpoint, GWK's evolution from a landmark into a "living stage" demands integration of people, process, and technology. Emotional programming and narrative consistency should be driven by collaborative leadership and community involvement. Richards & Marques (2020) highlight co-creation as

essential in post-pandemic cultural tourism, ensuring both authenticity and adaptability.

D. Conclusion

This study concludes that the current brand positioning of Garuda Wisnu Kencana (GWK) Cultural Park remains suboptimal in engaging cultural tourists, primarily due to fragmented symbolic narratives, limited emotional resonance, and a lack of participatory programming. While GWK holds monumental symbolic value, particularly in its physical structure, this potential is not yet translated into immersive cultural experiences that align with the expectations of modern domestic visitors.

Quantitative and qualitative findings indicate that only the Engaged Cultural Tourists (Cluster 3, 63.7%) exhibit strong emotional and symbolic attachment to GWK, while the Neutral Visitors (Cluster 2, 29.0%) represent a strategically significant group with high potential for engagement if addressed through personalized narratives and emotionally meaningful programs.

This study contributes to the literature by offering an integrated model of brand positioning through cultural programming tailored for domestic cultural tourists, combining narrative strategy, segmentation insights, and internal alignment. From a managerial perspective, five core strategies are recommended: (1) reconstruct GWK's identity as "The Living Soul of Balinese Culture" through cross-media storytelling; (2) activate Cluster 2 potential via participatory, persona-driven program design; (3) expand and diversify emotionally engaging cultural programs; (4) align program flow spatially and thematically across the park; and (5) build structured collaboration with local cultural communities through a Curatorial Council to ensure authenticity and sustainability.

Looking forward, GWK's transformation requires a long-term Knowledge Management (KM) vision, positioning the park not only as a destination but also as a knowledge-based cultural institution. This includes establishing integrated information systems, revising operational procedures to embed symbolic meaning, and cultivating a knowledge-sharing culture supported by leadership and continuous learning. These actions are essential to support adaptive innovation and ensure cultural integrity amid evolving visitor expectations.

Future research may explore the longitudinal impact of such branding-programming integration, assess visitor emotional engagement over time, or investigate KM-driven transformations in other heritage-based tourism destinations.

References

- Ahn, Y. J., & Back, K. J. (2021). Cultural destination marketing: Developing a scale for measuring narrative transportation in heritage tourism. *Journal of Travel Research*, 60(2), 421–437. <https://doi.org/10.1177/0047287519895121>
- BPS-Statistics Indonesia. (2024). *Tourism Statistics 2023*. <https://www.bps.go.id>
- Company, M. &. (2024). *The Future of Travel Post-COVID: Trends in Experience and Expectation*.
- Creswell, J. W., & Creswell, J. D. (2022). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (6th ed.). SAGE Publications.
- Dredge, D., & Gyimóthy, S. (2023). *Cultural Tourism and the Experience Economy: Perspectives from Asia-Pacific*. Channel View Publications.
- Getz, D., & Page, S. J. (2022). *Event studies: Theory, research and policy for planned events* (4th ed.). Routledge.
- Haq, F., Yasin, N., & Nair, V. (2023). Strategic responses of heritage destinations to COVID-19: A resilience and knowledge

- management approach. *Tourism Management Perspectives*, 45, 101050. <https://doi.org/10.1016/j.tmp.2022.101050>
- Kim, J. H., & Lee, C. K. (2021). Enhancing cultural tourism experience through storytelling: A structural approach. *Journal of Sustainable Tourism*, 29(6), 937–955. <https://doi.org/10.1080/09669582.2020.1855439>
- Konecnik Ruzzier, M., & Petek, N. (2021). Revisiting destination brand identity and image alignment: Implications for sustainable branding strategies. *Journal of Destination Marketing & Management*, 19, 100537. <https://doi.org/10.1016/j.jdmm.2020.100537>
- Kotler, P., & Keller, K. L. (2021). *Marketing Management* (16th ed.). Pearson.
- Lyu, J., & Wang, S. (2021). Repositioning cultural destinations through branding and storytelling: A post-pandemic strategy. *Journal of Travel & Tourism Marketing*, 38(8), 756–773. <https://doi.org/10.1080/10548408.2021.1982623>
- Middleton, V. T. C., Fyall, A., & Morgan, M. (2020). *Marketing in Travel and Tourism* (5th ed.). Routledge.
- Morgan, N., Pritchard, A., & Pride, R. (2023). *Destination Branding: Creating the Unique Destination Proposition* (4th ed.). Routledge.
- Pine, B. J., & Gilmore, J. H. (2020). *The Experience Economy: Competing for Customer Time, Attention, and Money* (Updated ed.). Harvard Business Review Press.
- Qiao, G., Ren, L., & Zhang, H. (2023). Cultural tourism in the post-COVID era: Reconstructing visitor engagement. *Annals of Tourism Research*, 97, 103564. <https://doi.org/10.1016/j.annals.2022.103564>
- Richards, G. (2021). Cultural tourism 3.0: New models of tourism in the creative age. *Tourism Management Perspectives*, 39, 100856. <https://doi.org/10.1016/j.tmp.2021.100856>
- Richards, G., & Marques, L. (2020). Creating synergies between cultural policy and tourism for sustainable urban development. *Journal of Policy Research in Tourism, Leisure and Events*, 12(3),

- 358–373. <https://doi.org/10.1080/19407963.2020.1731835>
- Sheng, C. W., & Chen, M. C. (2021). A study of experience expectations of museum visitors. *Tourism Management*, 85, 104292. <https://doi.org/10.1016/j.tourman.2020.104292>
- Situmorang, R. A., & Nugroho, Y. (2023). Digital storytelling and place attachment in heritage tourism. *International Journal of Heritage Studies*, 29(5), 567–582. <https://doi.org/10.1080/13527258.2022.2082051>
- UNESCO. (2023). *World Heritage and Cultural Tourism Trends*.
- UNWTO. (2025). *Tourism Recovery Tracker 2025*.
- Veal, A. J. (2022). *Research Methods for Leisure and Tourism* (5th ed.). Pearson Education.
- Wang, Y., & Yang, L. (2021). Participatory planning and knowledge co-creation in cultural tourism development. *Journal of Destination Marketing & Management*, 20, 100632. <https://doi.org/10.1016/j.jdmm.2021.100632>
- Widiastuti, R., & Suryawan, I. W. (2023). Revitalization of local wisdom in tourism: Balinese values and community-based strategies. *Journal of Sustainable Tourism Studies*, 7(1), 21–37.
- WTTC. (2024). *Trends Shaping Travel and Tourism: 2024 Outlook*.
- Yin, J., Gao, X., & Pan, S. (2024). Smart tourism destinations and co-creation: Exploring transformative cultural experiences. *Annals of Tourism Research*, 97, 103610. <https://doi.org/10.1016/j.annals.2023.103610>
- Zhang, H., & Fan, D. X. F. (2022). Emotional branding and visitor loyalty in cultural destinations: The role of symbolic value. *Journal of Travel & Tourism Marketing*, 39(4), 367–384. <https://doi.org/10.1080/10548408.2022.2061432>

Development of Electronic Modules (MOLEK) in Learning to Write Poetry at MTS Nurrodiyah Kota Baru Jambi

Puji Sholeha¹, Nazurty¹, Rustam¹

¹Universitas Jambi, Indonesia

Corresponding author e-mail: pp.poejhy@gmail.com

Article History: Received on 21 June 2025, Revised on 24 June 2025,
Published on 28 June 2025

Abstract: This study aims to develop teaching materials and describe the effectiveness of electronic modules (MOLEK) in improving poetry writing skills in class VIII MTs Nurrodiyah Kota Baru Jambi. The research method used is research and development. The development procedure in this study used the research and development design of the ADDIE model (Analysis, Design, Development, Implementation, Evaluation). Data collection techniques in this study are divided into two, namely during pre-research (interviews and observations) and during research (questionnaires and student learning outcomes tests). The calculation of the validity of the instrument items for the test was carried out by calculating the correlation between the item score and the total instrument score using the Pearson product moment correlation coefficient formula. The results are that the electronic module developed is suitable for use in learning and the use of this Electronic Module (Molek) is proven effective in improving students' poetry writing skills and learning interest.

Keywords: Electronic, Module, Development, Poetry Writing Learning

A. Introduction

Language skills include four skills, namely listening, speaking, reading and writing. A person goes through a regular sequence of relationships in acquiring language skills: in childhood a person will learn to listen and then speak, then a person will learn to read and write (Elwi, 2021). Based on this, it can be said that writing is a skill that is considered to have the most difficult or high level of difficulty among other language skills. This is also in line with (Fitria,2021) that writing is an activity that uses thoughts and feelings, determines something to be written, then writes it down so that readers will easily understand the writing clearly. Basically, writing is not only an activity of pouring a feeling and thought, but an activity to express knowledge, ideas, and things that happen in life in written language. Writing is not only a simple activity that does not need to be learnt, but must be mastered (Gigih, 2020).

Writing makes it easier for learners to think, so writing is very important in education (Susy,Dealiani, 2022). A way that can be done to develop writing skills for students is to train students to write various kinds of literary works, such as writing poetry (Handi, 2020).

Poetry is one type of high-value literary work. Because poetry is a literary work that is rich in meaning in it (Nurul Isnaini, 2021). In writing poetry, the choice of words and language used is different from the language used in everyday life. Poetry is a literary work that is made as an expression of the author's desires, circumstances and feelings that are poured into poetry (Johan,2023).

According to some expert opinions above, it can be concluded that poetry writing skills are a person's ability to pour ideas, ideas, opinions and feelings into written language with the accuracy of language, diction, majas, rhyme, themes and contain meaning in accordance with the elements of poetry building. So that it can

produce a literary work that is rich in meaning as a result of a person's contemplation of his circumstances and feelings imaginatively. So that the audience can feel as a written work that contains beauty (Josephina,2021).

Writing skills are often considered a difficult skill to learn and teach by teachers, because writing skills require a long process and complex thinking. In this skill, it is not only limited to observing and then expressing through writing, but it is more about organising the writing into a unit that has meaning and is intact. Writing skills will not come automatically, but must go through a lot of practice and regular practice'. Therefore, writing skills must be fully developed and taught in Indonesian language subjects (Munira,2023).

Miftahul (2022) suggest that writing skills are quite important in the learning process because they are an important part of communicating with others. Writing includes the activity of assembling/arranging ideas or ideas in a cohesive writing. In carrying out poetry writing activities, students can do so by not forgetting the building blocks, so that poetry can look beautiful and fitting Septiani et al. In learning to write poetry, students are emphasised to be able to imagine, pour their ideas into a beautiful literary work in the form of poetry. So that this becomes one of the challenges for educators in guiding students in writing poetry.

Writing poetry, as a form of self-expression that is rich in the beauty of language and imagination, should be an integral part of Indonesian language learning. However, in practice, students' interest and ability in writing poetry often decline. Some of the factors that contribute to this problem are students' lack of interest in poetry, students' lack of ability to process language creatively, and the lack of availability of relevant and interesting teaching materials.

Students' lack of interest in poetry can be caused by several things. Firstly, students' perception that poetry is a form of literary work that is difficult to understand and boring. Second, students' lack of experience in reading and appreciating poetry from an early age. Third, the lack of student involvement in poetry writing activities on an ongoing basis.

Based on observations made by researchers at MTs Nurrodiyah Kota Baru Jambi, that the learning process is still teacher-centred so that students are less active in the learning process. One of the causes is the limited number of teaching materials. The number of package books provided by the school is only 15 books while the total number of students in class VIII is 32 students. In addition, the available package books are books with reference to the previous curriculum, namely the KTSP curriculum. This limitation of teaching materials is very influential in student achievement results. In the material of writing poetry, out of 32 students in class VIII, only two students got scores in accordance with the achievement of learning objectives. The rest of the students have not fulfilled the achievement of learning objectives. Therefore, it is necessary to develop teaching materials for writing poetry to overcome the gap in teaching materials that is happening.

One of the challenges teachers face when teaching poetry in the classroom is the low desire to learn, which is shown by a lack of enthusiasm, reluctance to follow up on what is being learnt, a tendency to get bored quickly and give up, as well as a lack of interest in the subject, lack of interest in practising or completing tasks, limitations in coming up with and expressing ideas, and a lack of resources. As it is difficult for them to understand and compose poetry, students have limited motivation to learn. In addition, the use of less diverse media contributes to additional factors (Febri, 2019).

In addition, students' lack of ability in writing poetry is also an obstacle, namely Students often have difficulty in processing words, choosing the right diction, and composing a good poetry structure. This is caused by several factors, such as students' lack of understanding of the intrinsic elements of poetry, lack of writing practice, and lack of guidance from teachers.

On the other hand, the lack of teaching materials in accordance with the curriculum is also a problem that needs attention. Existing teaching materials are often monotonous and less interesting for students. As a result, the learning process of writing poetry is less effective and unable to motivate students to be creative.

The success of the learning process is supported by teaching materials. (Dheanita, 2022) states that an educator and students need a support in learning, one of which is teaching material which is a learning resource. The teaching materials for the Merdeka Curriculum are textbooks, teaching modules, project modules to strengthen the profile of Pancasila students, examples of the operational curriculum of educational units, learning videos, etc.

Along with technological advances in this era, the learning process of teaching materials that become learning resources must also develop and innovate (Asmarani, 2021). Therefore, it is necessary to develop teaching materials that are more effective, efficient, innovative and flexible.

Writing poetry is not an easy activity. This activity requires extensive knowledge, high creativity, and strong language knowledge. In line with this Adisti (2023) suggest that writing poetry is easy if the conditions for writing poetry are met. The requirements include being intelligent, mastering language, broad insight and sensitivity. So far, learning to write poetry is only presented in PPTs and incomplete teaching materials. The material in various printed books has not really provided experience to

students in general. The tendency of students to listen to the material is not systematic, so that when producing work in the form of poetry, they have not been able to adjust to the material to the fullest. With the many criteria for writing poetry, not many students are able to write poetry by fulfilling various criteria.

Because there is still a lack of conformity between expectations and reality, it is necessary to find a solution. Some solutions can be offered, among others, improving teaching methods by providing many opportunities for activities related to creativity and imagination. In addition, it is necessary to develop various learning tools such as learning media such as PPT and video, then written teaching materials, such as teaching modules, printed teaching materials, and online teaching materials.

In line with the above, it is hoped that there will be teaching materials that are written to be easily read and distributed online. Therefore, the author chose to develop electronic module media (MOLEK). In addition, the electronic module (MOLEK) has a function as an alternative to digital book learning media by containing better and more enjoyable content. In addition, the electronic module aims to share information that is easy to inform (Afifi,2020).

Electronic modules (MOLEK) are tools or media that can make it easier to capture lessons. With the electronic module (MOLEK) can increase student activity in the learning process. Electronic modules (MOLEK) are highly favoured by students in this online learning situation. This is because electronic modules (MOLEK) are teaching materials that are packaged in such a way that contains material, summaries, instructions for implementing learning that students must do (Hermawan et.al, 2022)

Baed on this background, the author is interested in conducting research with the title 'Development of Electronic Modules (MOLEK) in Poetry Writing at MTs Nurrodiyah Kota Baru Jambi'.

B. Methods

The research method used is research and development. The development procedure in this study uses the research and development design of the ADDIE model (Analysis, Design, Development, Implementation, Evalution). Data collection techniques in this study are divided into two, namely during pre-research (interviews and observations) and during research (questionnaires and student learning outcomes tests). The calculation of the validity of the instrument items for the test was carried out by calculating the correlation between the item score and the total instrument score using the Pearson product moment correlation coefficient formula.

C. Results and Discussion

Result

Table 1.Hasil Evaluasi Kelompok Kecil (Pretest)

No	Nama	Nilai
1	Syafira Nengsih	52
2	Nabila Calista Putri F.R	48
3	Nadine zufaria Ramadhani	60
4	Ashila Gassana Putri Liano	56
5	Razzan Putra G.A	48
6`	Sherly Marshela	60
7	Wildan alvaro Herman	60
8	Vadzila Shayakhira	60
9	Naufal aidi Ikram	60
10	M. Fadila	40
Jumlah		544
Rata-rata		54,4
Kategori		Tidak layak

Based on the data above, average score of 5.44 is obtained which is included in the inappropriate category. This assessment was conducted in a small group of 10 students. Thus, these results indicate that the pretest results of learning to write poetry at MTs Nurrodiyah Kota Baru Jambi are declared inappropriate.

Table 2. Hasil Evaluasi Kelompok Besar (Posttest)

No	Nama	Nilai
1	Abdhan	64
2	Akhmad Rafif	76
3	Alfaya Rhenata	80
4	Andi Muhammad Aminin	84
5	Ashila Gassana Putri Liano	80
6	Aulia Putri Kaswani	80
7	Aulia Ramadhani	72
8	Azizah zykriyah	88
9	Difa Latifatul zuviani	76
10	Fardan zhakiy Mubarak	92
11	Febida aiy Lestari	76
12	Fitri Nailiy Fauziah	80
13	Intan Nurmadina	80
14	Kirana Adenia Putri	80
15	M. Raya Al Riaky Perdana	80
16	M. Fadhila	0
17	M. Subhan	76
18	Muhammad Adam Firdaus	68
19	Nabila Calista Putri F.R	88
20	Nabila Maysa El Badria	76
21	Nadine zulfaria Ramadhan	80
22	Naufak Aidi Ikram	80
23	Nur Hidayati	84
24	Ratna Marina Sari	76
25	Razzan Putra G.A	80
26	Said Muhammad Fakhri	80
27	Sherly Marsela	88
28	Syafira Nengsih	80
29	Syaqila zohra	88

30	Vadzila Shayakhira	76
31	Wildan Alvaro Herman	80
32	Gita Ayu Sabrina	80
Jumlah		2468
Rata-rata		77,12
Kategori		Layak

Based on the data above, a score of 77.125 is obtained which is included in the category of feasible enough. This assessment was carried out in a large group consisting of 32 students. Thus, these results indicate that the results of the Posttest using the Electronic Module (Molek) in learning to write poetry at MTs Nurrodiyah Kota Baru Jambi are declared feasible.

Comparison of Pre-Test and Post-Test Results

Based on the above results, an average score of N Gain 0.49 was obtained with a fairly feasible category, conducted in a large group of 32 students at MTs Nurrodiyah Kota Baru Jambi. So based on the results of this comparison, the electronic module learning media (Molek) for learning to write poetry at MTs Nurrodiyah Kota Baru Jambi is quite feasible to use as learning media.

Discussion

The development of learning media based on Electronic Modules (Molek) is carried out through several stages, namely analysis, design, development, implementation, and evaluation. At the analysis stage, the author identifies the initial needs, characteristics of students, and the learning environment. While at the design stage, the author compiles the development team, sets the implementation schedule, and designs the structure of the material to be developed in the form of a storyboard.

At the development stage, the author refined the learning media that had been prepared, then validated the media experts, material experts, and linguists to assess the feasibility of the media before being tested on students. The validation results showed that the media obtained an average score of 75.78% from media experts with a decent category, 85% from material experts with a very decent category, and 88.57% from linguists with a very decent category.

Furthermore, at the implementation stage, to measure the effectiveness of the module, the author conducted a trial of learning media to students using instruments in the form of response questionnaires, pretest sheets, and postes. The initial evaluation was conducted in a small group of 10 learners, where the pretest results showed a score of 544 or an average score of 54.4 with the category not feasible. Meanwhile, in a large group involving 32 learners, the posttest results showed a score of 2,468 or an average value of 77.12 with a decent category. As well as the results of the analysis of the effectiveness of the Electronic Module (Molek) which has an average value of 77.12, it can be said that the Electronic Module (Molek) is effective as a learning medium for writing poetry at MTs Nurrodiyah Kota Baru Jambi.

Empirically, the use of interactive digital media such as MOLEK is proven to increase learning interest, student engagement, and learning outcomes, especially in expressive literacy skills such as writing poetry. According to research the effectiveness of the electronic module is based on the results of the student knowledge test, the average score obtained is 87 with an A predicate. Based on the student skills test results, the average score obtained is 87 with an A predicate (very effective) (Amril & Thahar, 2022). E-modul as a learning medium can improve news writing skills (Himmah et al., 2024).

After finding the results of the pre-test and post-test, a comparison was made using the N-Gain formula which found a result of 0.49 in the moderate category. So based on the comparison of these results, the learning media for writing poetry based on electronic modules (Molek) is declared feasible to be used as a learning media at MTs Nurrodiyah Kota Baru Jambi. The significant increase in poetry writing skills in the experimental class was due to more active student involvement during the learning process. The use of electronic modules encourages students to be actively involved and develop critical thinking skills in every learning activity (Ulya Nurul et al., 2022).

In addition, based on the student response questionnaire, the majority of students stated that the electronic module used was interesting, easy to understand, and helped them be more interested in the poetry writing process. This shows that the Molek module not only improves poetry writing skills, but also encourages students' interest in learning Indonesian language materials.

D. Conclusions

Based on the results of research and development of teaching materials for writing poetry based on electronic modules (Molek) for grade VIII students of MTs Nurrodiyah Kota Baru Jambi, it can be concluded that:

1. The development of teaching materials for writing poetry based on Electronic Modules (Molek) is carried out through the ADDIE model which includes the stages of analysis, design, development, implementation, and evaluation. The module was developed by considering student needs, material characteristics, as well as content, media, and language feasibility. The media has been validated by experts, with the results of media experts 75.78% (decent category), material

experts 85% (decent category), linguists 88.57% (very decent category). This shows that the developed electronic module is suitable for use in learning.

2. The effectiveness of the Electronic Module (Molek) was tested through pretests and posttests. The results of the small group trial showed the average value of the pretest was 54.4 (less feasible category), while in the large group the average value of the posttest increased to 77.12 (quite feasible category). And the comparison results with 0.49 showed a moderate category. Thus, the use of this Electronic Module (Molek) is proven effective in improving the ability to write poetry and student interest in learning.

E. Acknowledgement

We would like to thank you for to the supervising lecturer who has provided direction and guidance during the research process, as well as to the Jambi University who has provided permission and facilities. The author also thanks all students who have been willing to be respondents in this study.

References

- Adisti Primi Wulan. (2023). Komik Bergambar Timun Mas sebagai Media Pembelajaran Menulis di Era Metaverse. *Jurnal Pendidikan Bahasa dan Sastra Indonesia* Volume 8 Nomor 1.
- Afifi & Maryam Isnaini Damayanti. 2020. Pengembangan Bahan Ajar Menulis Puisi Bermedia Film Motivasi Untuk Siswa Kelas Iv Sekolah Dasar. *JPGSD*. Volume 08 Nomor 02.
- Amril, K. J., & Thahar, H. E. (2022). Pengembangan Modul Elektronik Menulis Teks Cerpen Berbasis Project Based Learning bagi Siswa Kelas XI SMA. *Diglosia: Jurnal Kajian Bahasa, Sastra, Dan Pengajarannya*, 5(3), 715–730. <https://doi.org/10.30872/diglosia.v5i3.489>
- Asmarani, N. E., Arief, M., & Churiyah, M. 2021. Meningkatkan hasil

- belajar peserta didik dengan menggunakan E-modul berbasis 3D pageflip professional dengan model discovery learning (A useful learning E-modul based 3D pageflip professional with use discovery learning model). *Jurnal Ekonomi, Bisnis Dan Pendidikan*, 1(1), 59–70.
- Dheanita Tungawardhani & Susanti. 2022. Pengembangan Bahan Ajar E-Modul Interaktif Berbasis Flipbook pada Materi Pajak Penghasilan (PPH) Pasal 21. *Edukatif : Jurnal Ilmu Pendidikan* Volume 4 Nomor 3.
- Elwi Salfia. 2021. Pengembangan Bahan Ajar Berbasis E-Modul Interaktif Menggunakan Model Pembelajaran Berbasis Masalah Pada Materi Integral Sma Kelas XII. *Jurnal Riset Ilmu Pendidikan* Vol. 1, No. 1.
- Fitria Hidayat & Muhamad Nizar. 2021. Model Addie (Analysis, Design, Development, Implementation And Evaluation) Dalam Pembelajaran Pendidikan Agama Islam. *JIPAI; Jurnal Inovasi Pendidikan Agama Islam* Volume 1, No. 1.
- Gigih Yudha Pratama, dkk. 2020. Pengembangan Bahan Ajar Menulis Puisi Dengan Perpaduan Model Demonstrasi Dan Teknik Beriur Kata Kelas Viii Smp (Development of Poetry Writing Teaching Materials with Combination of Demonstration Models and Word Giving Techniques for Eighth Graders Junior High School). *Jurnal Kajian Bahasa, Sastra dan Pengajarannya. Diglosia* Volume 3 Nomor 2.
- Handi Saputro, dkk. 2020. Pengembangan Bahan Ajar Menulis Puisi Di Smp Kabupaten Jepara (Development Of Teaching Writing Materials In Jepara District Junior High School). *Jurnal Penelitian Bahasa, Sastra, dan Pengajarannya Pendidikan Bahasa dan Sastra Indonesia Program Pascasarjana Universitas PGRI Semarang* Volume 5 Nomor 1.
- Hermawan Yudha Prasetya, Danar Susilo Wijayanto, T. W. S. (2022). *Jurnal Pendidikan Teknik Mesin Undiksha. Jurnal Pendidikan Teknik Mesin Undiksha*, 10(2), 14–21.
<http://10.0.93.79/jptm.v10i2.51606>
- Himmah, U., Yusuf, M., & Drahati, N. A. (2024). Pemanfaatan E-Modul

Berbasis Multimodal sebagai Media Pembelajaran Menulis Berita. *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 7(2), 1241–1248.
<https://doi.org/10.54371/jiip.v7i2.3342>

- Johan Tanama, I Nyoman Sudana Degeng, Nurmida Catherine Sitompul. (2023). Pengembangan E-Modul Sejarah Indonesia dengan Aplikasi Canva untuk Meningkatkan Semangat Belajar Siswa Kelas XI. *Jurnal Teknologi Pendidikan: Jurnal Penelitian dan Pengembangan Pembelajaran* Vol 8, No. 1.
- Josephina Nirma Rupa & Agustinus Kembardi Sumbi. (2021). Pengembangan Bahan Ajar Menulis Cerpen dengan Pendekatan Saintifik untuk Siswa Sekolah Menengah Pertama. *Edukatif : Jurnal Ilmu Pendidikan* Vol 3 No 6.
- Kirana, Z. C., & AM, A. N. A. B. (2020). Peranan apresiasi guru terhadap antusias belajar siswa kelas XI Madrasah Aliyah Hasan Muchyi. *Salimiya: Jurnal Studi Ilmu Keagamaan Islam*, 1(3), 174-193.
- Miftahul Jannah, Dkk. (2022). Pengembangan Bahan Ajar Modul Menulis Puisi Berbasis Pendekatan Saintifik Untuk Siswa Kelas VIII SMPN 5 Kota Bengkulu. *Jurnal Pustaka Indonesia (JPI)* Vol. 2, No. 3.
- Munira Hasjim, dkk. 2023. Pengembangan Bahan Ajar Bahasa dan Sastra Indonesia Berbasis Sastra Anak dan Pendidikan Karakter Untuk Sekolah Dasar. *Jurnal Pendidikan Bahasa dan Sastra Indonesia* Volume 8 Nomor 1.
- Niko Reski. 2021. Tingkat Minat Belajar Siswa Kelas Ix Smpn 11 Kota Sungai Penuh. *Jurnal Inovasi Penelitian* vol.1 No.11
- Nurdyansyah dan Mutala'iah, Nahdilyah. (2018). "Pengembangan Bahan Ajar
- Nurul Isnaini, dkk. 2021. Pengembangan Bahan Ajar Berbasis E-Modul pada Pembelajaran Komunikasi Perkantoran Program Studi Pendidikan Administrasi Perkantoran. *Jurnal Pendidikan Administrasi Perkantoran (JPAP)* Volume 9.

- Siti Rokhayah & Pujiati Suyata. 2021. Pengembangan Modul Pembelajaran Menulis Puisi Berbasis Project Based Learning. *Alinea: Jurnal Bahasa, Sastra, Dan Pengajaran* Volume 10, (1).
- Susy Deliani & Ade Maruli Tua Dongoran. 2022. Pengembangan Bahan Ajar Menulis Puisi Melalui Pembelajaran Higher Order Thinking Skill (Hots). *Jurnal Penelitian Pendidikan Bahasa Dan Sastra* Vol. 7 No. 2.
- Tania, L. (2017). pengembangan bahan ajar e-modul sebagai pendukung pembelajaran kurikulum 2013 pada materi ayat jurnal penyesuaian perusahaan jasa siswa kelas x akuntansi smk negeri 1 surabaya. *Jurnal Pendidikan Akuntansi (JPAK)*, 5(2).
- Teguh, dkk. 2019. "Pengembangan Bahan Ajar Menulis Puisi Berbasis Project Based Learning Siswa Kelas X". *J-Symbol*, Vol. 07, No.1.
- Ulya Nurul Laili, Vella Citra Veronika, & Hermanto. (2022). Pengaruh Modul Elektronik Terhadap Ketrampilan Menulis Puisi Pada Siswa Kelas VIII di SMP Negeri 4 Muncar. *DIAJAR: Jurnal Pendidikan Dan Pembelajaran*, 1(4), 462-468. <https://doi.org/10.54259/diajar.v1i4.1186>

Women Principals in Education: A Literatur Review on Leadership, Gender, and Empowerment

Asti Putri Kartiwi¹, Fetty Poerwita Sary², Emal Hadipassa³

¹Universitas Bengkulu, Bengkulu, Indonesia

²Universitas Telkom, Bandung, Indonesia

³Universitas Pendidikan Indonesia, Bandung, Indonesia

Corresponding author e-mail: astiputri@unib.ac.id

Article History: Received on 21 June 2025, Revised on 24 June 2025,
Published on 28 June 2025

Abstract: Publications on the topic of women's leadership have grown rapidly since gender equality became a strategic issue worldwide. The aim of this publication is to map publication trends on the topic of women's leadership, including authors who write extensively on the topic, organizations involved in the publication, and publication trends from year to year. The method used is bibliometric analysis using VosViewer. The data used is from the Scopus database with the search keyword "women's leadership," yielding 74,046 documents, consisting of 54,288 journal articles, 6,582 book chapters, 4,747 reviews, 3,568 conference proceedings, 2,497 books, 1,046 notes, 707 editorials, 311 short surveys, 164 letters, 70 errata, 32 conference reviews, 26 retracted publications, and 6 data papers. The results of the analysis show that publication trends from 1980 to 2024 have continued to increase significantly. The two authors with the most publications are not primarily focused on the social sciences. Two institutions have the highest number of publications on "women's leadership in education," namely the University of Alabama and Northwestern University. Authors from these two universities are known to have collaborated on publications. Further recommendations suggest that publications on the "women's leadership in education" theme can be developed into empirical research, particularly by connecting it to other fields of study.

Keywords: Bibliometric, Gender Empowerment, Literature Review, Women's Leadership

A. Introduction

Leadership has become a specialized field of study increasingly being researched and linked to various other disciplines. Leaders serve as an organization's brand, making their presence a focal point of attention (Manning & Curtis, 2019). Research in leadership continues to grow as leaders are evaluated from multiple perspectives. Leadership is a concept that involves an individual's ability to lead, direct, and influence others to achieve specific goals. Leadership is not merely tied to a particular position or title. However, it is also a series of qualities, attitudes, and actions that enable someone to serve as a guide or role model in achieving collective success.

Leadership is also associated with the context or institution where a leader operates. Education leadership has unique characteristics. Education leaders must possess strong social skills because education is a social institution (Junita & Agilitas, 2021). Educational leaders must also have high empathy because, in many cases, not everyone can afford quality education according to established standards (Manning & Curtis, 2019). Based on these demands, educational leadership has its uniqueness. Education leadership must be based on ethics, integrity, and justice values. Educational leaders must set a good example, promote high moral standards, and make decisions grounded in the interests of students and society (Bush, 2020).

In the current phenomenon with the existence of policies in various countries that women have the same opportunities for careers as men, many women leaders have begun to emerge (Komariah et al., 2020; Weir et al., 2023). These women leaders then become the world's attention because there are still many negative stigmas regarding women leaders associated with issues of gender equality and feminism (Weir et al., 2023). In several studies on gender equality in work, it is explained that women are more consistent in carrying out work (Komariah et al., 2020). However, some studies also explain that women leaders tend to be volatile in decision-making (Şahin, 2018).

Women's leadership is also closely related to feminine traits. The nature of women described in feminine behavior is considered gentle, patient, and empathetic (Manning & Curtis, 2019). Many women leaders have emerged in education, especially in primary, secondary, and higher education. Women leaders have become increasingly prevalent in education, particularly in primary, secondary, and higher education. Leadership positions in Indonesian primary schools are still predominantly held by women. Women principals are considered highly suitable for primary schools because primary school leadership's core tasks and functions are complex and require patience (Hallinger & Kulophas, 2020; Purbadi et al., 2024).

In this article, the author is interested in exploring the theme of women's leadership through a literature review analysis. Based on a review of research publications using the keywords "Leadership," "Leaders," and "Leader" in the Scopus database. publications on this topic have been appearing since 1943 until now. A total of 74,046 documents were identified, consisting of 54,288 journal articles, 6,582 book chapters, 4,747 reviews, 3,568 conference proceedings, 2,497 books, 1,046 notes, 707 editorials, 311 short surveys, 164 letters, 70 errata, 32 conference reviews, 26 retracted publications, and 6 data papers. The research shows that Scopus provides a consistent and steady increase in the number of publications and citations across multiple disciplines, making it more reliable for bibliometric analysis (Bakhmat et al., 2022).

Meanwhile, literature review publications with a more specific focus on "Women Principal Leadership" in the Scopus database revealed only one article titled "A postcolonial feminist exploration of the scholarship on women and educational leadership with a bibliometric approach," authored by Kuzhabekova in 2021. Kuzhabekova's analysis used the Web of Science database from 1975 to 2020 and identified 823 publications. In contrast, this article introduces novelty by utilizing the Scopus database as a data source, which is considered

more comprehensive, and focusing on the keywords "women principal leadership," yielding a dataset of 366 publications (Kuzhabekova, 2023).

This article highlights the importance of publication trends on "women's principal leadership." The bibliometric analysis conducted will enable the mapping of future research trends in women's leadership studies. This analysis will also offer insights into previously unexplored linkages between research areas, providing new perspectives for future studies. The focus of this research is to answer the research question

RQ 1 : What are the trends in publications on the topic of woman principal leadership?

RQ 2 : Who are the authors who have publications on the topic of woman principal leadership

RQ 3 : Which organizations are involved in publications on the theme of woman principal leadership

B. Methods

This article employs bibliometric analysis as the primary analytical tool. In bibliometric analysis, mapping the field of scientific study aims to construct a literature review map that illustrates how a specific scientific field, keyword, or research topic can be systematically and conceptually mapped (Ifani & Kartiwi, 2023). Bibliometric analysis can provide a holistic overview of a particular field of study and reveal relevant relationships between each publication within that field. (Bauwens et al., 2022; Gümüş et al., 2020).

The authors use data from the Scopus database, which is considered one of the most comprehensive and reputable databases for bibliometric analysis. The bibliometric analysis in this article is conducted through three main phases as shown in figure 1. The first phase is the data collection, which includes identifying criteria for selecting data from the Scopus database and refining the collected records. (Bauwens et al., 2022) The second phase is the data visualization phase, where analysis is performed using VOSviewer software to map relationships between authors, countries, journals, and fields of study. The third phase is the data analysis phase, which aims to identify the discussed theme, specifically regarding women's principal leadership.

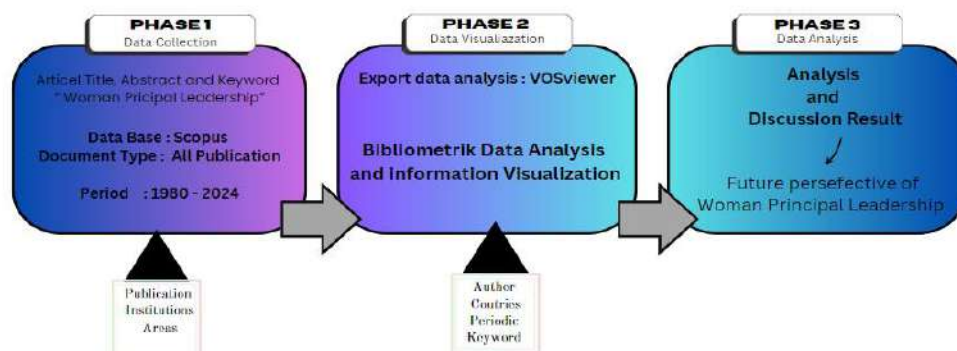


Figure 1: Bibliometric Research Design

The bibliometric method is one of the analytical methods used to identify trends in scientific literature studies. Additionally, this analysis can systematically organize the results of scientific publications within a large database. Literature review analysis through bibliometrics ensures the quality of information and the processed results or products. The documents in this study were collected from the Scopus database, considered a comprehensive database for bibliometric analysis, encompassing information published in journals indexed across multiple fields of knowledge. This database has been widely used in bibliometric analysis.

The search was conducted on August 19, 2024, using the keyword "women principal leadership". The search period covered publications from 1980 to 2024. For a broader analysis of publications, the authors focused on the social sciences field and included only published works. Initially, the Scopus search returned 366 publications article, paper, news and unpublished document. After applying filters for the field of study, publication type, and language (English), 233 publications remained. These filtered data were then used for co-authorship and co-occurrence analyses, enabling the creation of network maps for authors, countries, and keywords. Additionally, citation analysis was conducted to generate a network map of scientific journals. The bibliometric analysis in this study employed VOSviewer software (version 1.6.17, Leiden University, Leiden, Netherlands) as the primary analytical tool. This software was used to construct and visualize bibliometric networks, allowing the extraction of information from publications, such as authorship, journals, organizations, countries, and keywords.

C. Results and Discussion

Publication Trends on the Theme of Women Principal

From the extraction of titles, article titles, abstracts, and keywords in the Scopus database on August 19, 2024, the authors obtained data on 366 publications using the keyword "women principal leadership." The data revealed that publications on this topic first appeared in 1980. In that year, two publications in the form of articles addressed this topic: one by Paddock (1980) titled "Women Principals: The Rule or the Exception?" and another by Kim and Cho (1980) titled "Studies in Family Planning."

The collected data show that the majority of publications are articles (293 documents), followed by reviews (28 documents) and book chapters (28 documents). Other types include conference papers, editorials, short surveys, and letters. Of the total data collected,

358 publications have been finalized and published.

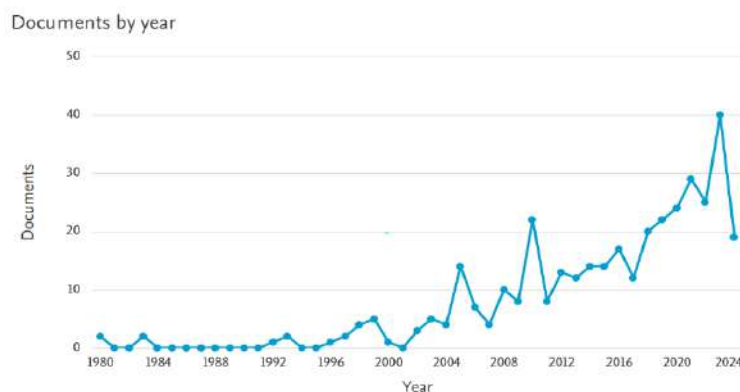


Figure 2: Graph of Publication Trends on the Topic of "Women Principal Leadership"

This trend graph shows the fluctuating publication trends on the "women principal leadership" theme over 44 years. The publication trend on this topic has experienced significant growth over the past seven years. Based on the trend graph, it can be observed that the publication trend began to rise in 2010 with 22 documents, peaking in 2023 with 40 documents. In 2024, 19 documents have been published.

Authors with the Most Publications on the Topics of Women Principal

The co-authorship analysis aims to identify the authors who have published the most on women's principal leadership. Based on the Scopus database retrieved on August 19, 2024, six authors were identified as having the highest number of publications on the theme "women principal leadership": Mark Yudin., and Deborah Money each with 7 documents, followed by Julia Van Schalkwyk, Jacky Lumby, Andre Gruslin, and Khalid Arar, each with 6 documents.

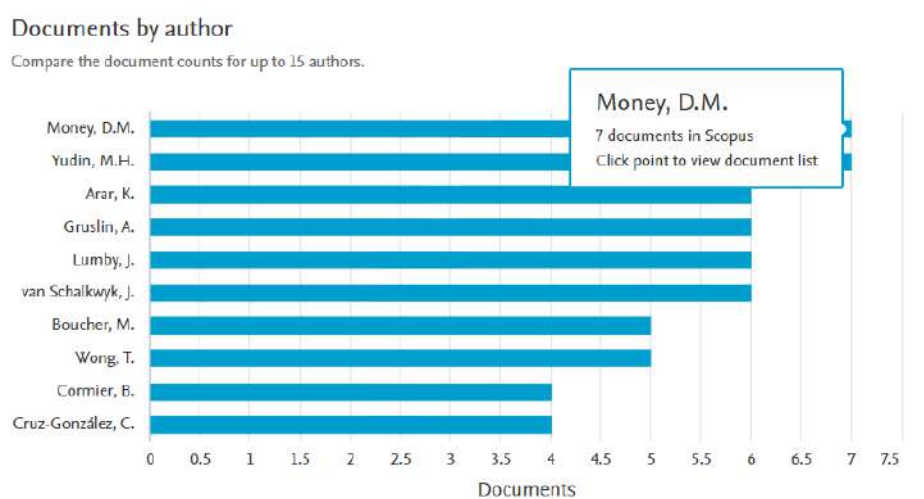


Figure 3: Graph of Authors with the Most Publications on the topic of "Women Leadership"

Based on bibliometric analysis using VOSviewer, several author networks with publications on the "Women Principal Leadership" theme were identified. Cluster 1 Consists of 9 authors, including Dzau, Brennan, Trull, Goldszer, Otten, and Paulus (2005). These authors have 2 documents, but they are connected through 19 networks. This cluster primarily published documents in 2005; Cluster 2: Consists of 3 authors. Khalid Arar is the most prolific author with 6 documents, Thamar Shapira with 5 documents, and Faisal Azaiza with 2 articles. Together, these three authors form a total of 14 networks. Publications in this cluster were released in 2013; Cluster 3 Consists of 4 authors with 24 networks. On average, each author in this cluster has 2 documents; Cluster 4 Includes 4 authors, each averaging 4 publications, with a total of 4 networks. The documents in this cluster were published in 2021.

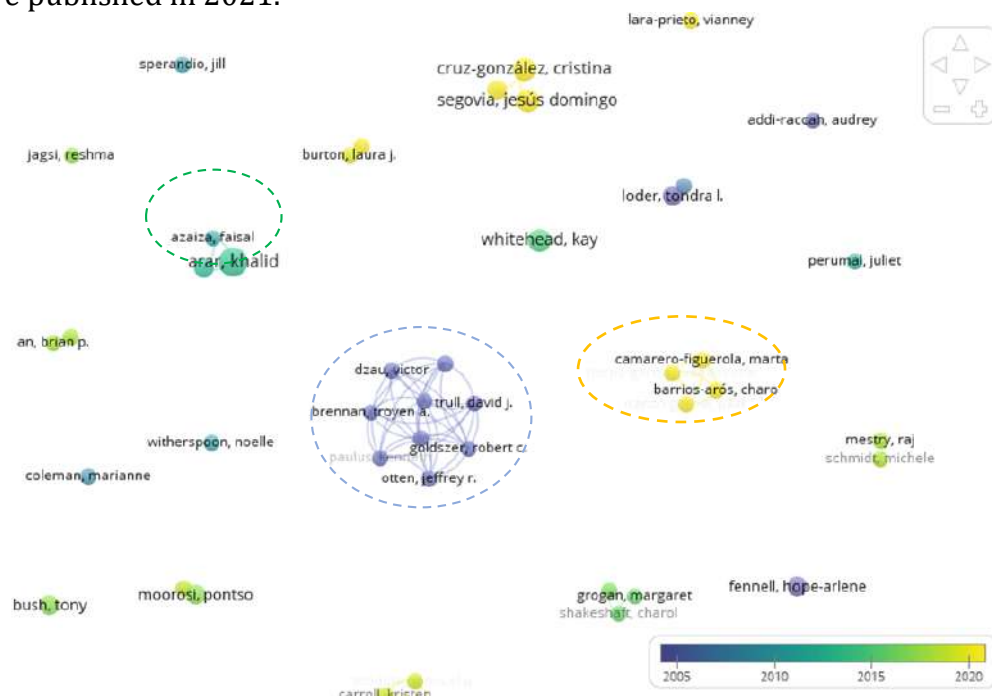


Figure 4: Co-Authorship by Author Map

Based on Figure 2 (Co-Authorship Analysis by Author), this analysis illustrates the collaboration patterns among authors publishing on the theme of "Women Principal Leadership." Cluster 1 (marked with a blue outline) consists of nine authors with strong network connections. Names such as Dzau, Brennan, Trull, Goldszer, Otten, and Paulus stand out in this group. The authors in this cluster have close connections, forming a significant collaboration network. Cluster 2 (marked with a green outline) consists of three main authors: Faisal Azaiza, Khalid Arar, and another collaborator. The connections in this cluster are more limited than in Cluster 1 but still demonstrate consistent collaboration. Cluster 3 (marked with a yellow outline at the top) includes two main authors: Cristina Cruz-González and Jesús Domingo Segovia. Collaboration in this cluster appears more focused on connections between these two authors within a smaller group. Cluster 4 (with an orange outline on the right) includes four authors with fairly close connections. Namely,

Camarero-Figuerola, Marra, Barrios-Álvaro, and Charo emerge as key figures.

Based on Figure 3, cluster 1 has a more complex network than the other clusters, indicating the role of these authors in building broader collaborations. Clusters 2 and 3 show more focused collaborations with fewer authors but remain effective. This trend indicates the presence of several core groups in research related to *"Women Principal Leadership,"* with varying strengths and scopes of connections.

Distribution of Institutions Involved In Publications On Women Principal Leadership

To analyze the relationships between organizational networks involved in publications on the theme of *"Women Principal Leadership,"* the authors conducted a bibliometric coupling analysis by the organization. Based on the analysis using the VOSviewer application, it was found that six organizations have two publication documents each and an average citation count above four. These organizations include the University of Alabama, Northwestern University, the University of Warwick, the Department of Education Leadership, the University of Nottingham, and the School of Engineering and Science. The total strength of the connections from each institution is represented by 92 networks, as shown in Figure 5.

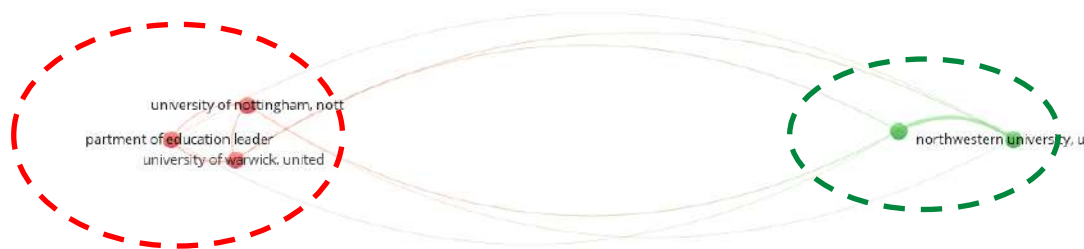


Figure 5: Bibliometric coupling by organization

To analyze the relationships between organizational networks involved in publications on the theme of *"Women Principal Leadership,"* the authors conducted a bibliometric coupling analysis by the organization. Based on the analysis using the VOSviewer application, it was found that six organizations have two publication documents each and an average citation count above four. These organizations are the University of Alabama, Northwestern University, University of Warwick, Department of Education Leadership, University of Nottingham, and School of Engineering and Science. The total strength of the connections from each institution is represented by 92 networks, as shown in Figure 5.

Publications on *"Women Principal Leadership"* first appeared in 2005 at the *University of Alabama*. These publications were later developed into further publications at the *University of Warwick*. In the overlay visualization, darker-colored nodes and lines represent older years compared to lighter-colored ones. The most recent *"Women Principal Leadership"* publication emerged in 2020 at the *University of Nottingham*. Publications at the *University of Nottingham* have a total link strength of 15. Two published documents are networked with four other universities: *the Department of Education Leadership*, *the University of Warwick*, *the University of Alabama*, and *Northwestern University*.

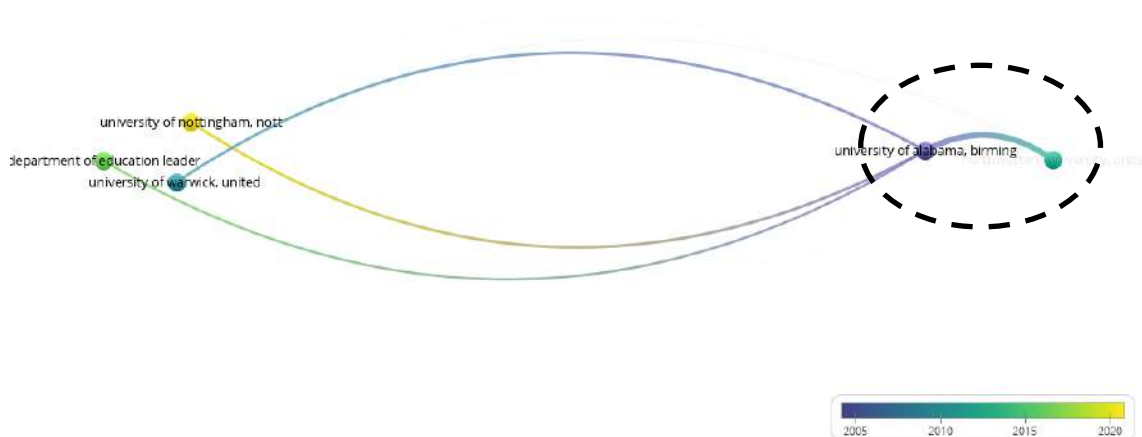


Figure 6: Overlay Visualization Bibliometric Coupling By Organization

A particularly strong network connection is observed between the *University of Alabama* and *Northwestern University*, with a total link strength of 59, as shown in Figure 6. Despite having only two documents, the high total link strength suggests that publications on "*Women Principal Leadership*" at these two universities are authored by researchers deeply dedicated to this field of study.

DISCUSSION

Publication Trends on the Theme of Women Principal Most Publications on the Topics of Women Principal

The author identified 366 publications using the keyword "*women principal leadership*." The findings indicate that the earliest publications on this topic were from 1980, with two articles published that year: "*Women Principals: The Rule or the Exception?*" by Paddock (1980) and "*Studies in Family Planning*" by Kim and Cho (1980). The publication trend rose significantly in 2010, with 22 documents recorded. The highest number of publications was observed in 2023, reaching 40 documents, while 2024 has recorded 19 publications.

The trend in publications during 2023 showed an increase in the form of published articles, including those written by Kerry Weir, Mary Lynn Boscardin, and Linda Griffin, titled "*Leadership Experiences of Women Administrators of Special Education*"; Dorris Ann McGinnis, Jae Young Kim, Ain Grooms, Duhita Mahatmya, and Ebonee Johnson, titled "*A Psychology of Working Perspective on Women of Color K-12 Educational Leaders' Work Experiences*"; Kimberly T. Luthi and Michael K. Kosloski, titled "*Advancement Experiences of Women in Academic Senior Leadership Positions in STEM Disciplines: A Delphi Analysis*"; and Michele Schmidt and Raj Mestry, titled "*South African Indian Women Principals in the Gauteng Province*." These articles had an average of over 15 citations in the past year (Luthi & Kosloski, 2023; McGinnis et al., 2023; Weir et al., 2023).

The rising trend in publications with the theme "*women principal leadership*" in 2024 included a total of 19 documents, 11 of which focused on the characteristics of women

leaders in educational institutions and their roles as leaders. (Leavy et al., 2024; Moyo, 2024). Notable articles include:

- a. "Situational Leadership During the Post-Pandemic Crisis: A Case of Amanah Institute" by Irfan Saleem, Muhammad Ashfaq, and Shajara Ul-Durar. (Saleem et al., 2024)
- b. "The Unique Professional Journey of Women High School Principals in Utah" by Deon Leavy, Donald Baum, Isaac Calvert, Bryan Bowles, Heidi Erickson, Michael Owens, and Jessica Ashcraft. (Leavy et al., 2024)
- c. "Significance of Cultural Context in Shaping Women School Leadership and Management in Zimbabwe" by Zvisinei Moyo. (Moyo, 2024)
- d. "Challenges of Women Principals in Madrasah Leadership in Banda Aceh: A Gender Analysis" by Sakdiah, Eka Srimulyani, Syabuddin Gade, Syaiful Akmal, and Muhammad Furqan (Sakdiah et al., 2024)

Several articles published in 2024 explored the leadership roles, traits, characteristics, and leadership approaches of women principals, particularly in educational settings. For instance, Deon Leavy and colleagues (2024) highlighted the challenges frequently encountered by women principals in Utah. These challenges often mirror those faced by women leaders in other fields. Women principals are typically expected to behave more like "mothers" rather than assertive leaders. Their voices are often overlooked, and they are frequently perceived as less capable compared to their male counterparts. Research indicates that support from mentors and examples of inclusive leadership can help women overcome these barriers. This article sheds light on recurring themes such as gender stereotypes, discrimination, and lack of support (Leavy et al., 2024).

Authors with the Most Publications on the Topics of Women Principal

Using co-authorship analysis, it was found that the authors with the highest number of publications on the theme of "women principal leadership" are Mark H. Yudin and Deborah Money, each with seven documents. Both authors share a focus in the field of obstetrics and gynecology (Ob-Gyn), with their research centering on reproductive health and women's diseases in general. After filtering through the Scopus search engine for publications specifically in the field of social science, 260 documents on the theme of "women principal leadership" were identified. Two authors with the highest number of documents in this field are Khalid Arar and Jacky Lumby, each with six publications. Khalid Arar has six documents, many of which emphasize the keyword Educational Leadership. One notable publication, written in collaboration with Sedat Gümüş and Izhar Oplatka, is titled *"Review of International Research on School Leadership for Social Justice, Equity, and Diversity"* and was published in the *Journal of Educational Administration and History* in 2021. This publication has garnered 50 citations (K. Arar, 2020; K. Arar et al., 2023; K. H. Arar, 2019).

Arar's focus is primarily on leadership in the context of education, as reflected in his publications from 2019 to 2023, which address themes such as Refugee Education, Case Studies, English Language, School Leadership, Managers, Leadership in Education, Professional Identity, and related topics (Source: Scopus Database).

Jacky Lumby also has six publications on the theme of *Women Principal Leadership*. Some of her notable works include:

- a. Valuing Knowledge Over Action: The Example of Gender in Educational Leadership"*, published in the journal *Gender and Education* in 2013.
- b. Women Principals in South Africa: Gender, Mothering, and Leadership"*, published in the *British Educational Research Journal* in 2014.
- c. Leading Schools in Communities of Multiple Deprivation: Women Principals in South Africa", published in the journal *Educational Management Administration and Leadership* in 2015 (Lumby, 2011, 2013b, 2013a, 2019).

Lumby's work focuses on leadership, women, and gender, particularly in the field of education. She has been publishing regularly on the theme of Women Leadership since 2013, with an average of 10 to 15 citations per article. Other authors contributing to the theme of Women Principal Leadership include Cruz-Christina Gonzalez and Kathryn Whitehead, each with four publications. Meanwhile, other authors typically have one to three publications on this topic (Cruz-González, Lucena Rodríguez, Domingo Segovia, & Mula Falcón, 2021; Whitehead, Andretzke, & Binali, 2018). Authors publishing documents on the topic of Women Principal Leadership, particularly within the social sciences, began to emerge after 2020. This suggests that the topic has gained increasing academic interest since that time. Researchers publishing in this area generally specialize in leadership studies.

Distribution of Institutions Involved In Publications On Women Leadership

In the distribution of organizations affiliated with authors publishing documents on the theme of "women principal leadership," several institutions were identified, including University of Alabama, Birmingham, United States; Northwestern University, United States ; University of Warwick, United Kingdom ; Department of Education Leadership, University of Nottingham, Nottingham ; and School of Engineering and Science. Among these institutions . (Allen et al., 2024; Amir et al., 2024; Bryce et al., 2024; Heriberta et al., 2024; Kapse et al., 2024)

The findings indicate that the University of Alabama and Northwestern University are two institutions significantly engaged in scholarly publications related to *women principal leadership*. The University of Alabama has produced more than two publications with a total of 83 citations, while Northwestern University has published two articles that have received 49 citations. Although their output may not be high in volume, the academic impact of these publications is considerable, as reflected in their citation counts. One of the noteworthy contributions from the University of Alabama is an article by Newton R.M., titled *"Does Recruitment Message Content Normalize the Superintendency as Male?"*, published in 2006, which has garnered 26 citations. This study addresses gender representation in recruitment practices for leadership roles in education, a critical issue in understanding the persistent underrepresentation of women in top educational leadership positions. Another key publication involves Tondra L. Loder (University of Alabama) and John Spillane (Northwestern University), who co-authored the article *"Is a Principal Still a Teacher? US Women Administrators' Accounts of Role Conflict and Role Discontinuity"*,

published in 2005, with 16 citations. This collaboration exemplifies early inter-institutional research networks focusing on role identity and conflict experienced by women in school leadership (Akoto et al., 2024; K. H. Arar, 2019; Armstrong & Hunt, 2024; Khera et al., 2024; Kong et al., 2024; Şahin, 2018).

Northwestern University has also contributed significantly through the work of Simone Ispa-Landa and Sabu Thomas S., whose 2019 article *"Race, Gender, and Emotion Work Among School Principals"* has received 24 citations (Ispa-Landa & Thomas, 2019). This publication expands the discourse by integrating intersectional perspectives of race and emotional labor, highlighting the unique psychosocial challenges faced by female school leaders, particularly those from minority backgrounds. Perhaps the most impactful publication, with 69 citations, is a 2010 study by John Spillane and Brian Hunt of Northwestern University, titled *"Days of Their Lives: A Mixed-Methods, Descriptive Analysis of the Men and Women at Work in the Principal's Office."* This article offers a comprehensive analysis of the day-to-day routines of school principals, employing a mixed-methods approach to uncover gendered differences in administrative practices.

These publications collectively demonstrate a sustained collaborative effort between the University of Alabama and Northwestern University, particularly between 2019 and 2021, in exploring issues of gender and leadership in educational contexts. The collaboration reflects a shared research agenda and methodological alignment that has significantly contributed to the academic conversation surrounding *women principal leadership* (Schmidt & Mestry, 2023; Venter et al., 2024).

D. Conclusions

Based on the findings, it can be concluded that a significant increase in publications on the topic of *"Woman Principal Leadership"* occurred in 2023, with a total of 40 documents. The authors who published the most on this topic were Yudin and Money, whose area of expertise is obstetrics. Meanwhile, other authors specializing in social sciences produced a maximum of six documents on this topic. The institutions most actively involved in publishing documents on *"Woman Principal Leadership"* were the University of Alabama, Birmingham, and Northwestern University, United States. These two institutions collaborated on two jointly authored documents, although these were not the ones with the highest citation counts. This study is expected to be beneficial for future research in the field of leadership studies, either as empirical research or literature reviews in related disciplines.

E. Acknowledgement

The authors would like to thank the Bengkulu University Quality Assurance Agency for providing artificial intelligence-based technology to support this research. We greatly appreciate the organization's support for future research.

F. References

- Akoto, E. V., Boateng, I., Akoto, E. O., Amanamah, R. B., & Boateng Newman, O. (2024). Women leadership effectiveness and underrepresentation – a skills theory perspective in a Ghanaian public higher education institution. *International Journal of Public Leadership*, 20(3–4), 293–307. <https://doi.org/10.1108/IJPL-04-2024-0041>
- Allen, M., Lazor, J., Nirmalanathan, K., & Nowacki, A. (2024). Women at the top: a qualitative study of women in leadership positions in emergency medicine in Canada. *Canadian Journal of Emergency Medicine*, 26(11), 819–827. <https://doi.org/10.1007/s43678-024-00751-y>
- Amir, R., Arif, F. M., & Shuhufi, M. (2024). The Women's Leadership: Orientation from a Legal and Islamic Sharia Perspective. *Jurnal IUS Kajian Hukum Dan Keadilan*, 12(2), 345–356. <https://doi.org/10.29303/ius.v12i2.1345>
- Arar, K. (2020). *Making meaning out of participation in school processes and practices: Collaboration with the leadership team in an Arab high school in Israel*.
- Arar, K. H. (2019). The challenges involved when Arab women forge a path to educational leadership: Context, personal cost, and coping. *Educational Management Administration & Leadership*, 47(5), 749–765.
- Arar, K., Sawalhi, R., DeCuir, A., & Amatullah, T. (2023). *Islamic-based educational leadership, Administration and Management: Challenging expectations through global critical insights*. Taylor & Francis.
- Armstrong, N., & Hunt, E. (2024). The Positive Impact of Women Leadership in Public Sector Settings: A Case Example in Virginia's State Mental Health System. *Psychological Services*, 21(4), 748–757. <https://doi.org/10.1037/ser0000891>
- Bauwens, R., Batistič, S., Kilroy, S., & Nijs, S. (2022). New Kids on the Block? A Bibliometric Analysis of Emerging COVID-19—Trends in Leadership Research. *Journal of Leadership and Organizational Studies*, 29(2), 224–232. <https://doi.org/10.1177/1548051821997406>
- Bryce, C. J. C., Dadswell, K., Dallat, C., & Parker, A. G. (2024). Perceptions of empowerment and leadership in the context of outdoor education: a qualitative study in women participants. *Journal of Outdoor and Environmental Education*, 27(3), 413–436. <https://doi.org/10.1007/s42322-023-00136-2>
- Bush, T. (2020). *Theories of educational leadership and management*.
- Gümüş, S., Bellibaş, M. Ş., Gümüş, E., & Hallinger, P. (2020). Science mapping research on educational leadership and management in Turkey: a bibliometric review of international publications. *School Leadership & Management*, 40(1), 23–44.
- Hallinger, P., & Kulophas, D. (2020). The evolving knowledge base on leadership and teacher professional learning: a bibliometric analysis of the literature, 1960-2018. *Professional Development in Education*, 46(4), 521–540.
- Heriberta, H., Gaus, N., Paramma, M. A., & Utami, N. (2024). Advancing women to leadership in academia: does personal branding matter? *Qualitative Research Journal*, 24(5), 666–681. <https://doi.org/10.1108/QRJ-06-2023-0091>
- Ifani, N. N., & Kartiwi, A. P. (2023). Quality Of Education in Islamic Schools: A Bibliometric Review Study. *Edukasi Islami: Jurnal Pendidikan Islam*, 12(001).
- Ispa-Landa, S., & Thomas, S. (2019). Race, Gender, and Emotion Work among School Principals. *Gender and Society*, 33(3), 387–409. <https://doi.org/10.1177/0891243218821920>

- Junita, A., & Agilitas, T. (2021). KEPEMIMPINAN AGILE 4.0. *Leadership Di Era Digital*, 37.
- Kapse, M., Radović-Marković, M., Sharma, V., Mahajan, Y., & Hiremath, R. B. (2024). The Influence of Women's Leadership on Organizational Alignment with Sustainable Development Goals: A Discriminant Analysis Approach. *Journal of Women's Entrepreneurship and Education*, 2024(3-4), 230-248. <https://doi.org/10.28934/jwee24.34.pp230-248>
- Khera, P., Ogawa, S., Sahay, R., & Vasisht, M. (2024). Women's Leadership in Fintech: Cross-Country Evidence. *CESifo Economic Studies*, 70(3), 284-305. <https://doi.org/10.1093/cesifo/ifa013>
- Komariah, K., Endarwati, L., & Mahfud, T. (2020). The role of women as leaders in improving educational quality: Evidence from Indonesia. *International Journal of Innovation, Creativity and Change*, 11(8).
- Kong, L., Usman, M., Yue, W., Yasmin, F., & Sokolova, M. (2024). Leader: role of women leadership in shaping corporate innovation. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-024-03852-2>
- Kuzhabekova, A. (2023). A postcolonial feminist exploration of the scholarship on women and educational leadership with a bibliometric approach. *Educational Management Administration & Leadership*, 51(3), 616-636.
- Leavy, D., Baum, D., Calvert, I., Bowles, B., Erickson, H., Owens, M., & Ashcraft, J. (2024). The Unique Professional Journey of Female High School Principals in Utah. *Education Sciences*, 14(5), 445.
- Lumby, J. (2011). Enjoyment and learning: Policy and secondary school learners' experience in England. *British Educational Research Journal*, 37(2), 247-264.
- Lumby, J. (2013a). Distributed leadership: The uses and abuses of power. *Educational Management Administration & Leadership*, 41(5), 581-597.
- Lumby, J. (2013b). Valuing knowledge over action: The example of gender in educational leadership. *Gender and Education*, 25(4), 432-443.
- Lumby, J. (2019). Distributed leadership and bureaucracy. *Educational Management Administration & Leadership*, 47(1), 5-19.
- Luthi, K. T., & Kosloski, M. F. (2023). Advancement Experiences Of Women In Academic Senior Leadership Positions In Stem Disciplines: A Delphi Analysis. *Journal of Women and Minorities in Science and Engineering*, 29(4). <https://doi.org/10.1615/JWomenMinorScienEng.2022037814>
- Manning, G., & Curtis, K. (2019). *The art of leadership*. McGraw-Hill Education.
- McGinnis, D., Kim, J. Y., Grooms, A., Mahatmya, D., & Johnson, E. (2023). A Psychology of Working Perspective on Women of Color K-12 Educational Leaders' Work Experiences. In *Leadership in Turbulent Times: Cultivating Diversity and Inclusion in the P-12 Education Workplace* (pp. 53-74). Emerald Publishing Limited.
- Moyo, Z. (2024). Significance of cultural context in shaping female school leadership and management in Zimbabwe. *African Identities*, 22(1), 60-74.
- Purbadi, A., Sinaga, B. M., Sukmawati, A., & Denni, A. (2024). Global Leadership Competency Development in Banking Industry. *Quality-Access to Success*, 25(200).
- Şahin, M. (2018). Women leadership and its effect on teachers' emotional labor in Turkish high schools. *Quality and Quantity*, 52. <https://doi.org/10.1007/s11135-018-0725-6>
- Sakdiah, S., Srimulyani, E., Gade, S., Akmal, S., & Furqan, M. (2024). CHALLENGES OF FEMALE PRINCIPALS IN MADRASAH LEADERSHIP IN BANDA ACEH: A GENDER

ANALYSIS. *Jurnal Ilmiah Islam Futura*, 24(1), 178–197.

- Saleem, I., Ashfaq, M., & Ul-Durar, S. (2024). Situational leadership during the post-pandemic crisis: a case of Amanah Institute. *Emerald Emerging Markets Case Studies*, 14(2), 1–21.
- Schmidt, M., & Mestry, R. (2023). South African Indian female principals in the Gauteng province. *International Journal of Leadership in Education*, 26(5), 873–891.
- Venter, D. J., Naicker, S. R., & Awodiji, O. A. (2024). Enhancing School Principals' Instructional Leadership through Emotional Intelligence. *International Journal of Educational Organization and Leadership*, 31(2), 45–69.
<https://doi.org/10.18848/2329-1656/CGP/v31i02/45-69>
- Weir, K., Boscardin, M. L., & Griffin, L. L. (2023). Leadership Experiences of Women Administrators of Special Education. *Journal of Special Education Leadership*, 36(1).

Implementation of Madrasah Self-Evaluation in Improving The Quality of Graduates At Mts Astoffaina, Deli Serdang District

Rabbirham¹, Amiruddin Siahaan¹, Syaukani¹

¹Universitas Islam Negeri Sumatera Utara

Corresponding author e-mail: rabbirham0332234003@uinsu.ac.id

Article History: Received on 27 June 2025, Revised on 28 June 2025,
Published on 30 June 2025

Abstract: This study investigates how the implementation of Madrasah Self-Evaluation (EDM) drives improvements in graduate quality at MTs Astoffaina, Biru-Biru Subdistrict, Deli Serdang Regency. Employing a descriptive qualitative approach, the research uncovers that EDM fosters significant gains in graduate outcomes by promoting active stakeholder involvement, ensuring data transparency, and supporting evidence-based planning. Despite persistent challenges—such as limited human resources and insufficient familiarity with EDM instruments—the process has proven instrumental in elevating educational standards. The findings highlight the transformative potential of EDM when supported by targeted training and robust institutional backing, underscoring its critical role in advancing educational quality and school accountability.

Keywords: Madrasah Self-Evaluation, Graduate Quality, Islamic Educational Management, EDM

A. Introduction

Madrasah education in Indonesia plays a crucial role in shaping a generation that excels intellectually while upholding religious and moral values. As an integral part of the national education system, madrasahs blend Islamic teachings with the general curriculum to prepare students for the demands of the 21st century. However, the quality of madrasah graduates remains a significant concern, particularly regarding learning standards and competitiveness. According to the Education for All Global Monitoring Report 2016, Indonesia's education quality, including that of madrasahs, ranks 10th out of 14 developing countries, indicating generally low educational outcomes (UNESCO, 2016).

To address these challenges, the Indonesian Ministry of Religious Affairs introduced the Madrasah Self-Evaluation (EDM) instrument as part of its internal quality assurance system. EDM aims to facilitate data-driven institutional reflection, enabling madrasahs to assess their strengths and weaknesses and develop actionable work plans (Muhtasar & Hakim, 2022). Integrated with the e-RKAM platform for digital budget planning and management, EDM's implementation has faced obstacles such as limited human resource capacity, insufficient understanding of the instrument's indicators, and an underdeveloped culture of evaluation (Pujasari & Wahyuni, 2022). Nevertheless, when applied with participatory, transparent, and evidence-based principles, EDM has the potential to significantly enhance accountability and educational quality (Efendi & Rifai, 2023).

MTs Astoffaina, a private madrasah in Biru-Biru District, Deli Serdang Regency, exemplifies efforts to implement EDM sustainably. Despite a steady increase in student enrollment, the quality of graduates has stagnated; internal data from 2018 to 2024 show no significant improvement in graduation rates or academic achievement. This suggests that EDM has not been fully leveraged to

enhance educational outcomes at this institution. Therefore, a comprehensive study is required to examine EDM implementation, identify challenges, and propose effective improvement strategies.

This research uses MTs Astoffaina as a case study to investigate how EDM contributes to improving graduate quality. The study focuses on the technical aspects of EDM implementation, stakeholder involvement—including teachers, principals, committees, and parents—and the extent to which EDM drives managerial change and learning improvement. Using a qualitative descriptive approach, this study aims to offer practical and theoretical insights for developing a more adaptive EDM implementation model to advance the quality of Islamic education in Indonesia.

B. Methods

This study employs a descriptive qualitative approach to provide a comprehensive understanding of the phenomenon based on empirical evidence gathered in the field. The primary objective is to explore the implementation of Madrasah Self-Evaluation (EDM) in the context of enhancing graduate quality.

The research subjects include various stakeholders within MTs Astoffaina, such as the head of the madrasah, teachers, the madrasah committee, and students. Subjects were selected purposively, ensuring that each participant had direct involvement or experience with the EDM implementation process.

Data collection was carried out using three main techniques. First, observation was conducted by the researcher attending and monitoring EDM-related activities and classroom learning processes. The researcher used an observation sheet to systematically record behaviors, interactions, and procedures during evaluation meetings and daily teaching activities, ensuring a detailed and objective account of actual practices. Second, in-

depth interviews were held with selected stakeholders. These interviews were semi-structured, allowing participants to share their experiences and perspectives regarding EDM implementation. Interviews were audio-recorded with participants' consent and followed a flexible guide to probe into challenges, successes, and suggestions for improvement. Third, documentation analysis involved reviewing EDM reports, RKAM documents, and other relevant administrative records to triangulate findings from observations and interviews.

The collected data were analyzed using the interactive model proposed by Miles and Huberman, consisting of three stages. Data reduction involved selecting and focusing on information relevant to the research questions. Data presentation entailed organizing the data in narrative or tabular form to facilitate interpretation. Finally, drawing conclusions and verification were conducted to synthesize the findings and determine their implications for improving the quality of madrasah graduates.

C. Results and Discussion

Results

MTs Astoffaina has implemented Madrasah Self Evaluation (EDM) by referring to the e-RKAM system. This process is carried out by the Madrasah Core Team (TIM) consisting of leaders, teachers, and committees. Through initial training, the TEAM conducts evaluations based on five dimensions of quality indicators. The implementation of EDM has helped the preparation of annual programs and madrasah budget planning in a more focused and accountable manner.

Based on the results of observations and documentation, there are several aspects that show improvement after EDM was implemented. This improvement is seen in aspects of discipline, teacher competency development, and more structured learning

management. The following table shows a summary of the aspects that have been positively impacted:

Aspect	Change Indicator	Impact on Quality
Discipline	Improved teacher & student attendance	More conducive learning environment
Teacher Competency	Training and preparation of teaching materials	The quality of learning increases
Management Learning	More regular schedule & use of teaching media	Time efficiency & better learning outcomes

Although the implementation of EDM shows positive results, there are a number of challenges that still need attention. These challenges are more technical and systemic, not just weaknesses of the madrasah. The following table summarizes the challenges faced along with alternative handling efforts that have been attempted by the madrasah:

Challenge	Description	Madrasah Efforts
Technological Literacy	Not all teachers have mastered e-RKAM	Periodic internal technical training
Understanding Indicators	Some TEAMS are confused about interpreting the EDM rubric	Supervision by supervisors and joint coordination
Stakeholder	Minimal parental	Regular socialization

Participation	involvement in evaluation	and dialogue with the committee

The impact of the implementation of EDM at MTs Astoffaina can be seen in managerial changes and more structured learning. Although not yet fully reflected in outcome indicators such as academic achievement, the foundation of a quality culture has begun to form. Teacher participation has increased, data-based planning has begun to be implemented, and the role of supervisors is increasingly felt as coaching partners. With gradual strengthening, EDM has great potential to become an instrument for improving the quality of graduates in a sustainable manner.

Discussion

The implementation of the Madrasah Self-Evaluation (EDM) at MTs Astoffaina demonstrates the institution's capacity for reflective analysis of its internal conditions, serving as a foundation for targeted quality improvement planning. The integration of the e-RKAM application has facilitated a more systematic, data-driven approach to educational management, aligning with the Ministry of Religion's policy to digitalize quality assurance and promote participatory planning (Muhtasar & Hakim, 2022). This digital shift not only modernizes administrative processes but also supports a culture of transparency and accountability within the madrasah.

Findings indicate that EDM has contributed positively to several key areas, including improved discipline, enhanced teacher professionalism, and more effective learning management. The structured evaluation process has heightened the madrasah's awareness of its internal weaknesses, prompting the development of targeted programs that address actual needs rather than perceived ones (Efendi & Rifai, 2023). This aligns with the principle that systematic self-evaluation is essential for institutional growth,

as it fosters a culture of continuous improvement and responsiveness to change.

Nevertheless, the implementation of EDM at MTs Astoffaina faces persistent challenges commonly encountered by private madrasahs in non-urban settings. Issues such as low digital literacy among teachers, inadequate technological infrastructure, and limited understanding of EDM instruments reflect broader structural barriers rather than isolated institutional shortcomings (Pujasari & Wahyuni, 2022). Addressing these challenges requires affirmative policy interventions, including advanced training, technical assistance from supervisors, and leadership development for madrasah principals (Sugiyono, 2013). Such support is crucial for building the institutional capacity necessary to fully realize the benefits of EDM.

Beyond technical and structural factors, stakeholder engagement—particularly involving parents and madrasah committees—remains an area for further development. Genuine participation from the community in the self-evaluation and planning process is vital for ensuring that EDM functions as a participatory rather than merely administrative tool. As highlighted by Zazin (2011), active stakeholder involvement enhances the accountability and legitimacy of school improvement initiatives, fostering a sense of shared ownership and collective responsibility.

These findings reinforce educational quality management theories, which emphasize that sustainable improvement is rooted in systematic, reflective self-evaluation and a commitment to ongoing development (Sallis, 2021). EDM offers a robust framework for cultivating a quality-oriented culture, enabling madrasahs to monitor progress, identify gaps, and design relevant strategies in response to evolving challenges.

D. Conclusions

The findings of this study demonstrate that the implementation of Madrasah Self-Evaluation (EDM) at MTs Astoffaina has contributed significantly to enhancing graduate quality, particularly by fostering student discipline, strengthening teacher competencies, and improving learning management. Integrating EDM with the e-RKAM platform has enabled more accountable and needs-based program planning, driving continuous improvement. The internal evaluation process has encouraged the madrasah to reflect on its strengths and weaknesses, resulting in more responsive and contextual strategic planning.

This progress is closely linked to the pivotal role of the madrasah principal, whose leadership and commitment have been essential in coordinating the implementation team, fostering a collaborative work environment, and maintaining effective communication with supervisors and stakeholders. The active involvement of teachers, the madrasah committee, and supervisors has also ensured that the evaluation process is inclusive and objective.

Despite these achievements, the implementation of EDM at MTs Astoffaina still faces challenges, particularly in optimizing digital technology and community engagement. Nevertheless, initiatives such as internal training, the formation of functional teams, and ongoing coaching have proven to be effective practices worth emulating. These results indicate that with a focused approach and robust institutional support, EDM can become a key driver in improving madrasah quality.

Based on these findings, it is recommended that other madrasahs implementing EDM should:

1. Strengthen the capacity of the EDM team through regular technical training and direct supervision;
2. Enhance the digital literacy of education personnel to ensure

- efficient and timely execution of e-RKAM;
3. Actively involve parents and the madrasah committee as partners in decision-making and quality assurance;
 4. Integrate EDM into the organizational culture to promote sustainable managerial change.

References

- Afizhah, A., Wahira, & Ardiansyah, M. (2022). Impelementasi Rencana Kerja Sekolah di SMPIT Ibnul Qayyim Makassar. *Jurnal Administrasi Pendidikan*.
- Aprizal, Y. (2023). Pendampingan Penyusunan Rencana Kerja dan Anggaran Madrasah (RKAM) Melalui Aplikasi E-RKAM Pada Madrasah di Kecamatan Natar Kabupaten Lampung Selatan. *Meuseuraya - Jurnal Pengabdian Masyarakat*. <https://doi.org/10.47498/meuseuraya.v2i1.1957>
- Athiyah, C. N. U. (2017). Implementasi Penjaminan Mutu Pendidikan melalui Evaluasi Diri Madrasah di MAN 4 Jakarta. *Andragogi Jurnal Diklat Teknis*, 5(2).
- B.Miles, M., Huberman, A. M., & Saldana, J. (2014). *Qualitative Data Analysis - Matthew B. Miles, A. Michael Huberman, Johnny Saldaña* - Google Books. In Sage Publications.
- Cipto, H., Deddy, K., P, S., & Alwi, A. H. I. (2024). Manajemen Standar Kualifikasi Pendidik dan Tenaga Kependidikan untuk Meningkatkan Mutu Pendidikan. *JiIP - Jurnal Ilmiah Ilmu Pendidikan*, 7(3). <https://doi.org/10.54371/jiip.v7i3.3800>
- Creswell, J. W. (2019). *Pendekatan Metode Kualitatif, Kuantitatif, dan Campuran (Terjemahan)*. In Jakarta: Pustaka Pelajar.
- Efendi, D. R., & Rifai, A. A. (2023). Evaluasi Diri Madrasah dalam Mengembangkan Lembaga Pendidikan. *Jurnal Manajemen Pendidikan Islam (MANAPI)*, 2(2). <https://doi.org/10.31958/manapi.v2i2.9606>
- Emzir. (2012). *Metodologi penelitian kualitatif analisis data*. Jakarta: Raja Grafindo.
- Fathih, M. A. (2022). *Meninjau Kembali Prinsip dan Perencanaan Supervisi Pendidikan Sebagai Pengawasan dalam Pendidikan*

- yang Bersifat Pembinaan. *Al-Idaroh: Jurnal Studi Manajemen Pendidikan Islam*, 6(2).
<https://doi.org/10.54437/alidaroh.v6i2.384>
- Halawa, A. N., & Mulyanti, D. (2023). Faktor-Faktor Yang Mempengaruhi Peningkatan Kualitas Mutu Instansi Pendidikan Dan Pembelajaran. *Inspirasi Dunia: Jurnal Riset Pendidikan Dan Bahasa*, 2(2).
- Hendarman. (2014). Kendala-Kendala Pelaksanaan Evaluasi Diri Sekolah (Eds). *Jurnal Pendidikan Dan Kebudayaan*, 20(1).
- Herlina, F., Marsidin, S., & Sabandi, A. (2020). Kebijakan Standar Pengelolaan di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 2(2).
<https://doi.org/10.31004/edukatif.v2i2.127>
- Hofman, R. H., Dukstra, N. J., & Hofman, W. H. A. (2005). School self-evaluation instruments: An assessment framework. *International Journal of Leadership in Education*, 8(3).
<https://doi.org/10.1080/13603120500088802>
- Huda, M. (2022). Analisis Faktor Kinerja Guru Untuk Meningkatkan Mutu Pendidikan Madrasah. *Islamic Management: Jurnal Manajemen Pendidikan Islam*, 5(01).
<https://doi.org/10.30868/im.v5i01.2083>
- Ibrahim, I., Nia Anggraini, O., Marlina, L., & Supadi, S. (2022). Implementasi Standar Pengelolaan Pendidikan. *PEDAGOGIKA*.
<https://doi.org/10.37411/pedagogika.v13i2.1803>
- Joshi, S. N., & Pande, S. S. (2009). Development of an intelligent process model for EDM. *International Journal of Advanced Manufacturing Technology*, 45(3-4).
<https://doi.org/10.1007/s00170-009-1972-4>
- Lubis, A. (2013). Pelaksanaan Standar Nasional dalam Dunia Pendidikan. *Jurnal Pendidikan Teknik Bangunan*.
- Magdalena, I., Mutia, R., Mahpudloh, S. N., & Witantri, L. (2024). Proses Penyusunan Desain Pembelajaran Dan Konsep Evaluasi Formatif. *Sindoro: Cendikia Pendidikan*, 2(7).

- Maulana, M. P., Nurlaeli, A., & Suryana, S. (2021). Upaya Tenaga Administrasi Pendidikan Dalam Meningkatkan Mutu Layanan Administrasi Di Sekolah. *PeTeKa*, 4(2).
- Musnaeni, M. (2022). Pentingnya Manajemen Strategi Dalam Meningkatkan Kualitas Pendidikan. *Cendekia: Jurnal Ilmu Pengetahuan*, 2(2).
<https://doi.org/10.51878/cendekia.v2i2.1168>
- Mustafa. (2022). Evaluasi Diri Madrasah (EDM) pada Madrasah Aliyah Nahdatut Thulab Talang Babat Kabupaten Tanjung Jabung Timur. Program Studi Manajemen Pendidikan: Pascasarjana Universitas Jambi.
- Muthmainnah, Udin, T., Sianturi, M. K., Nasution, S. I., Punomo, A., Rifai, A., & Dkk. (2022). Sistem Model Dan Desain Pembelajaran. In *Desain Pembelajaran Pengertian*.
- O'Brien, S., McNamara, G., O'Hara, J., Brown, M., & Skerrett, C. (2022). Teacher leadership in school self-evaluation: an approach to professional development. *Irish Educational Studies*.
<https://doi.org/10.1080/03323315.2022.2135568>
- Permendikbud. (2003). Undang-undang Nomor 20 Tahun 2003 Tentang Standar Kompetensi Lulusan. *Records Management Journal*, 1(2).
- Pradana, A., Thoyib, M., & Harsoyo, R. (2023). Pelatihan Dalam Penyusunan Evaluasi Diri Madrasah (Edm) Dan Rencana Kerja Dan Anggaran Madrasah Berbasis Elektronik (E-Rkam) Di Ma Al Iman Putri Ponorogo. *InEJ: Indonesian Engagement Journal*, 4(2). <https://doi.org/10.21154/inej.v4i2.7248>
- Presiden RI. (2022). Peraturan Pemerintah Republik Indonesia Nomor 4 Tahun 2022 Tentang Perubahan Atas Peraturan Pemerintah Nomor 57 Tahun 2021 Tentang Standar Nasional Pendidikan. *Lembaran Negara Republik Indonesia Nomor 14 Tahun 2022*.
- Pujasari, R. S., Susapti, P., Mukholid, A., Sari, S. Y., Marani, I. N., Safiah, I., Erawati, M., Yulianti, I., Rachmijati, C., Juita, D. P., Fatimah, S., Siregar, S., Fadhillah, M. N., & Labuem, S. (2022). Optimisme Peningkatan Mutu Pendidikan. In *Akademia Pustaka*.

- Pusat Bahasa Departemen Pendidikan Nasional. (2018). Kamus Besar Bahasa Indonesia. In *Analytical Biochemistry* (Vol. 11, Issue 1).
- Puspita, D. G., & Andriani, D. E. (2021). Upaya Peningkatan Mutu Pendidikan Di Sekolah Menengah Pertama Dan Permasalahannya. *Jurnal Pendidikan Dan Kebudayaan*, 6(1).
<https://doi.org/10.24832/jpnk.v6i1.1734>
- Riyantini, R. (2023). Akreditasi Sebagai Penjaminan Mutu Lembaga. *Indonesian Journal of Adult and Community Education*, 1(2).
<https://doi.org/10.17509/ijace.v1i2.22357>
- Rohiyatun, B. (2019). Standar Sarana Dan Prasarana Pendidikan. *Jurnal Visionary : Penelitian Dan Pengembangan Dibidang Administrasi Pendidikan*, 4(1).
<https://doi.org/10.33394/vis.v4i1.1974>
- Saifulloh, M., Muhibbin, Z., & Hermanto, H. (2012). Strategi Peningkatan Mutu Pendidikan Di Sekolah. *Jurnal Sosial Humaniora*, 5(2).
<https://doi.org/10.12962/j24433527.v5i2.619>
- Sallis, E. (2021). Kitemarks. In *Total Quality Management in Education*. <https://doi.org/10.4324/9780203417010-10>
- Spradley, J. P. (1979). *The Enthographic Interview*. In New York : Holt, Rinehart and Winiston.
- Sugiyono. (2013). *Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, dan R&D* Sugiyono. 2013. "Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, dan R&D." Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, dan R&D. <https://doi.org/10.1>. Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, Dan R&D.
- Tayibnapis, W. F. Y. (2015). Evaluasi Program Pembelajaran. In *Jurnal Ilmu Pendidikan*.
- Wahab. (2017). Implementasi evaluasi diri madrasah dalam upaya penguatan manajemen pendidikan di MTs Negeri Surabaya 1. UIN Sunan Ampel Surabaya.
- Wahyuni, S. (2023). Peningkatan Kinerja Kepala Madrasah Tsanawiyah Binaan Dalam Menyusun Rencana

- Pengembangan Madrasah (Rpm) Melalui Workshop Di Kabupaten Lumajang Pada Semester 2 Tahun Pelajaran 2022/2023. *Jurnal Kepengawasan, Supervisi Dan Manajerial (JKSM)*, 1(2). <https://doi.org/10.61116/jksm.v1i2.199>
- Wulandari, A. E. (2022). Implementasi Evaluasi Diri Madrasah Sebagai Modal Penyusunan Rencana Kerja Anggaran Madrasah. *Journal of Islamic Education Leadership*, 2(2). <https://doi.org/10.30984/jmpi.v2i2.384>
- Wulandari, H., & Poerwanti, E. (2023). Analisis Penilaian Kinerja Guru Sekolah Dasar. *Afeksi: Jurnal Penelitian Dan Evaluasi Pendidikan*, 4(5). <https://doi.org/10.35672/afeksi.v4i5.148>
- Zazin, N. (2011). Gerakan Menata Mutu Pendidikan. *Mutu Peserta Didik*.

The Effect of Profitability, Debt Policy, and Investment Decisions on the Value of Insurance Companies Listed on the Indonesia Stock Exchange (2019-2023)

Iktiarni¹, Riyanti¹

¹Muhammadiyah University of Jakarta, South Tangerang,
Banten, Indonesia

Corresponding author e-mail: humas@umj.ac.id

Article History: Received on 27 June 2025, Revised on 29 June 2025,
Published on 30 June 2025

Abstrak: This study analyzes the effect of profitability (ROE), debt policy (DER), and investment decisions (PER) on company value (PBV) in the Indonesian insurance sub-sector (IDX, 2019-2023) using multiple linear regression and secondary data from company financial reports. The regression analysis shows a positive and significant effect of profitability (ROE) and a negative and significant effect of debt policy (DER) on company value (PBV). Investment decisions (PER), although showing a positive effect, are not statistically significant. The model explains 66.5% of the variance in PBV. These findings have practical implications for investors, insurance company management, and regulators in investment decision-making, corporate strategy, and regulatory development. This research contributes original insights by providing up-to-date empirical data for the post-pandemic period, filling a gap in the literature, and offering a comprehensive understanding of the dynamics of insurance company valuation in Indonesia.

Keywords: Profitability, Debt Policy, Investment, Decisions.

A. Introduction

Modernization and rapid technological development and economic progress in Indonesia have had both positive and negative impacts. One of the important pillars of wise financial planning is insurance (Pangestu, 2022). The advantage of insurance lies in its ability to provide comprehensive financial protection, reducing the negative impact of various unforeseen risks. By having an insurance policy, one can feel peace and security knowing that the family's valuable assets and well-being are protected from potential financial losses that can be devastating (Ghozali, 2018). These advantages include various types of insurance products that are tailored to various needs. For example, health insurance provides protection against medical expenses that are often very high, while vehicle insurance protects against losses due to accidents or theft. Property insurance, like home insurance, provides a guarantee of protection against damage or loss of valuable property (Ghozali, 2021). Furthermore, life insurance plays a crucial role in securing the future of the family by providing financial benefits to the heirs in the event of the policyholder's death, thus helping to ease the financial burden of the left behind family and ensure their survival (Riyanto, 2022).

Agreements between insurance companies and the insured, while intended to provide protection, are also vulnerable to insurance fraud by the insured or third parties who intentionally commit unlawful acts to gain financial gain illegally. The Indonesian Life Insurance Association (AAJI) has recorded a significant increase in insurance fraud cases in recent years, especially due to "false death claims" with the mode of falsifying documents, murder, and false witnesses. This situation was exacerbated by the Covid-19 pandemic which had a negative impact on the global stock market. The decline in the value of the stock market results in a decrease in the value of investments in unit-linked insurance policies. This situation highlights the importance of strict OJK supervision and education for the public to prevent fraud (Gulo & Arita, 2023).

Assessing the performance and financial health of a company is crucial, both for investors and the management of the company itself. Various methods are used to determine the value of a company, and one of them is Price to Book Value (PBV), as explained by (Brigham & Houston, 2019). PBV is a ratio that compares the market price of a stock to its book value per share, providing an idea of how the market values a company relative to its net assets (Hairudin et al., 2022).

**Table 1.1. Price Book Value
Insurance Sub-Sector Companies listed on the IDX for the 2019-
2023 period**

No.	Issue Code	Price Book Value (PBV)					Flat - Flat
		2019	2020	2021	2022	2023	
1	ABDA	3,45	2,49	2,40	2,76	2,32	2,69
2	AMAG	0,76	0,56	0,90	1,06	0,85	0,83
3	ASDM	0,31	0,24	0,25	0,24	0,24	0,26
4	ASMI	21,71	20,00	5,03	2,50	1,16	10,08
5	ASRM	0,11	0,25	0,23	0,20	0,18	0,20
6	LPGI	0,03	0,03	0,04	0,24	0,14	0,10
7	MREI	1,39	1,39	1,58	1,60	0,74	1,34
8	MTWI	0,73	0,69	1,29	1,09	0,77	0,91
Flat - Flat		3,56	3,21	1,47	1,21	0,80	2,05

Source : www.idx.co.id, www.britama.com (Data processed)

As shown in table 1.1, the Price Book Value (PBV) of insurance subsector companies on the IDX for the 2019-2023 period, with average PBV fluctuating between years and between companies. This is consistent with the statement that profitability, which is very important in determining the value of a company, shows significant fluctuations in Indonesia's insurance subsector during the period (Kusaendri, 2022).

According to Kasmir (Kasmir, 2021), these profitability ratios serve as an important indicator to evaluate how effective a company is in converting revenue into profits and at the same time reflects management's efficiency in managing the company's resources. The higher the profitability ratio achieved, the greater the attractiveness of the company to potential investors, thus potentially increasing the company's value in the market. Analysis of profitability ratios, particularly ROE, which shows fluctuations from year to year and between companies, indicates that many insurers have not yet achieved optimal profitability, as described in the next paragraph (Sabrina & Maulana, 2024). An ROE value below 1 indicates inefficiency in generating profits from shareholder equity.

Daniel Brando Siahaan explained (Siahaan & Herijawati, 2023), increasing the value of the company directly has an impact on increasing the wealth of shareholders. Therefore, understanding and managing company values is the key to success for any company. A company's value can be measured from a variety of perspectives, including stock market value (based on the stock price in the market), book value (the difference between total assets and total liabilities), and intrinsic value (the true value of assets and potential earnings). In the context of companies that are already listed on the stock exchange (Go Public) (Riyanto, 2022), the interaction between the demand and supply of stocks in the market determines the price of the stock, which then contributes to the valuation of the company's overall value. The PBV ratio provides valuable insights into the market's perception of a company's value relative to its book value, providing important information for the Company's investment and management decision-making (Syafriada, n.d.).

The use of debt as a source of funding is an important strategy implemented by companies to support the growth and development of their business (Kusaendri, 2022). Debt policy, as described by Brigham & Houston in his book (E. F. Brigham & Houston, 2021), is the company's option to utilize debt as an additional source of financing, complementing internal funding sourced from retained earnings. High debt levels, however, can have a significant impact on a company's financial performance as well as the

dividend policy implemented, as emphasized by (Juan Carlos Pangestu , 2022). Companies often need considerable funds to carry out various operational activities, expand, or invest in new projects. Therefore, debt policy is an integral part of a company's financial strategy. An effective debt policy refers to a planned and measurable strategy in managing and utilizing debt as a source of financing, with the primary goal of supporting sustainable business growth, increasing corporate liquidity, and ultimately, maximizing value for shareholders (Harmon, 2022).

This study uses Debt to Equity Ratio (DER) as the main indicator of debt policy, which shows the proportion of financing from debt to own capital. The DER analysis aims to assess a company's reliance on debt and its implications for performance and risk. The results of the analysis of the ROE and DER of ABDA, AMAG, ASDM, ASMI, ASRM, LPGI, MREI, and MTWI companies (2019-2023) show significant annual fluctuations without a clear trend. Key anomalies include very high DER MTWI in 2020 and 2023, as well as high but unsustainable ASDM ROE in 2019. This variability requires further analysis, including comparisons with industry benchmarks, studies of financial statements and corporate strategies, and macroeconomic and industry contexts.

On the IDX, a company's value can change significantly in seconds, minutes, or even hours, indicating the high level of competition and fluctuations in the current economy. Therefore, the right and strategic investment decisions are crucial for companies to attract investors and increase the company's value in the market (Wulandari et al., 2021). The investment decision-making process involves a commitment to allocate financial resources into various assets in the hope of generating future profits, as explained by (Rajagukguk et al., 2019). PER is a simple ratio obtained by dividing the stock market price by earnings per share. A high PER ratio indicates that investors are willing to pay a higher price for every rupiah of profit generated by the company.

This can indicate a positive growth prospect for the company in the future and is attractive to investors looking for great profit potential. In other

words, companies with high PERs are considered to have the potential to generate greater profits for investors compared to companies with low Per. Therefore, the company's management must consider the PER in investment decision-making to maximize the company's value and its attractiveness in the capital market (Arochman & Southampton, 2024).

The results of research that have been conducted by various parties show that there are differences in research results regarding the influence of profitability, debt policy, and investment decisions on company value. Although some studies have shown a positive relationship between profitability and company value (Suardana, Endiana, & Arizona, (2020); Rajagukguk, Ariesta, & Pakpahan, (2019), another study found different results. Hartono, Susanti, and Fauzi (2019) for example, found a non-significant positive influence of investment decisions, while Putranto, Maulidhika, and Scorita (2022) note the negative influence of profitability. Arizki, Masdupi, and Zulvia (2019), even finding a negative influence of investment decisions on the value of the company. This lack of consistency shows the need for further research, especially focusing on the insurance sector in Indonesia for the 2019-2023 period to provide a more comprehensive and contextual picture.

This disparity in findings sparked interest in conducting further research to provide a more comprehensive understanding. Therefore, this research was conducted with the title "The Influence of Profitability, Debt Policy, and Investment Decisions on Company Value in the Insurance Subsector Listed on the Indonesia Stock Exchange 2019-2023".

B. Method

This study uses an associative quantitative approach to test the hypotheses that have been formulated. Reliable secondary data, obtained from the Indonesia Stock Exchange (www.idx.co.id) and the official websites of the insurance companies studied, were statistically analyzed to uncover the cause-and-effect relationship between variables. This approach is in accordance with the philosophy of positivism (Scott, 2019), allows

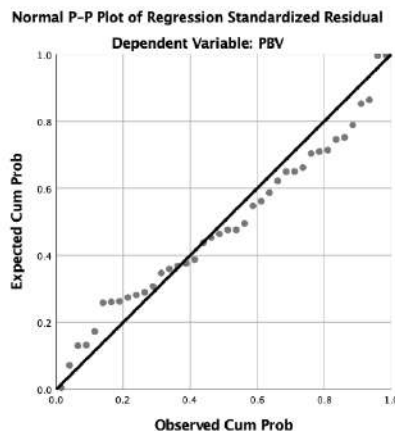
hypothesis testing and answering the formulation of research problems. The quality and reliability of data are guaranteed thanks to the use of reliable sources. Systematic research planning and implementation is a crucial stage in the research process (Nazir, 2017).

This associative research examines the relationship between profitability (X1), debt policy (X2), investment decisions (X3) as independent variables, and company value (Y) as dependent variables in the IDX insurance subsector (Sekaran, 2017). The analysis of this associative research aims to reveal the relationship between two or more variables, as well as to find out the direction and strength of the relationship, including the possibility of causal influence between independent variables and dependent variables. (Sugiyono, 2019, p. 55).

C. Results and Discussion

a) Normality Test

Figure 1
Standard Residue of Normal Regression P-Plot



The P-P plot shows a residual regression model for PBV variables distributed close to normal, although there is a slight deviation in the tail. In general, the assumption of normality is met.

Table 1
Kolmogorov-Smirnov Test Results One Sample
Kolmogorov-Smirnov Test One Sample

		Unstandardized Residual
N		40
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	0.76568641
Most Extreme Differences	Absolute	0.121
	Positive	0.121
	Negative	-0.056
	Test Statistic	0.121
	Asymp. Sig. (2-tailed)	142 ^c
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		

The results of the Kolmogorov-Smirnov test showed that the data was normally distributed ($p = 0.142 > 0.05$).

b) Multicollinearity Test

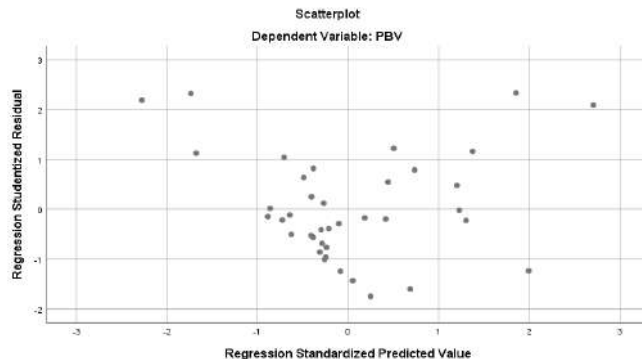
Table 2 Multicollinearity Test Results

Coefficients ^a		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	Return On Equity	0.805	1.243
	Debt to Equity Ratio	0.849	1.178
	Price Earning Ratio	0.918	1.809
a. Dependent Variable: PBV			

Multicollinearity analysis showed no significant problems in the regression model because all VIF values were well below 10. The regression model is considered valid.

c) Heterokedasticity Test

Figure 2 Heteroscedasticity Test Results



In general, scatterplots show that there is no clear or systematic pattern between standardized residual and standardized predictive values. The dots are randomly scattered around the zero (horizontal) line. This suggests that the assumptions of homocedasticity and linearity are likely to be met. There is no indication of the presence of non-constant residual variance or significant deviation from the linear relationship between dependent and independent variables.

Table 4a Heteroscedasticity Test Results

Koefisiensa						
Pattern		Non-Standard Coefficients		Standard Coefficients	t	Alone.
		B	Std. Error	Beta		
1	(Constant)	.492	.173		2.840	.007
	DEER	26.660	64.474	.075	.413	.682
	YES	.427	7.520	.010	.057	.955
	FOR	.003	.003	.202	1.195	.240
a. Variable Dependence: ABS_RES						

The heteroscedasticity test (Table 4a) showed a significance value (Sig.) of > 0.05 for all independent variables (0.117; 0.108; and 0.513). Therefore, the zero hypothesis of no heteroscedasticity is accepted. The regression model is free of heteroscedasticity.

d) Autocorrelation Test

Table 4b Autocorrelation Test Results

Model ^b Summary					
By	R	R Square	Customized R Box	Std. Estimation Error	Durbin-Watson
1	.815a	.665	.637	.79695	1.754
a. Predictor: (Konstanta), PER, DER, ROE					
b. Dependent Variable: PBV					

Based on table 4b, the results of the Durbin Watson autocorrelation test in the table yielded a value of 1.759, Since this value is close to 2, there is no indication of autocorrelation in the data.

e) Double Linear Regression Analysis

Table 5 Results of Multiple Linear Regression Analysis

		Non-Standard Coefficients		Standard Coefficients	Alone.
		B	Std. Error		
1	By (Constant)	.949	.300		.003
	Return of Equity	608.349	111.676	.586	.000
	Debt to Equity Ratio	-42.627	13.025	-.343	.002
	Price Earnings Ratio	.004	.005	.093	.364

a. Dependent Variables: Book Value Price

Based on table 5, the coefficient of the double linear regression equation can be interpreted as follows:

- a. The value of Constanta is 0.949. This means that there is a non-directional influence between independent and dependent variables. All independent variables (X) have a value of 0 or do not change, so the value of PBV (Y) is -0.521.
- b. The value of the regression coefficient on ROE (X1) is 608.349, meaning that if the ROE variable (X1) increases on one scale assuming that the other variable remains constant, it will be followed by an increase in PBV (Y) of 608.349.
- c. The value of the regression coefficient on DER(X2) is -42.627, meaning that if the variable DER(X2) increases one scale assuming that the other variable remains constant, followed by an increase in PBV (Y) by 42.627.
- d. The value of the regression coefficient in PER (X3) is 0.004, meaning that if the variable PER (X3) increases on one scale assuming that the other variable remains constant, it is followed by an increase in PBV (Y) by 0.004.

f) Partial Test Results

Table 6 Preliminary Test Results (Uji t)

Koefisiensa						
By		Non-Standard Coefficients		Standard Coefficients	T	Alone.
		B	Std. Error	Beta		
1	(Konstan)	.949	.300		3.164	.003
	DEER	608.349	111.676	.586	5.447	.000
	YES	-42.627	13.025	-.343	-3.273	.002
	FOR	.004	.005	.093	.919	.364
a. Dependent Variable: PBV						

Based on the test results contained in table 4.6

- a. The Effect of Profitability (ROE) on Company Value (PBV)
 From the results of the t-test calculation in table 4.10, the Return On Equity variable has a t-table value of 5.447 with a t-table value of 2.028 and a significant level of 0.000. So since the calculated t-value is smaller

than the t-table ($5.447 > 2.028$) and the significant value is smaller than 0.05 ($0.000 < 0.05$), it can be concluded that H_0 is rejected and H_a is accepted, meaning that the Return On Equity variable has a positive and significant influence on the Price Book Value.

b. The Effect of Debt Policy (DER) on Corporate Value (PBV)

From the results of the t-test calculation in table 4.10, the Debt-to-Equity Ratio variable has a t-table value of -3.273 with a t-table of 2.028 and a significant level of 0.002. So since the calculated t-value is greater than the t-table ($-3.273 < 2.028$) and the significant value is less than 0.05 ($0.002 < 0.05$), it can be concluded that H_0 is accepted and accepted H_a , meaning that the Debt-to-Equity Ratio variable has a negative and significant influence on the Book Value of the Price.

c. The Effect of Investment Decisions (PER) on Company Value (PBV)

Berdasarkan hasil perhitungan uji t pada tabel 4.10, variabel Price Earning Ratio memiliki nilai t-hitung sebesar 0,919, dengan nilai t-tabel sebesar 2,028 dan tingkat signifikansi sebesar 0,364. Karena nilai t-hitung lebih kecil dari t-tabel ($0,919 < 2,028$) dan nilai signifikansi lebih besar dari 0,05 ($0,364 > 0,05$), maka dapat disimpulkan bahwa H_0 ditolak dan H_a juga ditolak. Artinya, variabel Price Earning Ratio berpengaruh negatif namun tidak signifikan terhadap Price Book Value.

g) Test F Results (Simultaneous Test)

Table 7 T Test Results

ANOVA						
	By	Number of Squares	Df	Square Average	F	Alone.
1	Back	45.303	3	15.101	23.776	000b
	Remnant	22.865	36	.635		
	Entire	68.168	39			
a. Dependent Variable: PBV						
b. Predictor: (Konstanta), PER, DER, ROE						

The results of the above table can be seen from the values of Sig. 0.000 or < 0.05 and $F_{\text{calculate}} 23.776 > \text{table } 3.27 F$. Therefore, it can be concluded

that all independent variables including ROE (X1), DER (X2), and DER (X3) have simultaneous effects on PBV-dependent variables.

h) R2 Double Linear Regression Analysis Test

Table 8
Results of Determination Coefficient Analysis (R2)

By		Non-Standard Coefficients		Standard Coefficients	Alone
		B	td. Error		
1	(Konstan)	.949	.300		.003
	Return of Equity	608.349	111.676	.586	.000
	Debt to Equity Ratio	-42.627	13.025	-.343	.002
	Price Earnings Ratio	.004	.005	.093	.364

a. Dependent Variables: Book Value Price

Based on table 4.9, the regression model explains 66.5% of PBV variance using ROE, DER, and PER. 33.5% of PBV variances are still unexplained, requiring further research.

D. Conclusion

Based on the results of the research that has been conducted, it can be concluded that Profitability has a positive and significant influence on the Company Value in insurance subsector companies listed on the Indonesia Stock Exchange for the 2019-2023 period. Debt Policy has a negative and significant effect on the Company Value of insurance subsector companies listed on the Indonesia Stock Exchange for the 2019-2023 period. Investment Decisions have a positive and insignificant effect on the Company Value of insurance sub-sector companies listed on the Indonesia Stock Exchange for the 2019-2023 period. The suggestion that can be conveyed for further research is that further research is expected to use other variables that can affect the

value of the company, or use other financial ratios such as ROA, DAR, Current Ratio, Leverage, Liquidity to suit the needs of further researchers in taking the research title. Using other company value proxies such as MVA, EPR and, Tobin's Q. As well as it is advisable not only to rely on quantitative data, but also consider involving case studies or interviews with related parties.

E. Acknowledgement

I would like to thank the insurance companies in Indonesia whose financial data are open to the public on www.idx.com website which is an example of my research. And I would like to thank the lecturers and other parties whose names I cannot mention one by one.

Reference

- Arizki, A., Masdupi, E., & Zulvia, Y. (2019). The Influence of Investment Decisions, Funding Decisions and Dividend Policy on the Company's Value in Manufacturing Companies Listed on the Indonesia Stock Exchange. *Journal of Management and Entrepreneurship Studies*, Padang State University, 1(1), 73–82.
- Arochman, M., & South, S. (2024). The Effect of Capital Structure, Profitability, and Dividend Policy on the Value of Insurance Companies on the IDX for the 2019-2022 period. *Pragmatics*, 5(1), 16–27.
- Brigham, E. F., & Houston, J. F. (2021). *Fundamentals of Financial Management* (14th ed.). Salemba.
- Brigham, E., & Houston, J. (2019). *Fundamentals of Financial Management* 15e. Cengage Learning.
- Fahmi, I. (2020). *Financial Performance Analysis*. Alphabet.
- Ghozali, I. (2018). *Application of Multivariate Analysis with IBM SPSS 25 Program* (9th ed.). Publishing Agency of Diponegoro University.
- Ghozali, I. (2021). *Multivariate Analysis Applications with IBM SPSS Program 26* (10th ed.). Publishing Agency of Diponegoro University.
- Gulo, H. N., & Arita, E. (2023). The effect of dividend policy, debt policy, profitability, and stock price on the company's value. *Journal of*

- Financial and Business Accounting, 1(3), 271–282.
- Hairudin, Loliyani, R., & Loliyani, R. (2022). The Effect of Profitability Mediation: On the Analysis of the Influence of Investment Decisions on Company Value in the Covid-19 Pandemic Era. *Journal of Valuation: Scientific Journal of Management and Entrepreneurship*, 2(2), 825–850.
- Harmon. (2022). *Financial Management Based on the Balanced Scorecard. The Earth of Scripts*.
- Hartono, D. R., Susanti, S., & Fauzi, A. (2019). The Effect of Dividend Policy, Debt Policy, and Profitability on Company Value. *Journal of Accounting Science and Research*, 8(1). <https://jurnalmahasiswa.stiesia.ac.id/index.php/jira/article/view/240>
- Cashmere. (2021). *Analysis of Financial Statements Revised Edition*. Cashmere.
- Kusaendri, D. (2022). The Effect of Profitability, Investment Decisions and Funding Decisions on Company Value with Dividend Policy as a Moderation Variable. *Scientific Journal of Management, Business and Accounting Students (JIMMBA)*, 4(5), 1–13.
- Nazir, M. (2017). *Research Methods (7th ed.)*. Research Methods.
- Pangestu, J. C. (2022). The Role of Modernized Debt Policy on the Influence of Financial Performance and Dividend Policy on Company Value during the Covid-19 Pandemic in Indonesia. *Journal of Accounting Research*, 3(2), 189–202.
- Putranto, P., Maulidhika, I., & Scorita, K. B. (2022). The Impact of Good Corporate Governance and Profitability on Company Value. *ONLINE JOURNAL OF ACCOUNTANTS*, 7(1). <https://ejournal-binainsani.ac.id/index.php/JOIA/issue/view/125>
- Rajagukguk, L., Ariesta, V., & Pakpahan, Y. (2019). Analysis of the Influence of Profitability, Company Size, Investment Decisions, and Debt Policy on Company Value. *Journal of Business Inspiration & Management*, 3(1), 77–90.
- Riyanto, B. (2022). *Fundamentals of Corporate Expenditure (4th ed.)*. UGM Press.

- Sabrina, A. S., & Maulana, M. K. (2024). The Effect of Debt to Equity Ratio and Current Ratio on Asset Return of PT. Brick Shoes Tbk. *Krisnadwipayana Journal of Business Management*, 12(3), 241–249.
- Sekaran, U. (2017). *Research Methods for Business* (6th ed.). Salemba.
- Siahaan, D. B., & Herijawati, E. (2023). The Effect of Current Ratio, Debt to Equity Ratio, and Return of Equity on Company Value (Study of Food and Beverage Companies Listed on the IDX for the 2016-2020 Period). *INNOVATIVE: Journal Of Social Science Research*, 3(4), 1742–1751.
- Suardana, I. K., Endiana, I. D. M., & Arizona, I. P. E. (2020). The Influence of Profitability, Debt Policy, Dividend Policy, Investment Decisions, and Company Size on Company Value. *Kharisma Journal*, 2(2). <https://e-journal.unmas.ac.id/index.php/kharisma/article/view/975>
- Sugiyono. (2019). *Quantitative Research Methods* (4th ed.). Alfabet.
- Syafrida, H. (n.d.). *Financial Statement Analysis Techniques*. UMSU Press Medan.
- Tandelilin, E. (2024). *Portfolio and Investment Management*. Kanisius.
- Wulandari, C., Maharani, B., & Wardhaningrum, O. A. (2021). The Effect of Profitability, Dividend Policy, and Debt Policy on the Value of Insurance Companies Listed on the Indonesia Stock Exchange for the 2016-2020 Period. *Accounting Research Journal ACE*, 1(2), 151–162.

Analysis Ability Numeracy on Sundanese Manda Game in Mathematics Learning for Grade V in Elementary School

Femi Hidayati¹, Nur Ngazizah¹, Titi Anjarini¹

¹Universitas Muhammadiyah Purworejo, Jawa Tengah,
Indonesia

Corresponding author e-mail: femi.hidayati6472@gmail.com

Article History: Received on 27 June 2025, Revised on 28 June 2025,
Published on 30 June 2025

Abstract: The numeracy ability of fifth grade students of SDN Kedungpucang through the traditional Sundanese Manda game was examined in this study. The results of the AKM pre-test showed that the average student numeracy score was 50.33, below the school's KKM of 70. This study aims to analyze ability numeracy in games Sundanese manda in mathematics learning. This type of research is included in the qualitative descriptive category. with stages like data collection, data reduction, extraction conclusions, and verification. Tools for collecting data include observation , interviews , documentation , and sheets. Work student. Data analysis methods applied use approach analysis descriptive qualitative. Student performance was measured through active discussion, accuracy in solving problems, and application of mathematical concepts in real situations. The results of the study after the intervention increased significantly, with the average post-test being 67.33 or an increase of 17 points. Students involved in the game showed understanding operation count on concept numeracy in a way deep and contextual. Thus, integration game traditional sunda manda proven effective in develop skills numeracy .

Keywords : Ability, Numeracy, Games, Sundanese, Mathematics .

A. Introduction

Ability numeracy student is skills literacy the important basics for students at school base as well as related close with understanding numbers, data and their meaning. Evaluation competencies implemented by students Class V in semester 2 aims to for measure level development ability numeracy. This action was taken to assess competence student in ability numeracy especially in learning Mathematics. Learning mathematics through curriculum independent help increase creativity student in solve a problem. A analysis show that teacher's attention to problem mathematics often limited to topics that are considered difficult for students , so ignore potential development ability more numeracy wide (Nurhayati et al., 2022) . Based on previous findings, the level of preparation learning and ability numeracy start seen in students class above . In line with plan researcher, study This involving student class V at the level school base as respondents.

The Gap within ability numeracy in school students base become attention main, because ability This is an important foundation for solving basic mathematical problems. Analysis by teachers of various problem mathematics Still limited, especially only on topics that students consider difficult (Permatasari, 2021) . Ability students in the numeracy fields required by students , as aeady revealed by researchers previously , no Enough For help they in finish problems mathematics base (Irwan & Masrul, 2023) . Teachers must always be creative and be able to modify teaching materials to create atmosphere in the learning process . Research previously show ability numeracy student Not yet adequate For finish question mathematics basic . For overcome matter this , utilization game traditional Sundanese manda expected can become solution innovative in increase numeracy student in a way fun and effective (Amreta et al., 2025) . Game This practiced by students fifth grade at

Kedungpucang Elementary School as one of the work programs student Campus Teaching Class 7.

Ability numeracy referring to skills in understand, utilize, and interact with number as well as information numeric in activity everyday. According to (Ngazizah et al., 2022) , ability This covering various aspects , starting from ability base like count until more capabilities complex like data analysis and problem solving problem . According to NCTM standards , there are a number of ability the main thing to do owned , namely ability in solve problem, communicate, create connection, do reasoning, and use representation mathematics (Communication et al., 2024) . Solution the problem in question in context ability numeracy No only just finish questions existing mathematics. More from that, in context literacy numeracy, for student expected capable find relevant and contextual solutions to the challenges they face face it in activity daily. Skills This own connection close with understanding numbers, basic data, and their associations with meaning certain. Students must capable complete the questions mathematics base in assessment minimum competency (Nurgiyanto et al., 2022) .

Theories underlying numeracy skills, such as constructivism, emphasize that mathematical knowledge is constructed by students through direct experience and interaction with the environment (Rachmawati, 2023) . In this context, the application of constructivism theory needs to be integrated in real terms into the Sundanese Manda game mechanism. In addition to introducing draft numbers, games this is also in explicit give chance to student For apply principles mathematics in context life real. For example, when students count steps in a game, they not only learn numbers, but also understand the concepts of distance and estimation. Activities such as problem solving that arise during the game create a relevant context, so that the process of learning mathematics takes place contextually and in line with the principles of constructivism. Thus, learning theory and game practice are interconnected and do not run separately, thus creating a holistic and in-depth learning experience.

As expressed by (Casfian et al., 2024) "Constructivism allow student For build knowledge they Alone through meaningful experience." Therefore that, integration between theory and practice important For create environment effective learning.

In addition, mastery mathematics basic by students need investigated return through implementation diverse method learning, such as learning contextual, collaborative, and based on game. Context This in harmony with research by (Rahmat & Suparjana, 2023) . Various approach learning which is proven effective in develop ability numeracy students in this study, namely the approach based on Game. Approach based on game need analyzed more carry on which integrates aspect social and emotional in learning can give impact positive for students . Studies show that participating students in learning active tend own better understanding deep about concepts mathematics compared to with method learning more traditional nature passive.

B. Method

Type research used in studies This is approach descriptive qualitative. According to (Sugiono & Lestari, 2021) , Qualitative methods in study used For explore and understand in a way deep about the condition object in a way natural, where researchers functioning as tool main in data collection. Research implemented from month February until June 2024 at Kedungpucang State Elementary School with subject The research was grade V of elementary school . *Purposive sampling* method used For determine subject in study This time , there were 25 students involved includes 13 men and 12 women . According to (Sugiono et al., 2020) *purposive sampling* is technique election sample done with notice various relevant aspects with objective study This.

Observation method, interview, and data collection tasi documents become a strategy in the effort to collect research data. Ministry of

Education, Culture, Research, and Technology set the period 2022 to 2024 as a recovery period learning, where the curriculum new can implemented by schools that have Ready. Furthermore , in 2024 , the implementation curriculum during the recovery period learning will evaluated For compile policy furthermore (Salsinha et al., 2024) .

The research design applied is approach studies case. Research This prioritizes depiction experience individual or group in context certain. According to (Millah et al., 2023) design narrative allow researcher For compile data in form story or narrative that describes experience subject research. Based on Miles and Huberman's opinion analysis descriptive qualitative consists of on three stage main , namely data reduction , data presentation, and verification or withdrawal conclusions based on available data (Safrudin et al., 2023) . The data reduction stage is carried out with method do observation directly in the field on the learning process and behavior students who experience difficulty in understand material lesson (Sri Annisa & Mailani, 2023) .

C. Results and Discussion

Results

Ability numeracy is very important aspect in education, because reflect to what extent participants educate capable understand and apply draft mathematics in life everyday. Based on results test the beginning of what was done against 25 participants educate, average value numeracy obtained is 50.33 of score maximum 100, which is still far below minimum standards set school, namely 70. Findings This Enough worrying, considering low ability numeracy can give impact negative to performance academic participant educate in the field others, especially in the field of science and technology. A research by (Ayu & Syukur, 2023) describe that students who have level good understanding about number count tend more success in field academic others. For overcome problem said, the

implementation game Sundanese manda in learning chosen as one of the alternative.

Implementation game This done in two designed session for increase involvement participant educate in the learning process. Through game said , participants educate expected can participate in a way active , counting steps , and make decision based on the chosen strategy , so ability numeracy they can increase in a way gradually (Widati et al., 2025) .

Proportion participant students who receive answer correct on the test beginning numeracy classified as low . Of the 25 students who took part test of those, only 12 students or around 48% are capable answer more from half amount question with right. While that , as many as 13 students or 52 % other Not yet reach criteria This data is indicates that only part small students who have control material numeracy in a way adequate .



Figure 1. Implementation of the Sunda Manda Campus Teaching 7 2024 Work Program Practice

During the session ongoing, response student to the game is very positive. Many students show high enthusiasm and active involvement. For example, when game ongoing, students seen each other support and collaborate in group they For reach objective from the sunda manda game. P statement the in line with findings from

research conducted by (Nurhikmah et al., 2023) which reveals that learning based on game Can increase interaction social among students and create environment learn more pleasant.

Capability Data Numeracy

After implementation game Sundanese manda, results test end show significant improvement in ability numeracy students. Average grade mathematics student increase to 85.52% of previous exercise. Improvement this is very encouraging and indicative that game Sundanese manda No only just method fun learning , but also effective in increase ability numeracy student (Haryanti et al., 2024) . Important For noted that improvement This No only happen in a way as it happens. For example, when student must count step in games, they in a way No direct train calculate and apply draft number count. The findings revealed by (Andriani et al., 2023) support statement that approach learning contextual capable repair understanding concept among student.

Following table showing percentage results test beginning and end ability numeracy students in learning mathematics reviewed from the bottom side This:

No	Description	Before		After	
		AKM Pre-Test	Pre-Math Grade	Post-AKM Test	Mathematics Value
1.	Average	50.33%	73.50%	67.33%	85.52%
2.	The highest score	70	77	95	100
3.	Lowest value	35	45	45	60
4.	Students who do not answer	1	-	1	-
5.	Number of students	24	25	24	25

Table 1. Percentage of Students' Numeracy Ability Results

The table above serve the right illustration about changes that occur in ability numeracy student after implementation Game. Assessment

Minimum Competency (AKM) is evaluation competence the basis for the purpose get used to participant educate think critical through questions contextual in life daily (Nurgiyanto et al., 2022) . Pre-test scores Assessment Minimum Competency (AKM) is evaluation beginning For measure minimum student competencies in numeracy in a way general in accordance standard national. While that, value pre-math is results test a special beginning evaluate mastery material mathematics taught in class. Through this data, we can stated presentation completeness student in ability numeracy in games Sundanese manda in the process of learning mathematics in elementary school grade V is as following.

No	Indicator	Completeness	Eligibility	Skills	Participation
1.	Students are able to carry out addition and subtraction operations based on the properties of whole numbers correctly.	72%	✓	✓	✓
2.	Students can understand and implement the concept of the Sundanese Manda game in the material on whole numbers.	92%	✓	✓	✓
3.	Students can interpret the results of the analysis to predict and make decisions.	80%	✓	✓	✓

Table 2. P percentage Completeness Student Formula count indicator completeness

$$= \frac{\text{Total student finished}}{\text{Total student in a way overall}} \times 100\%$$

Discussion

Study to improvement ability numeracy This show that game Sundanese manda succeed interesting attention students and improve

understanding in learning mathematics about addition and subtraction number round For student Class V of Kedungpucang Elementary School . Students No only tired play Sundanese manda with results throwing gacruk arrive at the square to how much, but game This writer modification with to hook game on material number count addition and subtraction. Draft game traditional can utilized as a supporting media in the learning process mathematics in the environment school (Merliza, 2021) . Through game traditional , students can to obtain education positive characters, such as values like Love peace, faith, care environment, love homeland, ethos work, spirit learning, creativity, courage, discipline, work equality, honesty and deliberation are very important For developed (Safitri et al., 2022) .

Learning interesting mathematics can realized through implementation game Sundanese Manda. In the activity this, 25 students class V is divided into five groups in a way sequentially. Every group take turns throw dice twice, add up the result, and jump to box game in accordance the numbers obtained. After that, students take card challenge or card Question. Card challenge consists of from picture grass (may) continue), stone (stop and work on) question number count in three minutes), and boom (immediately) stop and turn move).

Card question containing exercise mathematics, in particular number the amount that becomes ability numeracy For used in solution in life everyday , for example in stating the nominal value of goods economy and so on (Khoirudin et al., 2022) . Games in progress three round, and if happen series, round third become determinant. The first group reach the finish line with mark nine from two throws dice stated as winner. This method make learning more interactive and fun, so increase interest and understanding student.

Preparation of teaching materials is a obligations that must be fulfilled owned by each educators. This is because of making tool learning covers various aspect important role in the process of effective and quality teaching and learning (Titi Anjarini & Suyoto, 2022) . The following is discussion about data analysis results workmanship participant educate before and after use game traditional Sundanese manda proven can increase motivation and understanding student in learning.

Presentation and analysis of the results data workmanship subject on card question:

1. Exposure question no.1

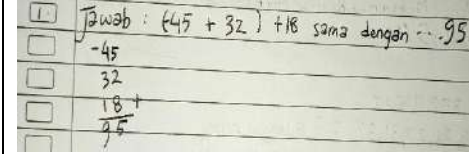
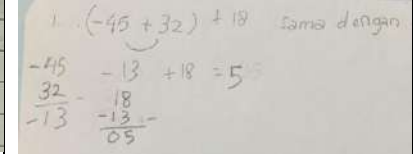
	
Preparation before using the Sunda Manda Game	Work after using the Sunda Manda Game

Figure 2. Sample student worksheet 1

Before use Sunda Manda game, MR misread the number -45 as 45, so the solution wrong Because Not yet understand draft number count. After follow games, MR trained distinguish and process number with Correct through activity summation and steps game, so that He capable finish question with appropriate without error similar.

2. Exposure to question no. 3

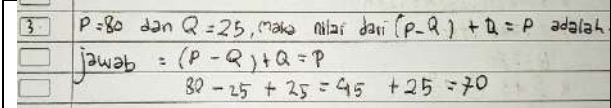
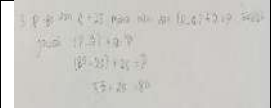
	
Preparation before using the Sunda Manda Game	Work after using the Sunda Manda Game

Figure 3. Sample worksheet 2

MR initially Already understand questions and formulas in questions number 3, but not enough thorough so it is wrong to add $45 + 25$ to 70, not 80. The Sunda Manda game is direct train MR for thorough and focused through activity summation results throw dice to be rolled done with careful in every steps . After playing , MR is used to it inspect results summation before continue , so that He capable answer question with right and proper time . Concrete exercises This make MR's precision and focus in mathematics increase .

3. Exposure to question no. 6

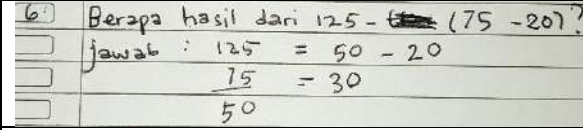
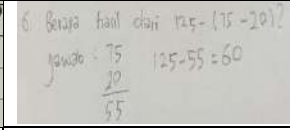
	
Preparation before using the Sunda Manda Game	Work after using the Sunda Manda Game

Figure 4. Sample student worksheet 3

Before use Sunda Manda game, MR not yet understand order operation and direct do subtraction without notice sign brackets, so that the answer is wrong. After follow Sundanese Manda game, MR trained follow step in a way sequentially in accordance rule game, so that He capable do question with correct and pay attention sign brackets moreover formerly.

4. Exposure to question no. 8

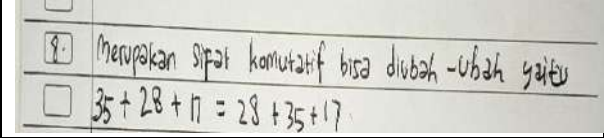
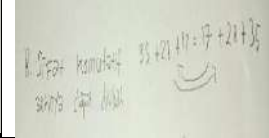
	
Preparation before using the Sunda Manda Game	Work after using the Sunda Manda Game

Figure 5. Sample student worksheet 4

Based on test data write and interview on the questions number 8, MR is able analyze and understand question story as well as

properties number count with okay . After use Sunda Manda game , MR can maintain understanding the Because game This train him For focus and thorough through activity breakdown problem in a way directly . Every step in game sue MR for understand instructions and apply draft number count , so that results Finally right and MR is not experience constraint .

5. Exposure to question no. 9

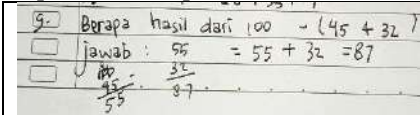
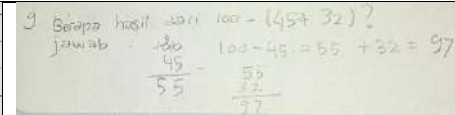
	
Preparation before using the Sunda Manda Game	Work after using the Sunda Manda Game

Figure 6. Sample student worksheet 5

Before use Sunda Manda game, MR not yet can finish question Because only depend on memorization without understand draft number count. After follow game, MR is used to to practice addition and application formula in a way directly on each step game, so that He start understand draft in a way comprehensive and capable finish question with step as well as correct formula. Activity interactive games also enhance MR's motivation and focus in Study mathematics, so that his understanding also increased significant. Research by (Umrah & Naim, 2024) state that method based on game make motivation Study more tall compared to method traditional . With Thus, the game Sundanese m you proven effective in increase skills numeracy student.

D. Conclusion

Based on results research, implementation Sunda Manda game proven in a way significant increase skills and abilities numeracy student class V school basic. Before use game this, the average value numeracy students on the pre-test recorded by 50.33%. After implemented, the average value of students increase to 67.33%, so that there is improvement by 17%. The Sunda Manda game is not

only support mastery draft numeracy, but also able to grow motivation as well as increase involvement student in learning Mathematics. Cultural integration local through Sundanese Manda game provides contribution specifically, namely create atmosphere learning that is fun, challenging, and inspiring, all at once practice skills motor as well as introduce values traditional to students. With Thus, the Sunda Manda game is effective in increase ability numeracy and enrichment experience Study student in a way overall. This method is also recommended For applied to the eyes another lesson because its interactive and comprehensive nature.

E. Acknowledgement

During the research and writing process article this, writer to pronounce accept deep love on support from all the party that has give guidance, direction and motivation:

1. Mrs. Rintis fortune Pangestika, M.Pd, Head of the Elementary School Teacher Training and Education Study Program, FKIP, Muhammadiyah University of Purworejo period until Now .
2. Ms. Nur Ngazizah, S.Si, M.Pd. , Supervisor I
3. Mrs. Titi Anjarini M.Pd, Supervisor II
4. Kedungpucang State Elementary School, as the research location and all parties involved.

Reference

- Amreta, MY, Rahayu, ND, Nisa, D., & Lestari, P. (2025). *Improving Numeracy Skills through Contextual Learning Based on Traditional Engklek Games at UPT SDN Sokosari Tuban . 5* , 456–464.
- Andriani, S., Ardianti, SD, & Masfuah, S. (2023). Effectiveness of Outdoor Study Learning Model Assisted by Audiovisual Media to Improve Students' Learning Outcomes and Interests. *As-Sabiqun* , 5 (2), 619–631.
<https://doi.org/10.36088/assabiqun.v5i2.3171>
- Ayu, N., & Syukur, M. (2023). Implementation of Numeracy Literacy

- Learning in the Teaching Campus Program to Improve the Learning Ability of Tanrara State Elementary School Students. *COMSERVA: Journal of Research and Community Service* , 2 (12), 3106–3121. <https://doi.org/10.59141/comserva.v2i12.720>
- Casfian, F., Fadhillah, F., Septiaranny, JW, Nugraha, MA, & Fuadin, A. (2024). Effectiveness of Constructivism Theory-Based Learning Through E-Learning Media. *Pediaqu: Journal of Social and Humanitarian Education* , 3 (2), 636–648. [http://repo.iain-tulungagung.ac.id/5510/5/BAB 2.pdf](http://repo.iain-tulungagung.ac.id/5510/5/BAB%202.pdf)
- Haryanti, JP, Hilyana, FS, & Kuryanto, MS (2024). Analysis of Collaboration Ability of Grade IV Students of Banyudono Elementary School in the Pancasila Profile Project of Traditional Games Festival. *Papeda Journal: Journal of Elementary Education Publication* , 6 (1), 1–12. <https://doi.org/10.36232/jurnalpendidikandasar.v6i1.4725>
- Irwan, I., & Masrul, M. (2023). Analysis of Students' Numeracy Ability in Mathematics Learning in Elementary Schools. *Pendas: Scientific Journal of Elementary Education* , 8 (1), 4119–4128. <https://doi.org/10.23969/jp.v8i1.7235>
- Khoirudin, M., Anjarini, T., & Suyoto. (2022). Analysis Of Students' Numeracy Ability In Solving Mathematics Problems On The Material Of Fraction Algorithmic Operations In Grade V Of Kebondalem State Elementary School. *DE_JOURNAL (Dharmas Education Journal)* , 3 (2), 190–199.
- Communication, AND, In, ICT, & Junaedi, L. (2024). *Analysis Of The Impact Of The Implementation Of Information Technology With The National Council Of Teacher Of Mathematics (Nctm) Standards* . 8 (2).
- Merliza, P. (2021). Ethnomathematics Study: Exploration of Mathematical Concepts in Traditional Games of Lampung Province. *Suska Journal of Mathematics Education* , 7 (1), 21–30. <https://doi.org/10.24014/sjme.v7i1.12537>
- Millah, AS, Apriyani, Arobiah, D., Febriani, ES, & Ramdhani, E. (2023). Data Analysis in Classroom Action Research. *Journal of Student Creativity* , 1 (2), 140–153.

- Ngazizah, N., Rahmawati, R., & Oktaviani, DL (2022). Development of Comic Media Based on Local Wisdom in Integrated Thematic Learning. *Science Tech: Journal of Science and Technology* , 8 (2), 147–154. <https://doi.org/10.30738/st.vol8.no2.a13187>
- Nurdiyanto, TR, Rulviana, V., & Rohmanurmeta, FM (2022). Analysis of Students' Numeracy Ability in Solving Minimum Competency Assessment (AKM) Mathematics Questions at SDN 01 Klegen. *KID (Proceedings of the Basic Scientific Conference)* , 2 , 173–184.
- Nurhayati, Asrin, & Dewi, NK (2022). Analysis of High Class Students' Numeracy Ability in Solving Problems on Geometry Material at SDN 1 Teniga. *Scientific Journal of the Educational Profession* , 7 (2b), 723–731. <https://doi.org/10.29303/jipp.v7i2b.678>
- Nurhikmah, A., Madianti, HP, Azzahra, PA, & Marini, A. (2023). Development of Learning Media Through Educandy Games to Improve Students' Learning Character in Elementary Schools. *Journal of Education and Social Humanities* , 2 (3), 442.
- Permatasari, KG (2021). PROBLEMATICS OF LEARNING MATHEMATICS IN ELEMENTARY SCHOOLS / MADRASAH IBTIDAIYAH. *Scientific Journal of Pedagogy* , 17 (1), 68–84.
- Rachmawati, DA (2023). Analysis of Numeracy Literacy Ability of Grade V Students of SD Islam Darul Huda Genuk Semarang. In *UNISSULA Institutional Repository* . <https://doi.org/10.37630/jpm.v13i2.946>
- Rahmat, AS, & Suparjana. (2023). Implementation of Digital Literacy Control Cards as Strengthening of Literacy-Oriented Pancasila Student Profiles in Elementary Schools. *Pancasila: Jurnal Keindonesiaan* , 3 (1), 22–32. <https://doi.org/10.52738/pjk.v3i1.110>
- Safitri, T., Affandi, LH, & Zain, MI (2022). Character Education Values in Traditional Games of the Sasak Tribe in Babussalam Village, Gerung, West Lombok. *Scientific Journal of Pendas: Primary Education Journal* , 3 (1), 63–76. <https://doi.org/10.29303/pendas.v3i1.1071>
- Safrudin, R., Zulfamanna, Kustati, M., & Sepriyanti, N. (2023). Qualitative Research. *Journal Of Social Science Research* , 3 (2),

1-15.

- Salsinha, CN, Bete, H., Bone, D., Solo, PMMFV, Nifu, MM, Kasa, AR, & Timutang, M. (2024). Optimizing the Utilization of the Merdeka Mengajar Platform as a Means of Strengthening Teacher Competence in the Implementation of the Merdeka Curriculum. *Abdi Insani Journal* , 11 (1), 588-597. <https://doi.org/10.29303/abdiinsani.v11i1.1290>
- Sri Annisa, I., & Mailani, E. (2023). Analysis of Factors Causing Students' Difficulties in Thematic Learning. *INNOVATIVE: Journal Of Social Science Research* , 3 (2), 6469-6477.
- Sugiono, & Lestari, P. (2021). Communication Research Methods (Quantitative, Qualitative, Text Analysis, How to write articles for national and international journals). In *ALFABETA BANDUNG* . <https://doi.org/10.14710/jdep.1.3.35-45>
- Sugiono, Noerdjanah, & Wahyu, A. (2020). Validity and Reliability Test of the SG Posture Evaluation Measurement Tool. *Journal of Physical Therapy* , 5 (1), 55-61. <https://doi.org/10.37341/jkf.v5i1.167>
- Titi Anjarini, & Suyoto. (2022). Development of HOTS Integrated Project-Based Learning Tools in Elementary Schools. *Journal of Social Humanities and Education Research* , 1 (4), 69-80. <https://doi.org/10.56444/soshumdik.v1i4.221>
- Umrah, A., & Naim, SN (2024). Implementation Of Teams Games Tournament (Tgt) Based On Wordwall Application To Improve Learning Interactivity In Grade Vii Students Of Smpn 4 Sungguminasa. *Didactics: Scientific Journal of PGSD FKIP Universitas Mandiri* , 10 (4), 331-342.
- Widati, E., Marlina, E., Harminto, Y., & Triyono. (2025). Improving Reading, Writing, Numerical Skills Through Literacy And Numeracy Dolanan Park. *Jarlitbang* , 11 (1), 1-12.