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**DEVELOPMENT MODEL OF SENAM CERIA ACTIVITY LEARNING FOR MENTAL RETARDATION STUDENTS IN SLB NEGERI DJOJONEGORO TEMANGGUNG, CENTRAL JAVA**

**Arif Adnan Musadi<sup>1</sup>, Dwi Gansar Santi Wijayanti<sup>2</sup>**

Universitas Negeri Semarang<sup>1,2</sup>  
arifadnanmusadi@students.unnes.ac.id,  
dwigansarsanti@mail.unnes.ac.id

**Abstract**

*This study aims to develop a learning model of rhythmic gymnastics activities that are adaptive, interesting, and in accordance with the characteristics of students with disabilities at the Djojonegoro Temanggung State Special School (SLB), Central Java. The model developed is called Cheerful Gymnastics, which is the result of modifying the basic movements of rhythmic gymnastics with a creative and fun approach, accompanied by musical accompaniment that is familiar to children. This study uses the Research and Development (R&D) method referring to the Borg and Gall model, which includes the stages of planning, development, expert validation, small-scale trials, revisions, and large-scale trials. The research subjects amounted to 63 students with disabilities from grades I–VI. The results of expert validation showed a feasibility rate of 88.83% (excellent category). Small-scale trials showed an average result of 78.21% (good category), while large-scale trials showed a significant improvement with an average of 97.44% (very good category). These results prove that Cheerful Gymnastics is effective in improving students' psychomotor, cognitive, and affective abilities, and is suitable for application as a learning model for rhythmic activities in SLB. This model also contributes to the overall increase in motivation, active participation, and physical fitness of students with disabilities.*

**Keywords:** *Cheerful Gymnastics; adaptive physical education; handicapped students; learning models; SLB*

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Correspondence Author: Arif Adnan Musadi, Universitas Negeri Semarang, Indonesia. E-Mail: arifadnanmusadi@students.unnes.ac.id

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**INTRODUCTION**

Physical education is an activity related to the human body from the environment to education (Sari et al., 2024). According to (Tifal, 2023) The purpose of physical, sports, and health education (Penjasorkes) is to form and perfect the foundation of 1) character through the process of internalizing noble values, 2) a personality that reflects an attitude of peace, social care, and tolerance for ethnic, religious, and cultural diversity, 3) critical thinking skills, 4) positive attitudes such as sportsmanship, honesty, discipline, responsibility, commitment, the ability to

work together, and confidence, and democratic spirit, 5) skills in trying through various methods such as games, movement exercises, gymnastics, rhythmic activities, water activities, and outdoor games, 6) the ability to manage oneself, maintain physical fitness, and live a healthy lifestyle, 7) the ability to create and maintain peace in relationships between individuals, 8) physical activities that are specifically designed to improve the fitness and health of the body and form a healthy lifestyle, and 9) positive use of leisure time through active and useful recreational activities. In general, physical education is an education that aims to increase physical activity and overall individual growth (Setiawan et al., 2020). Therefore, educators must be aware of the importance of the role of physical education in the implementation of the 2013 Curriculum (Syafuruddin et al., 2022).

Physical Education has a strong relationship with the interaction between humans and the environment in the context of education (Sari et al., 2024). According to (Hidayat et al., 2023) If directed and managed well, physical education can help children develop useful skills to positively fill their free time, participate in activities that support a healthy lifestyle, thrive in social aspects, and contribute to their physical and mental health. Physical education is not only intended for children in general, but is also given to children with special needs. **Children with special needs**, such as **the blind, deaf, deaf, deaf, deaf, and** other types of special needs, also receive physical education learning tailored to their conditions.

Adaptive physical education is a learning process that is structured by adjusting physical activities, aiming to provide opportunities for individuals with disabilities to participate safely, successfully, and feel satisfaction in every activity they do (Widiyanto and Son 2021). Adaptive physical education also plays a role as one of the methods of service delivery that is comprehensive, with special planning that aims to identify, find, and overcome problems in psychomotor

aspects that arise due to limited sensory abilities and obstacles in the learning process (Febriyanti & Pramono, 2022). According to (Gandasari, 2023) Adaptive physical education is a learning process that is carried out through physical activity, aiming to support the growth and development of students physically and mentally. This learning is designed to optimize students' physical abilities and skills by

reducing various barriers, such as intellectual limitations, fitness levels, as well as social, cultural, and emotional factors, as well as increasing appreciation of beauty, in order to form a whole individual in accordance with educational goals.

Exceptional students (children with special needs) are children who face obstacles or abnormalities in physical, mental, behavioral, or sensory functions so that in order to develop their potential, special education or services related to special education are needed (Khusus et al., 2024). Therefore, they need specialized educational services designed to help them reach their potential optimally (Widiyanto and Son 2021).

Disabled people are individuals who have below-average intellectual abilities and have difficulty adjusting to social norms in society (Nugroho & Lubis, 2021). Children with this condition usually have difficulty concentrating, have less stable emotions, and tend to be alone and withdraw from social interactions (Ardamis & Sari, 2023). Children with disabilities are included in the category of children with special needs who need special education services, which are generally provided through educational institutions such as Special Schools (SLB) (Tommy et al., 2022).

A learning model is a conceptual framework that describes the procedure in systematically organizing the learning experience, with the aim of achieving the desired learning outcomes. This model also serves as a guide for designers and educators in designing and planning the learning process (Indah et al., 2022). According to (Adolph, 2016) The learning model refers to the approach used in the learning process, which includes the goals to be achieved, the steps of the learning activity, the learning atmosphere or environment, and the method of classroom management. A learning model can be understood as a conceptual structure that describes the systematic steps in designing a learning experience to achieve a predetermined learning goal.

Rhythmic gymnastics is a series of gymnastic movements that are performed in tandem with the rhythm of music or free movements that are performed rhythmically, this activity has a close relationship with the ability to concentrate (Wahyudi et al., 2023). Rhythmic gymnastics, often referred to as rhythmic

gymnastics, is a form of exercise that combines body movement with music. This sport not only emphasizes agility and beauty of movement, but also requires coordination, flexibility, strength, and precision in following the rhythm (Siregar et al., 2024).

Creative gymnastics is a type of movement that aims to express a sense of art or beauty, which is performed against the background of music or through free exercises performed rhythmically (Nur Khofifah, Yulian Arianto, 2023).

Based on the results of observations, it is known that rhythmic gymnastics learning is rarely applied at SLB Negeri Djojonegoro Temanggung. The school also does not routinely carry out gymnastics activities, such as the Healthy Friday program which is generally carried out in the form of gymnastics with all school residents. This condition is caused by the limited number of educators, the lack of mastery of rhythmic activity materials by physical education teachers, and the lack of a learning model that suits the needs and characteristics of disabled students. As a result, learning rhythmic activities has not run optimally, and schools sometimes have to bring in gymnastics instructors from outside as a temporary solution. Therefore, it is necessary to develop a structured, interesting, and adaptive learning model, such as Cheerful Gymnastics, which is specifically designed to increase the participation, motor skills, and cheerfulness of disabled students in participating in physical learning at the SLB.

Therefore, the researcher decided to develop Cheerful Gymnastics as a learning model specifically designed for students with disabilities. Cheerful Gymnastics contains movement elements that are the result of modifications of basic movements in rhythmic gymnastics, which are developed creatively and adaptively to suit the needs of students with special needs. The development process is carried out by combining various easily recognizable songs and creative movements that are tailored to the motor skills, concentration, and physical response level of students at SLB Negeri Djojonegoro Temanggung. This model is expected not only to increase students' participation and involvement in physical learning, but also to be able to support the development of their physical, emotional, social, and cognitive aspects as a whole. With a fun and structured approach, Cheerful Gymnastics is

expected to be an innovative solution in improving the quality of learning rhythmic activities in an extraordinary educational environment, especially for children with disabilities.

The development of various Cheerful Gymnastics models can be used to expand students' knowledge and creativity in understanding rhythmic gymnastics movements, as well as can improve their physical fitness through the implementation of physical activities involving Cheerful Gymnastics. Interest has a significant impact on students' interest in doing activities voluntarily without coercion. However, the learning process that tends to be monotonous often causes students to feel bored or bored, which ultimately reduces their enthusiasm. This situation is largely due to the lack of variety in learning methods, particularly in physical fitness activities implemented by teachers in schools (Sudarmono, 2023). Therefore, the development of innovative game models in learning is expected to not only contribute to the improvement of students' physical fitness, but also to create a more dynamic and interesting learning atmosphere. In addition, this model is expected to help **make it easier for** physical education **teachers to carry out** their duties, by providing a more adaptive and fun approach for students with disabilities at SLB Negeri Djojonegoro Temanggung. Thus, Cheerful Gymnastics is expected to be an effective solution in supporting students' physical, social, and emotional development, as well as improving the quality of learning in extraordinary schools.

#### **METODE**

Researchers apply a type of research that uses a research and development method approach, known as Research and Development (R&D). Research and Development (R&D) is a series of steps that have been (Dai, 2022).

The product developed in this study is **in the form of a** rhythmic gymnastics **learning model** specially designed **for** disabled students, under the name Cheerful Gymnastics. The development of the model in this study refers to the procedure proposed by Borg and Gall, which consists of several stages, namely: initial information collection, planning, initial product development, expert validation, product revision, small-scale trial, follow-up revision, large-scale trial. Through these stages, it is hoped that the Cheerful Gymnastics learning model can become a

valid, practical, and effective product in improving rhythmic activities and physical fitness of students with disabilities.

The subjects in this study consisted of 63 students with disabilities from grade 1 to grade 6 at SLB Negeri Djojonegoro Temanggung. Small-scale with 20 students from grades III to IV and large-scale with 63 students were also carried out at SLB Negeri Djojonegoro Temanggung.

The types of data collected in this study include qualitative and quantitative data. Qualitative data was obtained through questionnaires distributed to gymnastics experts, learning experts, as well as from various other sources, both verbal and written, related to the initial product. On the other hand, quantitative data was collected through observation of students during the implementation of cheerful gymnastics product trials, both on a small and large scale. The data obtained from the validation of experts and the results of the trial at both scales were analyzed using descriptive statistical methods to describe and convert the data into the form of percentages using the following formula.

$$P = \frac{F}{N} \times 100\%$$

Information:

P : Introduce yourself

N : Number of Subjects

F : Frequency

The percentage data that has been obtained is then grouped or categorized to obtain relevant information in the research of this model development.

Table 1 : Classification of Assessment Percentages

Yes	Percentage	Category Percentages	Meaning
1.	81% - 100%	Excellent	Highly Worth It
2.	61% - 80%	Good	Proper
3.	41% - 60%	Pretty Good	Quite Decent
4.	21% - 40%	Bad	Not Eligible
5.	0% - 20%	Very Bad	Very Unworthy

## RESULT AND DISCUSSION

The subject of this study is elementary school students with disabilities in Temanggung District, Temanggung Regency, Central Java Province, precisely at SLB Negeri Djojonegoro Temanggung.

### Result

#### Cheerful Gymnastics Profile

Cheerful gymnastics is a form of creative gymnastics designed by combining various kinds of basic gymnastics movements that are systematically arranged and adjusted to the abilities of students, especially children with special needs such as students with disabilities. This gymnastics is carried out with energetic, exciting, and fun musical accompaniment, which serves to attract interest, increase motivation, and create a positive atmosphere during the activity. The name 'cheerful gymnastics' was chosen because it contains the spirit of cheerfulness and fun which is expected to be able to arouse students' enthusiasm in active participation. The main goal of the development of this cheerful gymnastics is to build a fun learning experience, while improving the motor, coordination, and physical fitness skills of disabled students optimally through an adaptive, interactive, and appropriate approach that is in accordance with their characteristics and needs in the Extraordinary School environment. This cheerful gymnastics consists of 5 stages, namely warm-up, core 1, core 2, core 3 and cooling.

The music contained in Sgymnastics Ceria is a combination of children's songs and regional songs consisting of three songs, namely: (1) the song Naik-Naik ke Puncak Gunung, (2) the song Balonku Ada Lima, and (3) the song Apuse. The reason for the selection of these three songs is based on the main target of Cheerful Gymnastics, namely disabled students at Extraordinary Elementary Schools (SLB). The songs were chosen because they have a simple, easily recognizable, and familiar rhythm for children, so that it can make it easier for students to follow gymnastics movements. In addition, the characteristics of cheerful and rhythmic songs are expected to increase motivation, concentration, and active involvement of students in learning activities. The selection of appropriate music is also an important part of creating a learning atmosphere that is fun and adaptive to the special needs of students with disabilities. The facilities and infrastructure used to carry out Cheerful Gymnastics are generally in the form of open fields or large rooms such as halls,

because these activities are usually carried out in groups. A loudspeaker device is also needed so that the instructions and rhythm of the music can be heard clearly by all participants, so that they can move in unison and harmony with the rhythm and dynamics of the music.

**Validation of Gymnastics Experts and Learning Experts on the Development of Cheerful Gymnastics.**

This research will be carried out in two stages, namely small-scale and large-scale tests. Before the initial product of Sgymnastics Ceria is tested on a small scale, validation tests are first carried out by experts to assess the effectiveness and identify product shortcomings based on input from experts. The initial product will be validated by two experts, namely a gymnastics expert and a learning expert. Those who acted as validators were: (1) Dr. Ipang Setiawan, S.Pd., M.Pd, lecturer of gymnastics courses at the PJSD FIK UNNES Study Program; and (2) Drs. Waluya, physical education teacher at SLB Negeri Djojonegoro Temanggung.

No.	Expert	Percentage Results	Information
1.	Dr. Ipang Setiawan, S. Pd., M.Pd	86.84%	Excellent
2.	Drs. Waluya	90.63%	Excellent
	Average	88.83%	Excellent

Based on the results of the questionnaire filled out by gymnastics experts and learning experts, an average score of 88.83% was obtained with the category 'Very Good'. This shows that the Sgymnastics Ceria product is worthy of being continued to the next stage, namely small-scale trials. However, before the implementation of the trial, it is necessary to make revisions based on input from experts, including adjusting movements to better suit the needs of disabled students in Extraordinary Elementary Schools (SLB), as well as improvements to the warm-up music section because the rhythm of the music is considered inappropriate and the tempo is too fast.

#### Small-Scale Trials

After the Cheerful Gymnastics product has been validated by experts and gone through the revision stage, the next step is to test the improved gymnastics

directly to students. Before being widely introduced, Cheerful Gymnastics needs to be tested first in a limited scope, namely through small-scale trials. This trial was held from September 12 to 13, 2024, involving 20 students with disabilities in grades III and IV at Extraordinary Elementary Schools (SLB). This activity was carried out in two meetings with the aim of identifying potential problems, evaluating the effectiveness of the product, and obtaining initial feedback that will be the basis for revision before entering the large-scale trial stage.

Based on the results of the phase I and II small-scale trials that have been carried out at SLB Negeri Djojonegoro Temanggung, student final assessment data was obtained which includes three aspects, namely psychomotor, cognitive, and affective. The evaluation of these three aspects was carried out through questionnaires filled out by physical education teachers, observation sheets, and student assessment sheets related to the development of Cheerful Gymnastics. The results of these three instruments are summarized and explained as follows:

Table 3 : Results of Small Scale Trials

Yes	Aspects	Percentage
1	Psychomotor	84.62%
2.	Cognitive	80.00%
3.	Affective	70.00%
	Average	78.21%

Based on the data in the table, the results of small-scale trials showed that the percentage of 84.62% in the psychomotor aspect was obtained with the category of 'very good'. For the cognitive aspect, the percentage reached 80.00% which was included in the 'good' category. Meanwhile, the affective aspect obtained a percentage of 70.00%, also in the 'good' category. Overall, the average student response to the development of Cheerful Gymnastics was in the 'good' category with a score of 78.21%. Thus, Cheerful Gymnastics is considered suitable for students with disabilities in grades 3 and 4 at SLB Negeri Djojonegoro Temanggung. However, during small-scale trials it was found that there were obstacles where students had difficulty remembering movements because the music did not have a clear beat. Therefore, gymnastics music was then revised to be more suitable and effective for use at the large-scale trial stage. This revision is carried out based on

the results of identifying the shortcomings and weaknesses of the product.

#### Large-Scale Trials

Large-scale trials were conducted with the aim of evaluating the effectiveness of the use of cheerful gymnastics in physical education, sports, and health learning (Penjasorkes) in other classrooms and schools with a wider scope. This activity was carried out at SLB Negeri Djojonegoro Temanggung, which is located in Temanggung District, Temanggung Regency. In the implementation of the trial, which involved 63 students with disabilities from grades I to VI of Extraordinary Elementary Schools (SLB), final data was obtained in the form of student assessments based on three aspects, namely psychomotor, cognitive, and affective. Namely as follows :

Table 4 : Results of Large-Scale Trials

NO	Aspects	Percentage
1.	Psychomotor	92,31%
2.	Cognitive	100,00%
3.	Affective	100,00%
	Average	97,44%

Based on the data contained in the previous table, students' abilities in large-scale trials include three aspects, cognitive, affective, and psychomotor. The results of the trial at SLB Negeri Djojonegoro Temanggung showed that in the psychomotor aspect, students reached a percentage of 92.31%, which is included in the very good category. Students manage to understand and broadcast the movements of Cheerful Gymnastics well, thanks to detailed explanations and their ability to adapt quickly. On the other hand, in the cognitive aspect, the percentage obtained is 100.00% (very good), which shows that students can understand values such as cooperation, honesty, responsibility, and sportsmanship in the learning process. In the affective aspect, students also achieved a percentage of 100.00% (very good). Overall, the average percentage of the third aspect reached 97.44%, which is included in the Very Good category. This shows that students are able to master movement skills well and can follow the development of Cheerful Gymnastics optimally. Thus, it can be concluded that the development of Cheerful Gymnastics has been very well received and understood by students, so it is feasible

to be applied at SLB Negeri Djojonegoro Temanggung.

### Discussion

The final result of this development research resulted in a product in the form of Cheerful Gymnastics, which is a development of rhythmic gymnastics activities. Based on the analysis of the data obtained, it can be concluded that the learning model of rhythmic activity has been successfully developed into a form of Cheerful Gymnastics. The Cheerful Gymnastics product developed is specially designed for use by Special School (SLB) students, especially students with disabilities, with an expert validation rate of 88.73%, which is classified as Very Good. This product has gone through several stages of testing to ensure its effectiveness, both in cognitive, affective, and psychomotor aspects.

In the small-scale trial, the following results were obtained: the psychomotor aspect reached 84.72% (very good), the cognitive aspect obtained 80.00% (good), and the affective aspect obtained 70.00% (good), with an overall average of 78.21%, which is included in the Good category. Meanwhile, in large-scale trials, the results showed a significant improvement with the psychomotor aspect reaching 92.31% (very good), the cognitive aspect 100.00% (very good), and the affective aspect also 100.00% (very good), so that an overall average of 97.44% was obtained, which was categorized as Very Good.

Taking into account all these results, the learning model product of rhythmic gymnastics activities through Cheerful Gymnastics has met the criteria of Very Good and was declared Very Feasible to be applied effectively in physical education learning in Special Schools, especially for students with disabilities. This product has also been proven to make a positive contribution to improving students' motor skills, concept understanding, and social attitudes, so that it can increase the active involvement and learning motivation of students in grades I to VI at SLB Negeri Djojonegoro Temanggung.

Cheerful gymnastics provides various benefits for physical and mental health. With regular implementation, this activity can help students in improving physical fitness, strengthening the immune system, and strengthening muscles. The

dynamic and diverse movements in this gymnastics also contribute to improving the flexibility of the body and the motor coordination of students. Fitness maintained through this activity makes students more active, productive, and better prepared for various daily activities. Based on the results of the research, it can be concluded that the development of Cheerful Gymnastics is an effective learning model and suitable for applying rhythmic gymnastics learning for students with disabilities in grades I to VI.

#### CONCLUSION

This study concludes that the Cheerful Gymnastics model has been successfully developed as an effective rhythmic gymnastics learning approach that is feasible in Special Schools, especially for students with disabilities in grades I to VI. Designed according to the characteristics and needs of students, Cheerful Gymnastics has been proven to increase students' motivation, participation, and psychomotor, cognitive, and affective abilities, as shown by the results of trials in the Good to Very Good category. This model not only supports fun and inclusive learning, but also contributes to improved physical fitness and overall quality of physical education.

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