



## The Effect of Assistant Media on Block Ability Field Tennis Game

Muhammad Ali<sup>1\*</sup>, Fajar Vidya Hartono<sup>2</sup>, Abdul Sukur<sup>3</sup>, Ahmad Atiq<sup>4</sup>, Choirul Umam<sup>5</sup>, Andika<sup>6</sup>,  
Sumajaya<sup>7</sup>, Agus Setiawan<sup>8</sup>

<sup>123</sup> Coaching Education Study Program / Faculty of Sport Science / Jambi University

<sup>123</sup> Street. Jambi - Muara Bulian No.KM. 15, Mendalo Darat, Kecamatan Jambi Luar Kota, Kabupaten  
Muaro Jambi, Jambi

<sup>45678</sup> Physical Education Study Program / Faculty of Teaching and Education / Tanjung Pura University /  
Indonesia

<sup>45678</sup> Street. Profesor Dokter H. Hadari Nawawi, Bansir Laut, Pontianak Tenggara Districts,  
Pontianak City, West Kalimantan, 78124

<sup>1</sup>[muhammad.ali@unja.ac.id](mailto:muhammad.ali@unja.ac.id), <sup>2</sup>[vidya@fio.unja.ac.id](mailto:vidya@fio.unja.ac.id), <sup>3</sup>[abdulsukur@fio.unja.ac.id](mailto:abdulsukur@fio.unja.ac.id),

<sup>4</sup>[ahmad.atiq@fkip.untan.ac.id](mailto:ahmad.atiq@fkip.untan.ac.id), <sup>5</sup>[choirulumam@gmail.com](mailto:choirulumam@gmail.com), <sup>6</sup>[andikaan@student.untan.ac.id](mailto:andikaan@student.untan.ac.id),

<sup>7</sup>[sumadjaya14@gmail.com](mailto:sumadjaya14@gmail.com), <sup>8</sup>[agussetiawan@student.untan.ac.id](mailto:agussetiawan@student.untan.ac.id)

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### ABSTRACT

*This study aims to determine the effect of auxiliary media on the hitting ability of the tennis game. The research method used is an experimental method, namely using a pre-experimental design experimental design. For a more specific experimental research design, the author uses a one-group pretest-posttest research model. The population in this study were third-grade students of SD Negeri 1 Jambi which consisted of 1 class totalling 31 students. The sample in this study were all third-grade students at the Ijambi State Elementary School, totalling 31 students who were designated as all samples because the number of samples or subjects was less than 100 people, therefore the sampling used the total sampling technique, which included all members of the population as research sample. Based on the results of the research, the count value is 5,208 by looking at the statistical table where the degrees of freedom  $db=(N-1)$  are  $31-1=30$  and at the 5% significance level, the  $t$ -table value is 2,042. Thus, it can be concluded that the value of  $t$ -test  $> t$ -table or  $14,667 > 2,042$ , meaning that the hypothesis is accepted that there is an effect of using auxiliary media on the ability to play tennis in third-grade students of SD Negeri 1 Jambi. The percentage increase is 34.9%.*

**Keywords:** Auxiliary Media; Hitting Ability; Tennis Court.

## INTRODUCTION

Sport is a planned and structured physical activity that gives the effect of excitement to those who do it. By exercising regularly and according to the body's ability, a person can feel the benefits of exercising including improving blood circulation so that it makes the body fit because metabolism in the body can run smoothly, improve brain performance so that in carrying out daily activities we can be more productive, it needs to be combined with a lesson.

The education process requires coordinated and directed coaching. Thus students are expected to achieve maximum learning achievement so that educational goals can be achieved. One of the subjects in the education curriculum in schools is physical education. Physical and health education is essentially an educational process that utilizes physical activity and health to produce holistic changes in individual qualities, both physically, mentally, and emotionally.

Physical education treats children as a unified whole, a total being, rather than just considering them as someone with separate physical and mental qualities (Husdarta, 2011). Physical education aims to increase the physical growth of students through basic movements that have been possessed since birth by every human being (Prasetyo et al., 2019). Physical education can increase movement activities that refer to specific body functions of the nervous system itself, which in this physical education is encouraged to improve fitness in children by carrying out regular and systematic movements (Mukhlis Yarso et al., 2019). The material in physical education contained in the learning device is one of the field tennis activities

The court tennis learning process based on the results of researchers' pre-research observations at SD Negeri 1 Jambi, it was found that several problems were found which became the basis of the problematic learning process, where in mastering the basic running techniques students were unable to optimize the learning of tennis, the strokes had not been able to penetrate what they wanted because at the time of setting the steps. unstable, meaning and reading the ball directly from the opponent. Overcoming existing problems, improvements need to be made so that student learning outcomes related to how when they want to punch students can be maximized, one of them is by using modified learning media.

Modifications in physical education subjects and educational sports are aimed at making students feel satisfied in following lessons, increasing the likelihood of success in participating, and students being able to perform movement patterns correctly (Jatmika, 2005). Furthermore, in modifying the learning media the researchers used several media including paper balls, and bats which are almost similar to rackets.

Based on some of these opinions, it can be concluded that the use of tools in physical education learning is very important. There are many obstacles faced by physical education teachers in learning physical education material, due to limited tools or even no tools provided by the school. The availability of relevant and adequate tools will greatly support the smooth teaching and learning process. On the other hand, if the tools

are not available, it requires a teacher to be creative so that learning can run well and optimal learning outcomes are obtained.

Overcoming problems in learning the material for short-distance running athletics requires learning strategies that are prepared in the lesson plan. The plan is the use assistive media that can provide enthusiasm, motivation, and innovation so that students feel always fresh, and feel comfortable when learning, especially in athletics for short-distance running. Auxiliary media in this study are media modified by researchers. The media used by the teacher must be appropriate and directed to achieve learning objectives.

The media is not used as an entertainment tool, or not solely used to make it easier for teachers to deliver material, but really to help students learn according to the goals to be achieved (Saputra, 2015). The media is in the form of paper media which aims to improve students' ability to run short distances by considering the level of safety. Auxiliary media with paper materials in the form of paper balls, coloured cardboard funnels, and sticks from paper rolls. The media used were applied in the basic techniques of short-distance running athletics. The basic techniques provided are combined with the use of assistive media so that students' interest in participating in the learning process will be more effective and improve their ability to run short distances according to the expected goals.

Physical education learning should provide various facilities to support various activity programs that will be taught by teachers (Husdarta, 2009). Furthermore, according to Corey (in Syaiful Sagala, 2012), the concept of learning is a process in which a person's environment is deliberately managed to allow participation in certain behaviours under special conditions or generate responses to certain situations.

The types of motion in tennis are cyclical and non-cyclical (Yusuf & Irawadi, 2019). Cycle motion is the motion that is done when running to catch the ball, while non-cyclical motion is motion when hitting the ball (Mulya & Agustriyani, 2020). Based on these basic techniques (Nugroho, 2016), each has different basic movements. The basic motion of groundstrokes is a volley swing, a block/punch, a serve and a smash is a throwing motion (throwing) and a lob is a lift (Budi et al., 2020). To know the kind of motion in tennis is determined by the volume, intensity and style of play (Yusuf & Irawadi, 2019). Volume is the work done by players during motion activities related to the length of the game, ball speed, consistency in hitting the ball, and relatively wide field mastery (Sukadiyanto, 2002).

Each individual can carry out a variety of daily work activities. An assessment of what a person can do lies in the willingness, ability, and ability of the individual to do something. A person's abilities will participate in determining behaviour and results. What is meant by abilities or abilities is the talent inherent in a person to carry out an activity physically or mentally that he has acquired since birth, learned, and from experience (Soehardi, 2003), According to Soelaiman (2007) ability is a trait brought born or learned that allows someone who can complete his work, either mentally or physically. Every sports athlete, although well-motivated, cannot all be able to play well. Abilities and skills play a major role in individual behaviour and performance (Siahaan, 2017). Skills are skills related to tasks that are owned and used by someone at the right time.

Field tennis is a very popular game, even in foreign countries. This game is quite difficult to do because it has different characteristics from games that use other rackets (Nugroho & Febrianti, 2019). Playing tennis is not like learning to ride a bicycle, because if you have done it once does not mean you can do it again at a different time and situation (Nugroho, 2016). It takes continuous practise so that the feeling of the ball and racket combined with swings, punches and so on can be achieved (Dharmadi, Kanca, 2017). According to Sukadiyanto (2002), the basic principle in playing tennis is hitting the ball over the net and into the opponent's playing field. At the time of hitting the ball, efforts must be made to make it difficult for the opponent to return it.

According to Rink (Husdarta, 2009) related to learning media (learning facilities), three components must be met, namely: 1) basic facilities, 2) complementary facilities, and 3) supporting facilities. These three facilities can assist teachers in optimizing learning programs to achieve the target, namely the formation of the quality of children's movements and other abilities. Students can learn better and have fun if a school can meet all the learning needs of students. The problems that students face in learning are relatively small. Student learning outcomes will be better (Syaiful Bahri Djamarah, 2008).

The roles and functions of physical education learning media are 1) improving the quality of human resources who can compete and cooperate in the era of globalization, 2) improving physical skills and quality to support daily activities, 3) increasing independence in participating in intra-curricular activities. as well as extracurricular and studying at home (Husdarta, 2009). For learning media to be used to teach students, many principles must be considered (Wina Sanjaya, 2006), including:

The media used by the teacher must be appropriate and directed to achieve learning objectives. The media is not used as an entertainment tool, or not solely used to make it easier for teachers to deliver material, but really to help students learn according to the goals to be achieved. The media to be used must be following the learning material. Each subject matter has its uniqueness and complexity (Herlina, 2019). The media to be used must be following the complexity of the learning material. For example, to teach students to understand population growth in Indonesia, teachers need to prepare some kind of graph that reflects this growth.

Learning media must be following the interests, needs, and conditions of students. Students who have poor listening skills will find it difficult to understand lessons when auditive media are used. Vice versa, students who have poor visual abilities will find it difficult to catch learning materials presented through visual media (Yarmani et al., 2019). Every student has different abilities and styles. Teachers need to pay attention to each of these abilities and styles. The media to be used must pay attention to effectiveness and efficiency (Taqwim et al., 2020). Media that requires expensive equipment is not necessarily effective in achieving certain goals. Likewise, very simple media do not necessarily have no value. Every media design by the teacher needs to pay attention to the effectiveness of its users. The media used must be following the teacher's ability to operate it. Often complex media, especially the latest media such as computer media, LCD, and other electronic media require special skills to operate them. Any sophisticated media will not be able to help without the technical ability to operate it. Therefore, the teacher should learn first how to operate and utilize the media that will be used. This needs to be emphasized because teachers often make principal mistakes in using learning media which in the end the use of media does not increase the ease of student learning, on the contrary, makes it difficult for students to learn. According to Sugiyono (2012), the hypothesis is a temporary answer to the research problem formulation, where the research problem formulation has been stated in the form of a question sentence. According to Suharsimi Arikunto (2006), the hypothesis is a temporary answer to the research problem, until it is proven through the collected data.

## **METHOD**

The research method used is the experimental method. According to Sugiyono (2012), experimental research can be interpreted as a research method used to find the

effect of certain treatments on others under controlled conditions. In this study, the author uses a pre-experimental design form of experimental design. Because there are still external variables that also influence the formation of the dependent variable, the experimental results which are the dependent variable are not solely influenced by the independent variable. This can happen because there is no control variable and the sample is not chosen randomly (Sugiyono, 2012). For a more specific experimental research design, the author uses a one-group pretest-posttest research model.

The population in this study were third-grade students of SD Negeri 1 Jambi which consisted of 1 class totalling 31 students. The sample in this study were all third-grade students at the 1 Jambi State Elementary School, totalling 31 students who were designated as all samples because the number of samples or subjects was less than 100 people, therefore the sampling used the total sampling technique, which included all members of the population as research sample.

## RESULTS AND DISCUSSION

### Data Description

The description of the data in this study is an analysis in the form of the results of research on the effect of using auxiliary media on the ability to run short distances in third-grade students of SD Negeri 1 Jambi. The description of the data is as follows:

**Table 1.**  
Descriptive data on the ability of tennis strokes

Description	Mean	Min	Max	Standard Deviation
Pretest	9.23	7	11	1.047
Posttest	12.45	11	15	1.207

The description of the research data based on table 1 shows the ability of students consisting of 31 students who became the research sample, so the pretest results obtained an average of 9.23, a minimum score of 7, a maximum score of 11, with a standard deviation of 1,047. While the posttest obtained an average of 12.45, a minimum score of 11, and a maximum score of 15, with a standard deviation of 1,207.

The comparison between the initial test and the final test is described in table 2 as follows:

**Table 2.**  
Comparison of the average pretest and posttest

Data	Average Learning Outcomes
Pretest	9.23
Posttest	12.5



Based on the results of the descriptive analysis of the pre-test and post-test data in table 2, the average pretest and post-test of sprinting in third-grade students of SD Negeri 1 Jambi are 9.23 on average and 12.45 on the final test.

### Hypothesis Testing Analysis

Before analyzing hypothesis testing, the analysis prerequisites were first tested. The analysis requirements testing is carried out by:

#### Normality test

The normality test was conducted to determine whether the data in the study were normal or not. The normality test was carried out by analysis using the Liliefors formula. Based on the analysis that has been done, the results of the data in table 3 are as follows:

**Table 3.**  
Significance of Pretest and Posttest

Description	Signification	Information
Pretest	0.144<0.161	Normal
Posttest	0.143<0.161	Normal

Based on the results of table 3, it can be seen that the pretest significant value is 0.144 and the post-test value is 0.143. These results are compared with the Liliefors table with degrees of freedom (DK) = n-1 or 31-1 = 30 at a significant level of 5%, so the value is 0.161. Based on these results, it can be concluded that L-count < L-table, then the data is normally distributed.

#### Homogeneity Test

A homogeneity test was carried out to determine whether the data in the study were homogeneous or not. The homogeneity test was carried out by analysis using the f-test formula. The results of the homogeneity test that has been carried out can be seen in Table 4 as follows:

**Table 4.**  
Homogeneity Test Results

Signification	Information
1.36<4.18	Homogenous

Based on the results of table 4, it can be seen that the significant value obtained is 1.36. These results are compared with the critical value table F with degrees of freedom dk1 = 1 and dk2 = 29 at a significant level of 5%, so the value is 4.18. Based on these results, it can be concluded that F-count < F-table or 1.36 < 4.18, so the data is homogeneously distributed.

### Effect Test

The effect test was carried out using t-test analysis. Based on the results of the calculation through the application of the t-test formula, it is described in table 5 as follows:

**Table 5.**  
T-Test Results Between Pretest and Posttest

T-count	DB	T-table	Significance level
5.208	30	2.042	5%

Based on the data in table 5, the t-count value is 5,208 by looking at the statistical table where the degrees of freedom  $db=(N-1)$  are  $31-1=30$  and at the 5% significance level, the t-table value is 2,042. Thus the value of t-test  $>$  t-table or  $14,667 > 2,042$ , meaning that the hypothesis is accepted that there is an effect of using auxiliary media on the ability to play tennis in third-grade students of SD Negeri 1 Jambi. The percentage increase is 34.9%.

Research related to short-distance running in third-grade students of SD Negeri 1 Jambi. The results of the research obtained are that there is an effect of using auxiliary media on the ability of tennis strokes in third-grade students of SD Negeri 1 Jambi. Increased tennis stroke ability as measured through a research grid, the assessment is the result of a comparison of the initial test and the final test that has been given treatment. through learning media which is a media to help deliver the content of tennis stroke material.

Auxiliary media in this study are media modified by researchers to help students when learning to experience optimal abilities. Media used by teachers must be appropriate and directed to achieve learning objectives. The media is not used as an entertainment tool, or not solely used to make it easier for teachers to deliver material, but really to help students learn according to the goals to be achieved. The media is in the form of paper media which aims to improve students' ability to run short distances by considering the level of safety.

Improved research results are given with learning stages in the form of 1) the implementation of short distance running learning with paper ball media is carried out utilizing students being at the starting line, the ball is placed at a certain point with a predetermined distance. Students take the balls one by one and then put them into the cardboard that has been prepared and then repeat it until the balls that have been prepared run out, 2) the implementation



of learning tennis strokes with paper-coloured funnel media is done by: hitting the ball with a tool that resembles a racket.

## CONCLUSIONS AND SUGGESTIONS

Based on the results of the research, the t-count value is 5,208 by looking at the statistical table where the degrees of freedom  $db=(N-1)$  are  $31-1=30$  and at the 5% significance level, the t-table value is 2,042. Thus, it can be concluded that the value of t-test  $>$  t-table or  $14,667 > 2,042$ , meaning that the hypothesis is accepted that there is an effect of using auxiliary media on the ability to play tennis in third-grade students of SD Negeri 1 Jambi. The percentage increase is 34.9%.

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