

The Effect of Physical Education Instructional Media on Long Jump Learning Outcomes

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Abstract

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This research aims to see the effect of the use video on physical Education learning outcomes for state high school students in Medan City. The method used in this research is an experimental method using the Pre Experimental Design research type. The sample in this research was state high school students in Medan City, totaling 25 students. Data analysis in this study used SPSS (version 25). The results of this research show that the data normality test shows that the pretest and posttest significance values are greater than 0.05, so it can be concluded that the data is normally distributed. The significance value homogeneity test is greater than 0.05, so it can be concluded that the data is homogeneously distributed. The T test between the pretest and posttest output of the "paired sample test" above, shows the sig value. (2 tailed) is $0.00 < 0.05$, then H_0 is rejected and H_a is accepted. The average student learning result in the pretest is 67.32 while in the posttest it is 79.30 with a significance test of the T Test (2 tailed) < 0.05 , so H_0 is rejected and H_a is accepted. State High School in Medan City.

Keywords: Influence, Learning Media, Physical Education

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INTRODUCTION

Physical education is a subject taught to students with the aim of providing various introductions to movement and basic movement skills (Ariyanto et al., 2020; Moerianto et al., 2021) (Ritonga, 2022; Verawati et al., 2021) from the opinions of these experts it can be concluded that physical education is an integral part of the movement learning process. The learning process emphasizes more on the formation of basic movement skills, meaning that students who do not yet understand movement will not have difficulty in participating in physical education learning, this is in line with the theory put forward by (Dewi et al., 2020, 2022; Dewi, Sitorus Pane, et al., 2023; Dewi & Faridah, 2022; Endriani et al., 2022). Physical education is an educational process that utilizes systematically planned physical activities that aim to develop and improve individuals organically, neuromuscularly, perceptually, cognitively and emotionally within the framework of the national education system (Dewi, Verawati, et al., 2023; Rahma Dewi et al., 2024a; Verawati et al., 2022). In the learning process of physical education, sports and health, more movement skills are learned than theory (Akhmad, 2016; Mustafa & Dwiyojo, 2020). Students not only listen and absorb the material presented by

the teacher, but students are directly involved in the learning process. From the learning process, students can produce gradual changes in themselves, both in the areas of knowledge, skills and attitudes. The aim of learning physical education, sports and health is to direct students to do sports activities, so as to create a healthy and strong generation (Abdul Hakim Siregar et al., 2024; Basuki Sunarno, 2020; Damrah, 2020; Fauzan et al., 2024; Fitriady et al., 2020; Mustafa, 2022). The purpose is to achieve teaching objectives, students learn and are educated through movement, apart from that students are taught to move to help the process of growth and development (Rahma Dewi et al., 2024b; Verawati & Dewi, 2019). To achieve the objectives of physical education learning in schools, it is necessary to have support from various interrelated factors, including teachers, students, curriculum, facilities and infrastructure, environment and social conditions. Of these factors, the one that plays a very important role is the role of a teacher. The intended role of the teacher is related to the role of the teacher in the learning process. In this case, it is a learning process that is applied by a teacher in athletic subjects, especially long jump.

It is hoped that sports learning in schools can have a positive impact on children's growth and development so that innovation and development must continue to be carried out (Kustiawan et al., 2019; Silaban et al., n.d.). The use of learning models and learning media that are interesting, varied, safe and easy to use are the main weapons that every teacher must have. Mastery of movement is not the only goal that must be achieved in the sports learning process at school, but emotional, psychological and social maturity must also be the target of sports learning outcomes. Although the results of many studies carried out in the field of physical education show that the physical education curriculum does not exist at an appropriate and satisfactory level.

One of the sports carried out in the educational process is athletics. Athletics is material that is taught based on the existing curriculum at school. Athletic material is included in physical education subjects. Athletics are divided into several numbers, including running, jumping and throwing. Athletic sports really require strong and well-trained energy and stamina. In the jump event, a very high, stable and maximum jump is required. According to (Happy, 2012) "jumping is moving by lifting the legs forward, down or up quickly and lowering them again." In the jump events there are four jump numbers, namely long jump, Long Jump and high jump and pole vault. Even in high school, basic jumping movement abilities have been studied with various modifications of learning media so that later jumping abilities can develop and improve. Learning must also be fun because children easily get bored with monotonous and less varied learning. According to Husdarta (Reno et al., 2022), "modifying the media is one of the efforts that physical education teachers can make, so that students can take part in lessons happily."

At the high school education level, there is athletics subject matter, especially the jumping numbers in the Long Jump in school physical education. Basically, Long Jumping must prioritize good and correct basic jumping movements. To achieve learning objectives, it cannot be denied that physical education teachers are required to be creative and innovative so that learning objectives are conveyed to students. Teachers are required to innovate and be able to adapt themselves to existing situations in schools, which must provide learning

materials in accordance with school conditions and must obtain optimal learning results. "Almost all of the existing physical education learning facilities are designed for adults. In the athletic learning process there are many media that can be used by physical education teachers so that learning can be carried out well and can attract students' interest in carrying out the learning provided by the teacher, so that teachers can overcome deficiencies. facilities available at the school. When learning at school, Long Jump material is given and taught as is. Teachers usually teach the movements and practice them to students and then the students practice on the field. Long Jump learning should be taught from the basics to form good movement patterns and basic techniques are really needed in learning. This is what makes teachers lack understanding of learning basic Long Jump technical movements and a lack of innovation to create tools that go into the realm of basic jumping technical movements. With this innovation, teachers can provide learning and the prepared material can be conveyed to students, so students can master the lesson and students are interested in learning.

Learning media is very necessary in the realm of physical education learning so that the learning process can run well and make it easier to achieve the desired learning process and is an effort to ensure that the learning process is not boring for students. (Yanuardi et al., 2024) states, learning media can generally be interpreted as a tool or means of communication to convey information from one party to another. So modifying learning media tools in physical education is very helpful for the teaching process for physical education teachers. Apart from that, students can participate in physical education learning well. According to Tite (Vai et al., 2021)"Basic technique is an initial level of technical mastery, which consists of the important components of a particular sport at the level that is easiest to perform." Basic Long Jump technique is the first step in introducing the basic movements of the Long Jump technique. Basic techniques are carried out so that the movements carried out during implementation run correctly and are continuous with advanced techniques.

The process of learning the Long Jump in high school also requires basic jumping techniques, because with basic techniques students want to learn and understand jumping movements but have not progressed to the actual movement. This can also inspire teachers to prepare lessons by including learning tools using existing tools that are made at low cost with the aim of students being able to recognize basic technical movements and be willing to do Long Jumps. Several previous studies have shown that the use of long jump learning media can improve basic jumping movement skills at the educational level (Febrianti et al., 2024; Hidayati et al., n.d.; Simon et al., 2024; Suharnoko & Firmansyah, 2018). The basic problem experienced by high school students is the weakness in implementing the effect of video use on learning outcomes of physical education using video-based learning media that can be taught to high school students in Medan City. The purpose of this study was to see the extent to which the use of learning videos influences physical education learning outcomes, whether it can improve physical education learning abilities in long jump material.

METHODS

The method used in this research is an experimental research method (Sugiyono, 2023). The experimental research method is a research method used to determine the effect of a particular action or treatment carried out intentionally on a particular condition. The method used in this research aims to reveal whether or not there is an influence of learning media on students' long jump results. In this case, the researcher used the Pre-Experimental Design research type on the basis that the researcher wanted to see to what extent the application of pre-experimental research could have an impact on improving students' abilities in doing long jumps. The research design used in this study was One Group Pretest Posttest Design. with the following design:



Figure 1. Design Experiment

Information:

O₁ : Pre-Test
O₂ : Post-Test
X : Treatment

In this research, the sampling technique used purposive sampling technique. Purposive sampling is "a technique for determining samples with certain considerations (Sugiyono, 2023). The characteristics of the sample used in the study were male and female high school students who studied long jump material. Based on this opinion, in this research the researcher chose to use class. The tools and materials used in this research are as follows; video of basic long jump techniques and questionnaire. The technique for collecting data is to provide an online questionnaire with google form of 50 questions. Then, after getting the pretest data, treatment is given based on the video of basic techniques for performing long jump techniques by athletes. The treatment in this research was given twice. The treatment was also given referring to the principle of experimental research, namely that the treatment can be stopped if there is a change in the experimental subject. After the treatment, a final test (posttest) was carried out in the form of a long jump test with the aim of determining the increase in the abilities of the research sample. Data analysis is a very important part of research. Because with data analysis, the validity of the stated hypothesis can be tested and then a conclusion can be drawn. Based on the explanation that has been put forward, the data analysis carried out was normality test, homogeneity test, influence test.

RESULTS & DISCUSSION

Data was obtained from the results of online questionnaire tests using Google Form and after the subjects received treatment with learning video media.

The frequency distribution of research data on learning outcomes can be seen in the table below:

Table 1. Distribution of Pretest and Posttest Learning Results Data

Test	Mean	Max	Min	Standard Deviation
Pretest	67,32	79	25	9,32
Posttest	79,30	85	75	2,68

The following presents the distribution of the average frequency of learning outcomes scores for the initial test (pretest) and final test (posttest) in graphical form:

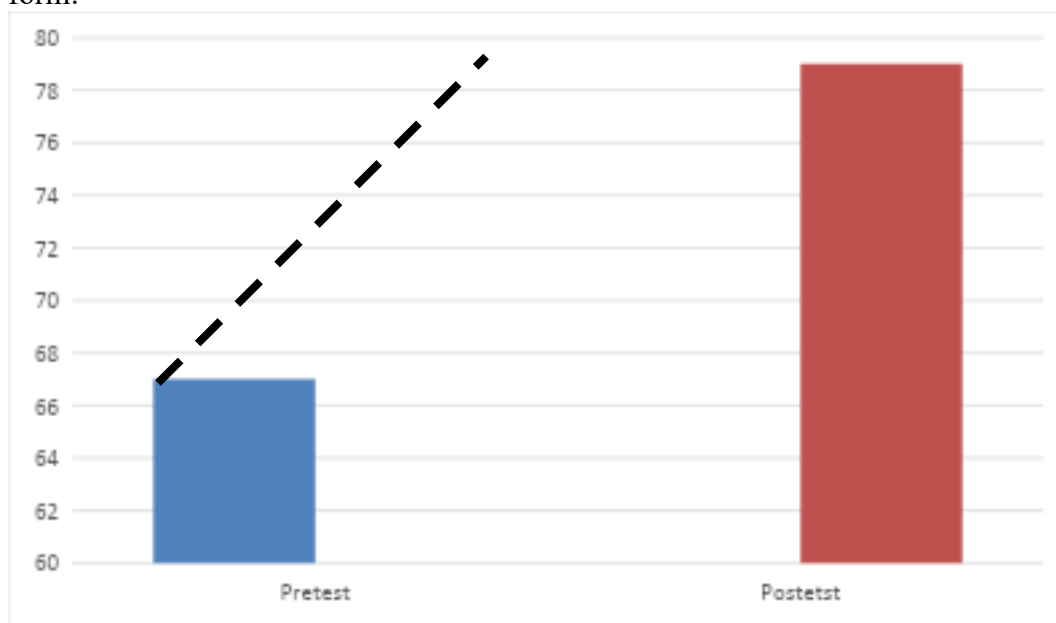


Figure 2. Graph of Average Learning Result Scores Using Pretest and Posttest Videos

Before testing the hypothesis. First, the analysis prerequisites are tested. The testing of analytical equipment is carried out using a normality test to determine whether the data in the research is normal or not. The normality test was carried out by looking at the comparison of the significance values of each variable listed in the Kolmogorov-Smirnov column using SPSS (version 25). Based on the analysis that has been carried out, the data results in table 2 are as follows:

Table 2. Results Data Normality Test

Description	Significance	Information
Pretest	182>0.05	Normal
Posttest	236>0.05	Normal

Based on the results of the table above, it can be seen that the pretest and posttest significance values are greater than 0.05, so it can be concluded that the data is normally distributed. Then a Homogeneity Test was carried out to determine whether the data in the research was homogeneous or not. The homogeneity test was carried out by looking at the comparison of significance values and each variable listed in the significant column of the test of homogeneity using SPSS

(version 25). The results of the homogeneity test that have been carried out can be seen in table 3 as follows:

Table 3. Homogeneity Test Results

Significance	Information
0,035>0.05	Homogeneous

Based on the results of the table, it can be seen that the significance value is greater than 0.05, so it can be concluded that the data has a homogeneous distribution. After that, carry out an influence test, an influence test carried out to find out whether the proposed hypothesis is accepted or rejected, namely by using t-test analysis. Based on the calculation results through the application of the t-test formula, it was obtained before we discussed the interpretation of the numbers contained in the "Paired Sample Test" output table. First, we need to know the formulation of the research hypothesis and decision making guidelines in the paired sample test data in table 4 as follows:

Table 4. T-test results between pretest and posttest

Indicator	Mean	Number of Students (N)	(2 tailed)	Significance
Pretest	67,32	25	,000	0,05
Posttest	79,30			

Based on the "paired sample test" output table above, the sig value is known. (2 tailed) is $0.00 < 0.05$, then H_0 is rejected and H_a is accepted. So it can be concluded that there is an average difference between the pretest and posttest learning outcomes, which means that there is an influence of the use of video learning media in improving long jump learning outcomes in high school students.

This research is experimental research to improve students' learning outcomes, namely the Influence of Learning Media on Jump Learning Outcomes. The research process was carried out by looking at students' basic abilities through an initial test (pretest), then they were given learning strategies on basic Long Jump technique material using video media, which had two stages, namely the first stage was preparing questions using Google Fonts because it adapted to the conditions of the online learning process. The question questionnaire was given to 25 class x State High School students in Medan City via the WhatsApp group. After the first stage has been completed, a final test (posttest) is immediately carried out which aims to compare basic abilities and final abilities after learning or treatment. After the research process has been carried out, the next stage is to analyze the influence test between the initial test and the final test, where based on the results of research data analysis it can be stated that in the initial test the ability scores were lower than in the final test, based on these results, an increase was seen between the initial test and the final test.

Based on the results of the research and analysis of influence tests that have been carried out, it can be concluded that there is a significant influence of learning media on the long jump learning outcomes of state high school students in Medan City. The average student learning outcome in the pretest was 67.32 while in the posttest it was 79.30 with a significance test of the T Test (2 tailed) < 0.05 , so H_0 was rejected and H_a was accepted. So it can be concluded that there is an average

difference between the pretest and posttest learning outcomes, which means that there is an influence of the use of learning media in improving long jump learning outcomes for State High School students in Medan City.

This increase in ability is the influence of the video media learning process carried out. The result is that the media learning carried out has a positive influence considering the opinion according to (Jani et al., 2022) Media is anything that can be used to channel messages from the sender to the recipient so that it can stimulate students' thoughts, feelings, concerns and interests in such a way that the learning process occurs. The video shown is dominated by basic video techniques using foot and hand movements, when performing basic techniques the video using feet and hands is shown in a position that can be adjusted to suit your needs, the video shown when performing basic video techniques during starting, body in the air, repulsion and landing, the video has quite good images and is easily watched by students. Based on the results of the data through statistical analysis, it can be seen after comparing the initial test and the final test that most of the results obtained by students have improved. Audio visual media is media that has better sound elements and image elements because it includes sound and images. (Ramadhan et al., 2020) because the image and sound elements support the learning process, based on the results displayed by researchers in the field, they have a positive impact on developing and improving the quality of students in relation to student learning outcomes. It is hoped that these results can be applied in the field to improve learning achievements and daily activities carried out by students, related to the quality of learning and movement which has an impact on cognitive abilities. Learning media is any form of channel as an intermediary or messenger from the sender to the message recipient. Learning media can stimulate students' interest in learning and help teachers and students in the learning process.

CONCLUSION

Based on the results of the research and analysis of influence tests that have been carried out, it can be concluded that there is a significant influence of learning media on the long jump learning outcomes of state high school students in Medan City. The average student learning outcome in the pretest was 67.32 while in the posttest it was 79.30 with a significance test of the T Test (2 tailed) <0.05 , so H_0 was rejected and H_a was accepted. So it can be concluded that there is an average difference between the pretest and posttest learning outcomes, which means that there is an influence of the use of learning media in improving long jump learning outcomes for State High School students in Medan City.

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