

## IMPROVED FOREHAND AND BACKHAND TENNIS COURT LEARNING OUTCOMES BY USING MOTION RECORDING AND AUDIO-VISUAL IMAGE MEDIA

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### Abstract

The research aims to improve the learning process of basic techniques of Forehand and Backhand tennis courts of students by using movement recording devices and Audio Visual Image Media. PTK research which is an action research that is carried out cyclically in order to solve problems until the problem is solved. The research subjects of Physical Education and Health Students totaled 32 people. While the object of research is the basic technique process of Forehand and Backhand to solve the problem of completeness of learning court tennis. The results showed that in the first cycle only 35% of students in the complete category. In cycle II, there was an increase in students who reached 87.5% completeness. therefore the hypothesis of action is acceptable, namely that there is an increase after recording movements and Audio Visual Media in the learning process

**Keywords:** Motion Record Tools; Audio visual image media; Learning Outcomes; forehand; Backhand; Airy tennis.

Submitted : 22<sup>th</sup> of December 2022

Accepted : 11<sup>th</sup> of January 2023

Published : 15<sup>th</sup> of January 2023

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DOI <http://dx.doi.org/10.31851/hon.v6i1.10163> 



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## INTRODUCTION

The era of globalisation of education is required to improve and follow the development of science and technology in accordance with abad 21, technology and science activities that are in line must be owned by the younger generation at the time in the milineal era and the role of education is a process of forming a person's character, reason, physical and personal, in addition to learning character building occurs (Nugroho & Fifukha Dwi Khory, 2020). Sports education and learning there is a slight difference, namely with the experience of movement in psychomotor form in students or college students;

At this time the sport of tennis is quite popular and growing, in the FKIP Penjas Universitas Islam Riau including compulsory courses that must be taken by

students. In the course of learning tennis, there are several basic techniques that students learn in the form of basic techniques of forehand, backhand, service, volleyball. The experience of learning basic tennis court techniques is a motor experience to be able to play well after completing lectures at the penjas. In the learning activities of the motion court tennis course, many mistakes are made and cannot correct direct mistakes in the learning process, the basic technique movement phase carried out in learning is correct, in addition, the *gerakan* phase that is carried out has not looked well coordinated, lack of creativity in learning skills, lack of analyzing movement errors and still low achievement hasil learning tennis courts.

One of them is the problem that occurs in learning, there is no movement recording learning model that can be seen in the learning process, the movement phase errors that are carried out cannot be observed and seen by students, fase movements made cannot immediately correct errors caused. When the practical learning process is focused on the movements performed. The way out of overcoming mistakes needs to be found solutions and innovations and updates in learning in the field, one of which is to overcome the mistakes of recording tools (handy Camp) and n video results of the learning process and recording of movement techniques carried out by students in perkuliahan as well as observing the medium of drawing and the movement of basic tennis court techniques. Audio-visual media as an intermediary and support in learning activities to spread ideas, opinions and ideas to recipients (Arsyad, 2010)

The use of movement recording tools and image and audio-visual media as media and learning models will motivate and increase student interest and evaluation tools for the basic technical observation process and can observe movement errors made, basic techniques are recorded to find out student weaknesses in learning basic tennis techniques, by using error analysts from movement record results, Students can inform their mistakes more accurately in learning and can improve them while analyzing errors and paying attention to image

media visually and can improve the quality of student learning. Motion recording and audio-visual media are learning resources to convey informational messages and help the learning process take place. Audio-visual media provides learning resource experiences for students in learning activities (Omodara O.D; Adu E.I., 2014)

Learning is a change and experience of both knowledge, attitudes and psychomotor for the learner. The experience of motion skills through the learning process and practice will increase well and correctly when passed with the experience of correct and precise movement. In court tennis games, there are many basic techniques that must be mastered, it requires regular, directed and programmed learning and training to achieve the best skills (Ardani, 2013). In tennis learning, the techniques that are first taught are forehand and backhand. (Brown, 2001) Forehand and backhand are the dominant movements that tennis court players must master, both activities have the same phase of movement, in learning and training these two basic techniques must be balanced. The basic technique of punches given to the new or beginners is forehandstroke and the most performed by the players is forehandstroke. (Brown, 2001) To be able to get the correct concept of movement demanded by the teacher as a teacher, can apply the right learning methods and models and how to present teaching materials that can cause students' interest and motivation in learning, because tennis court lectures have varying degrees of difficulty, therefore the learning pattern must be varied to adjust to the learning material, the teacher must be creative and innovative to improve learning outcomes, one of which is using media in learning. In accordance with the Minister of Education and Culture No. 22 of 2016, one of the learning principles used is the use of information technology and communication to improve the efficiency and effectiveness of learning. Media is a means and source of learning and is a medium of transformation and suggestion communication in the form of image media both in printed and audio-visual form messengers and communication in the learning process. (Rusman, 2012a).

Multimedia in the form of visual and audio is one of the media for visual and nonvisual communication tools for distributing information in the form of sound and images. Media audio-visual in the form of sound and moving images and still audio-visual in the form of still images and sounds (Haryoko, 2009) (Arsyad, 2009) states that audio-visual media is a medium that helps learning to be seen and heard there are elements of sound and images. Furthermore, by using audio-visual media, novice athletes can identify movements and presentation steps during training, Furthermore, media as a learning resource in the form of learning videos is a new step in training and learning (Agusni & Wijayanto, 2018). (Anzaku, F, 2011) audio-visual is an instructional tool to convey meaning. (Sheahan, 2016) audio-visual media is undoubtedly a tool for learning to encourage learning activities.

Visual and audio media help when learning and teaching activities take place and motivate students and are more interested in learning activities (Omodara O.D; Adu E.I., 2014) Information through the sense of immersion such as audio and visual resources such as visual resources or through combinations of senses. emphasizing that visual media and audio are undoubtedly teaching aids used in the classroom to encourage teaching and learning. (Akinwale, 2015). Media is a means to clarify messages and overcome time, energy and space and the five senses, so as to increase the activation and interest and passion for learning and there is interaction between teachers and students and learning resources and bathe students to learn independently according to the level of kinesthetic, auditory and visual abilities and provide the same experience of perception and stimulation, generally it can be said that media has uses, including: a). Clarify. (Sheahan, 2016), Learning activities are interactions between teachers, students, teaching materials in the form of teaching materials, media as sources of learning and students as communicants and teachers as learning resources or communicators and the target of learning outcomes is a learning objective (Daryanto., 2016). (Cecep, 2011) Learning videos can be classified into Audio Visual Aids in the form of media with

and views. Recording activities carried out in the form of audio-visual media, will provide information and understanding of the phases of the activities carried out in the form of motion skills and interrupting activities that are carried out can be in the form of TV, VCD, slides and films which are audio-visual. This activity can be recorded and can be used as a learning video and aired (Rusman, 2012b) states that learning media a technology carries a message that can be used for learning.

The achievement of learning objectives is more interesting and increases the motivation and interest of students in learning needs to increase learning resources in the form of media Furthermore, the application of audio-visual is easier and faster in understanding basic techniques, because each part of the movement of basic techniques.( Ardyanto, 2018) In addition, the purpose of use. In delivering learning materials, teachers should develop learning resources using innovative learning models, one of which is using media as a learning resource in the form of audio-visual to facilitate and streamline learning basic groundstrokes techniques, so that students are motivated and interested and active in the learning process.( Suryono, 2016) In tennis activities both training and learning punches forehand and backhand groundstroke, is the first stroke that a coach or teacher gives in learning, since these strokes are most performed in the game of tennis, some players and experts state that 47% of the strokes often performed in tennis activities are forehand and backhand punches (Brown, 2002) . From the opinions and explanations of experts, in the process of learning tennis and training, it is necessary to provide basic technical stages or phases of movement that are systematic and directed, so that the basic techniques of forehand and backhand are easy for students to understand and observation of the movement process is depicted in the form of performance assessment and can be carried out process assessment according to the stages or phases of movement of basic forehand and backhand techniques.

## **METHOD**

PTK research which is an action research that is carried out cyclically in order to solve problems until the problem is solved. The research subjects of

Physical Education and Health Students of the Faculty of Teacher Training and Education of Riau Islamic University totaled 32 people. While the object of research is the basic technique process of Forehand and Backhand to solve the problem of completeness of learning court tennis. The research was carried out in the odd semester of FY 2022/2023.

The action research procedure is a PTK research designed for 2 cycles, where each cycle is carried out twice face-to-face, the action plan is cyclic or cyclical stages. (Ardani, 2015) (Arikunto, Suharsimi, Suhardjono, 2006) Stage 1: Action Planning 2: Implementation of Action 3: Observation and Evaluation and Stage 4: Reflection

## RESULT AND DISCUSSION

The results of the first cycle analysis using motion recording tools and audio-visual media by assessing the performance process on kls 3 A Penjas FKIP UIR students with a total of 32 people, there is the lowest process value of 51 and the highest score is 75 with an average of 63. The results of the evaluation of the process of pasa students kls 3 A in cycle I as presented in table 1 below

**Table 1.** Distribution of Assessment of Basic Forhand and Backhand Tennis Techniques Class III. A FKIP UIR Cycle I

No	Range Value	Frequency	Percentage
1	51-55	4	12,5%
2	56-60	6	18,76 %
3	61-65	11	34,37 %
4	66-70	8	25 %
5	71-75	3	9,37 %
SUM		32	100%

Based on the analysis of cycle I above, it appears that the application of the learning model with motion records and visual audio image media has not been able to achieve the expected completion target. It has only reached 35%. From the results of the analysis, it must be reflected, by compiling a learning implementation plan, preparing teaching materials for cycle II, reconstituting learning evaluations by discussing with student lecturers weaknesses and shortcomings and providing

strengthening of performance before the second cycle process. Observation activities by the same observer i.e. the research team . Observations in cycle II are carried out at the end of cycle II, in carrying out reflection activities following the design of action reseach or PTK research.

After the reflection of cycle I, by looking at the results of the recording and discussing with the research team and seeing students the movements made by students from the phases of the movement seen movement errors and comparing with the movement video of the correct phases, it is used as a benchmark for evaluation and planning in cycle II. then the activities of cycle II are carried out planning the learning process based on inputs from cycle I and action actions are carried out the learning process following the steps according to the learning model carried out using motion records and audio-visual image media and observations of steps or phases of movement according to the fotmat that has been prepared with the team. Action and obseravsi activities are interrelated actions not in PTK research

Berdbased on reflection and process assessment, the results of cycle II analysis using motion recording tools and audio-visual media by assessing the performance process on kls 3 A Penjas FKIP UIR students with a total of 32 people, there is the lowest process value of 69 and the highest score is 93 with an average of 81.94. The results of the evaluation of the process of pasa students kls 3 A in cycle II as presented in table II below

Table 2. Distribution of Assessment of Basic Techniques for Forhand and Backhand Tennis Class III. A FKIP UIR Cycle II

No	Value Range	Frequency	Percentage
1	69-73	4	12.5%
2	74-78	5	15.63%
3	79-83	10	31.25%
4	84-88	7	21.87%
4	89-93	6	18.75%
	SUM	32	100 %

Based on the analysis of cycle II above, it appears that the application of learning models with motion records and visual audio image media has mostly reached the expected target of 87% of the classical, with this result it is seen that the application of motion recording tools and the busiest audio-visual media can increase learning outcomes

### **Data Analysis and Discussion**

Action research using a pattern of 2 (two) cycles, it turns out that it can test the hypothesis of the actions proposed in this study based on the theoretical framework presented in this study to increase forehand and backhand learning of FKIP UIR Assessment students by using motion records and audio-visual image media with an average of 75. Then to see the success in this action research as stated in the research method, learning success is measured by process assessment through observation sheets with a minimum of 75 from the classical research subject, this can be seen from the results of the reflection cycle I there is an increase in learning 45%, with an average score of 63, this proves that with the learning of court tennis using motion records and image and audio-visual media provides an increase in learning outcomes process.

Furthermore, the results of cycle II action research, seen from the results of reflexes through process assessment and to see improvement after the cycle II action process, through performance assessment with forehand and backhand basic technique observation sheets with an average value of 81.94, means an increase classically exceeding the target of 75 and an overall achievement rate of 87.5%. Based on the comparison of cycle I with cycle II, the increase is quite significant, it can be seen that this 40% increase proves that learning court tennis using motion recording devices and audio-visual media is very influential in the learning process. Recapitulation of PTK results in table 3 below



**Table 3.** Recapitulation of PTK Application of motion record and audio-visual image media in the learning of tennis courts basic forehand and backhand techniques in FKIP Assessment Students of Riau Islamic University

NO	INTERVAL	PTK RESULTS	PERCENTAGE
1	CYCLE I	Learning Completion	35 %
2	CYCLE II	Learning Completion	87,5%

Learning by using motion recorders and audio-visual image media forhand and backhand can increase student motivation and interest, in addition students can correct mistakes and shortcomings in learning propes. (Dwiyogo, 2008) states that the media is one of the transformations of science that can be used in information presentation activities. The development of learning media generates desire, motivation and stimulation of learning activities. This can be seen with the use of audio-visual media and motion recording greatly helps the effectiveness of the learning process.

The use of media and movement recorders is an innovative learning method and model, so that students will be more active and active and do not miss out on learning basic forehand and backhand techniques. (Sanjaya, 2010) interspersing audio-visual media can activate students in the learning process time both eyes, telinga (Omodara, O. D., & Adu, 2014) aligning the activities of the learning process, the use of audio-visual media provides knowledge and facilitates student understanding in learning activities. (Pate, Russel, 1984) to understand knowledge and observation using tools can be done in steps with clear stages. (Higgins, 1977) to see the ability to move can be done by paying attention to the phases of movement, attention must be centered and movement and results must be seen systematic relationships, as well as can help the evaluation of movement processes. (Kavita, V., Sharma, J. P., & Tiwari, 2013) states the role of multimedia can increase activity, interest and motivation in learning activities

## CONCLUSION

Action research, namely the application of motion recording devices and audio-visual drawing media in learning basic forehand and backhand techniques in court tennis courses can be concluded: There is an increase in the student learning process after the application of motion records and audio-visual image media in the first cycle by 35%, There was an increase in student learning completion after the application of motion records and audio-visual image media by 87.5%

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