



## The Effect Of Audio Visual Learning Media Towards Basketball Shooting Outcomes Learning Of SMP Negeri 2 Students At Kawunganten

Mario Dani Pratama,<sup>1✉</sup> Donny Wira Yudha Kusuma<sup>2</sup>

<sup>12</sup>Department of Physical Education, Health, and Recreation, Faculty of Sports Science  
Universitas Negeri Semarang, Indonesia

### Article History    Abstract

Received : 10 March  
2025  
Accepted : March 2025  
Published : May 2025

#### Keywords:

Audio Visual Learning  
Media; Basketball  
Shooting; Learning  
Outcomes

*This study aimed to determine the effect of audio visual learning media towards basketball shooting outcomes among students at SMP Negeri 2 Kawunganten. Using a quantitative experimental approach with a pretest-posttest control group design, the study involved 32 students, divided into an experimental group and control group. The experimental group received audio visual learning media containing basketball shooting techniques, while the control group received traditional learning methods. Data was collected through a basketball shooting test, conducted at a 4 meter distance with 10 shooting attempts. The results were analyzed using descriptive statistics, normality tests, homogeneity test, and an Independent t-test. The findings revealed a significant improvement in the experimental group, with the pre-test average score of 3.36 and post-test average score of 7.00. In contrast, the control group showed a less significant improvement, with a pre-test average score of 3.25 and a post-test average score 4.56. The Independent t-test showed a significant difference in the shooting results between the experimental and control groups ( $\text{Sig.} = 0.001 < 0.05$ ). This indicates that audio visual learning media had a positive effect on improving basketball shooting outcomes. It is concluded that audio visual learning media can significantly enhance basketball shooting skill in students at SMP Negeri 2 Kawunganten.*

#### How To Cite:

Pratama, M, D., & Kusuma, D, W, Y., (2025). The Effect Of Audio Visual Learning Media Towards Basketball Shooting Outcomes Learning Of Smp Negeri 2 Students At Kawunganten. *Indonesian Journal for Physical Education and Sport*, 6 (1), 114-120

<sup>✉</sup>Corresponding author:

E-mail: mariodani28@students.unnes.ac.id

## INTRODUCTION

Sports are human activities that involve physical movement and enhance the body's capabilities, aiming to achieve specific goals such as health, enjoyment, education, or achievement. Sports involve body movements that have an impact on the entire body. Sports help stimulate muscles and other parts of the body to move. Muscles become trained, blood circulation and oxygen flow in the body become smoother, and the body's metabolism becomes optimal. The body feels refreshed, and the brain functions better. In the present time, one of the most popular sports among the public is basketball (Pane, 2015).

Basketball is a team ball sports consisting of two teams, each made up of five players, who compete to score points by putting the ball into the opponent's basket. The game of basketball is played on a hard-floored area, with a length not exceeding 94 feet (approximately 29 meters) and a width not exceeding 50 feet (approximately 16 meters) (Sudjarwo, 2015).

Basketball game, of course, is inseparable from the basic techniques of the game, and one type of throw is shooting. In basketball, shooting is a very important skill. This shooting technique in basketball is the skill of shooting the ball into the basket to score points. Basketball shooting can be done with one hand or two hands. To perform a good shot, you need to practice regularly and follow each step correctly. There are various types of basketball shooting techniques, including the one-handed set shot, two-handed set shot, lay-up shot, hook shot, free throw, jump shot, three-point shot, and runner, all aimed at putting the ball into the opponents's basket to score points (Kurniawan et al., 2022).

In basketball, the most popular technique among many people is shooting. This is because,

according to (Supriatna, 2023), shooting has become an attraction for players to engage in basketball, and it also serves as an appeal for spectators to enjoy the game. This statement is true because players naturally have the instinct to quickly score points, and for spectators, watching a player score is the most anticipated moment when watching a basketball game.

Shooting is one of the fundamental techniques that must be learned by basketball players or students. It is not only important to learn how to shoot well, but it is also essential to train the correct shooting technique and improve accuracy in order to score points. This audiovisual learning media is necessary to enhance the learning outcomes of shooting for each student. Many students believe that shooting is very difficult. However, in reality, if we understand the proper basic shooting technique, it becomes easier to execute (Dindha Amelia, 2020).

According to (Meirizal et al., 2022), the shooting technique has a term called BEEF, which stands for Balance, Eyes, Elbow, and Follow Through.

The learning referred to here involves studying the body position phase, hand position phase, ball bouncing phase, and ball receiving phase, all of which will be covered in the basic shooting learning video. Although in reality, during physical education lessons, the basic shooting video will be shown indoors for a moment to view the learning video, it will not diminish the students interest or motivation in receiving the material. According to (Effendi et al., 2022), motivation can encourage and increase students interest in learning because this learning media, in the form of a video, is packaged in such a way as to attract (Kurniawan et al., 2022).

According to (Timur et al., 2024), "If the media conveys messages or information with an instructional purpose or contains teaching intentions,

then the media is called learning media.” Learning media refers to all tools and materials that can be used for educational purposes, such as radio, television, books, newspapers, magazines, and so on (Sudjarwo, 2015).

According to (Adi et al., 2018), not all teachers use media optimally to support the learning process. This is due to the lack of understanding among teachers about the use of learning media. Teachers must have sufficient knowledge and keep up with technological developments so that they can utilize learning media to support the teaching and learning (Adi et al., 2021).

The learning media chosen by the researcher is audiovisual learning media, which is designed in such a way as to attract students. According to (Fitria, 2018), several studies show that information presented through images can be absorbed by 65% of the viewers. On the other hand, when presented through sound, the information can only be absorbed by 40% of the viewers. This means that when both media are combined, the message being conveyed will be more easily absorbed by students who are watching it (Adi, 2021).

A result of learning is the change in behavior of the students, which can be measured and observed through changes in attitude, knowledge, and skills. This theory is the definition of learning outcomes, which can be interpreted as the attitudes, knowledge, and skills acquired from the learning process, where these changes lead to positive outcomes and have an impact on the (Ulfah & Opan Arifudin, 2021).

The preliminary study conducted at SMP Negeri 2 Kawunganten involved interviewing 12 students. They responded that the understanding they gained during the learning process was primarily from the media of LKS (Student Worksheet) books. Meanwhile, the use of audio visual learning media was still rarely implemented. Based on the

background that has been explained, the researcher became interested in conducting a study focused on audio visual learning media and its effect on basketball shooting learning outcomes. Based on the importance of developing effective learning methods, the researcher aims to conduct a study to determine the impact of audio visual learning media on learning outcomes in basketball shooting.

## METHODE

In the research conducted, the researcher decided to use a quantitative research type in the form of an experiment. The research design used is a pretest-posttest control group design. This is intended to test the effect of audio visual learning media towards basketball shooting learning outcomes (Sugiyono, 2017).

In this study, 32 samples were used, divided into 2 groups as the experimental variable and the control variable. The training was conducted over 4 sessions. The groups will undergo two treatments and two test, namely a pretest before the treatment and a posttest after the treatment. This is intended to observe the effect of the treatment after the pretest, allowing for the observation of any differences. The treatment given in this study involves providing audio visual learning media containing material on basketball shooting to the students of SMP Negeri 2 Kawunganten.

To determine the basketball shooting results, the instrument is a basketball shooting test, basketball shooting test was used at a distance of 4 meters with 10 shooting attempts. This test was conducted with an initial measurement during the pre-test and a final measurement during the post-test. The pre-test was carried out to assess the students initial ability before the treatment, while the post-test was conducted to evaluate the students learning outcomes after the treatment. The shooting activity was followed by all

research subjects, both the experimental group and the control group.

Data collection was conducted using descriptive analysis, which was used to provide an overview of the data that had been collected in order to determine the results of the pre-test and post-test scores. To determine the effect of the differences between the experimental and control group, an Independent t-test was performed, with the following statistics used :

$$t_{hitung} = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1+n_2-2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$\bar{X}_1$  : The mean score of the first sample group

$\bar{X}_2$  : The mean score of the second sample group

$n_1$  : The sample size of the first group

$n_2$  : The sample size of the second group

$S_1$  : The standard deviation of the first sample group

$S_2$  : The standard deviation of the second sample group

As a prerequisite of the Independent t-test, the data between the experimental group and the control group must be normally distributed in the normality test and have the same variance in the homogeneity test (Sihotang, 2023).

## RESULTS AND DISCUSSION

This study was conducted to determine the effect of audiovisual learning media towards basketball shooting outcomes learning of SMP Negeri 2 students at Kawunganten. The data obtained consists of the results from the pretest, treatment, and posttest. The data was collected by having students perform 10 shooting trials. The students were divided into two groups, the experimental group and the control group.

**Table. 1 Descriptive Statistics**

		Statistics			
		Pre-test Eksperimen	Post-test Eksperimen	Pre-test Kontrol	Post-test Kontrol
N	Valid	16	16	16	16
	Missing	0	0	0	0
Mean		3.63	7.00	3.25	4.56
Std. Error of Mean		.221	.183	.171	.223
Median		3.50	7.00	3.00	5.00
Mode		3	7	3	5
Std. Deviation		.885	.730	.683	.892
Variance		.783	.533	.467	.796
Range		3	2	2	3
Minimum		2	6	2	3
Maximum		5	8	4	6
Sum		58	112	52	73

## Descriptive Analysis

The descriptive analysis of shooting results for the experimental group shows that the pre-test had an average score of 3.36, with the lowest score being 2 and the highest score being 5. In the post-test, the average score was 7, with the lowest score being 6 and the highest score being 8. For the control group, the pre-test had an average score of 3.25, with the lowest score being 2 and the highest score being 4. In the post-test, the average score was 4.56, with the lowest score being 3 and the highest score being 6.

## Normality Test

The normality test was conducted using the Kolmogorov-Smirnov<sup>a</sup> test. In this study, SPSS was used to determine whether the data follows a normal distribution, with a calculation of (Sig. > 0.05). The results of the normality test can be seen in the tabel below:

**Table. 2 Normality Test Result**

Tests of Normality						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-test Eksperimen	.153	16	.200 <sup>*</sup>	.949	16	.473
Post-test Eksperimen	.180	16	.173	.941	16	.364
Pre-test Kontrol	.128	16	.200 <sup>*</sup>	.972	16	.869
Post-test Kontrol	.155	16	.200 <sup>*</sup>	.933	16	.275

<sup>\*</sup>. This is a lower bound of the true significance.  
a. Lilliefors Significance Correction

Based on the table above, it can be concluded that the Kolmogorov-Smirnov<sup>a</sup> normality test result for the experimental group pre-test is pre-test = 0.200 > 0.05, which means the data

in this study is normally distributed. The Kolmogorov-Smirnov<sup>a</sup> normality test result for the experimental group post-test = 0.173 > 0.05, which means the data in this study is normally distributed. The Kolmogorov-Smirnov<sup>a</sup> normality test result for the control group pre-test is pre-test = 0.200 > 0.05, which means the data in this study is normally distributed. The Kolmogorov-Smirnov<sup>a</sup> normality test result for the control group post-test is post-test = 0.200 > 0.05, which means the data in this study is normally distributed. By observing Kolmogorov-Smirnov<sup>a</sup> test criteria using SPSS, where the values for all pre-test and post-test result are 0,05 (sig. > 0,05), it can be concluded that the data is normally distributed.

### Homogeneity Test

The homogeneity test is conducted to determine the similarity of variations obtained from a homogeneous population. Variations can be considered homogeneous if the sig > 0.05. The results of the homogeneity test can be seen in the table below:

**Table. 3 Homogeneity Test Result**

Tests of Homogeneity of Variances					
		Levene Statistic	df1	df2	Sig.
Shooting	Based on Mean	1.304	3	60	.281
	Based on Median	.864	3	60	.465
	Based on Median and with adjusted df	.864	3	52.941	.465
	Based on trimmed mean	1.281	3	60	.289

The results of the homogeneity test show that the sig. value is greater than 0.05 (0.281 > 0.05). Based on this testing result, it can be concluded that the data in this study is homogeneous.

### Independent Sample t-Test

The test aims to determine the difference in basketball shooting result among students at SMP Negeri 2 Kawunganten. The test conducted is the Independent sample t-test is that the data must meet normality and homogeneity test. The results of the variable show an effect if the Sig. (2-tailed)<0.05, indicating a significant difference between the

shooting results of the experimental group and the control group. If the Sig. (2-tailed)>0.05, then there is no significant difference between the shooting results of the experimental group and the control group.

The results of the Independent sample t-test can be seen in the table below:

**Table. 4 Independent Sample t-Test**

Independent Samples Test									
Levene's Test for Equality of Variances					t-Test for Equality of Means				
	F	Sig.	t	df	Significance One-Sided p Two-Sided p	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Hasil Belajar									
Equal variances assumed	1.976	.170	8.457	30	<.001	2.438	.298	1.848	3.028
Equal variances not assumed			8.457	28.974	<.001	2.438	.298	1.848	3.027

Based on the test, it can be seen that the significant value for the pre-test and post-test result is Sig. (2-tailed) = 0.001 < 0.05, indicating a significant difference in the shooting results between the experimental group and the control group.

To see the average basketball shooting results for the experimental group and the control group, it can be seen in the table below:

**Table. 5 Average Shooting Results**

Group Statistics				
Hasil Belajar	Kelas	N	Mean	Std. Deviation
	Eksperimen	16	7.00	.730
	Kontrol	16	4.56	.892

Based on the test results in the table above, it can be seen that the average shooting score for the experimental group is 7.00, while the average shooting score for the control group is 4.56. The improvement experienced by the experimental group is 93.06%, while the improvement in the control group is 40.31%. It can be concluded that the average increase in basketball shooting learning outcomes for the experimental group is higher than the average shooting results of the control group.

The results of the study show that students who used audiovisual learning media demonstrated a significant improvement in basketball shooting skills compared to the group that did not use the

media. Audiovisual media provided a clear visual demonstration of the basic basketball shooting technique, allowing students to better understand and practice these techniques more effectively. Based on the results above, which show a Sig. (2-tailed) =  $0.001 < 0.05$ , it can be interpreted that there is a difference in basketball shooting learning outcomes between the experimental group and the control group. Therefore, it can be concluded that “there is an effect of audio visual learning media towards basketball shooting outcomes learning of SMP Negeri 2 students at Kawunganten”.

## CONCLUSION

### Conclusion

Based on the results of the study on the effect of audiovisual learning media towards basketball shooting outcomes learning of SMP Negeri 2 students at Kawunganten, it can be concluded that there is a significant effect of audiovisual learning media on basketball shooting outcomes learning. This is proven through the test result for the experimental group, where the Sig.  $0.001 < 0.005$ , indicating that audiovisual learning media has a significant effect on the experimental group. Furthermore, the improvement experienced by the experimental group was 93.06%, while the control group only improved by 40.31%.

## REFERENCES

- Adi, S. (2021). *The Importance of Multimedia Technology in pe Learning*. 574(Iset 2020), 182–185.  
file:///C:/Users/HP/AppData/Local/Mendeley Ltd./Mendeley Desktop/Downloaded/Adi - 2021 - The Importance of Multimedia Technology in pe Learning.pdf
- Adi, S., Aldapit, E., Nova, A., Dharmika Nugraha, P., Hutomo Bhakti, Y., & Bang Redy Utama, M. (2021). Virtual Multimedia Communication for Physical Distancing in Physical Education. *Journal of Physics: Conference Series*, 1779(1).  
<https://doi.org/10.1088/1742-6596/1779/1/012016>
- Adi, S., Soenyoto, T., & Sulaiman, S. (2018). The Implementation of Media in Teaching and Learning of Physical, Sport, and Health Education Subject. *Journal of Physical Education and Sports*, 7(1 SE-Articles).  
<https://journal.unnes.ac.id/sju/index.php/jpes/article/view/19740>
- Dindha Amelia. (2020). UPAYA MENINGKATKAN HASIL BELAJAR SHOOTING FREE THROW BOLA BASKET MELALUI MEDIA AUDIO VISUAL. 21(1), 1–9. <http://mpoc.org.my/malaysian-palm-oil-industry/>
- Effendi, Y., Cahyani, O. D., & Adi, S. (2022). MOTIVASI BELAJAR SISWA PEMBELAJARAN PENDIDIKAN JASMANI. *Citius : Jurnal Pendidikan Jasmani, Olahraga, Dan Kesehatan*, 1(2 SE-Articles), 26–30.  
<https://journal.unugiri.ac.id/index.php/citius/article/view/272>
- Fitria, A. (2018). Penggunaan Media Audio Visual Dalam Pembelajaran Anak Usia Dini. *Cakrawala Dini: Jurnal Pendidikan Anak Usia Dini*, 5(2), 57–62.  
<https://doi.org/10.17509/cd.v5i2.10498>
- Kurniawan, Y., Subandowo, & Rohman, U. (2022). Pengaruh Penggunaan Media Audio Visual terhadap Peningkatan Hasil Shooting Bola Basket dalam Pembelajaran PJOK Siswa MAN Kota Surabaya. *Jurnal Pendidikan Kesehatan Rekreasi*, 8(1), 231–236.
- Meirizal, Y., Widiastuti, Sulaeman, I., Dlis, F., Hambali, S., Taufik, M. S., Haneif, Y. N., & Setiakarnawijaya, Y. (2022). Effect of the BEEF (Balancing, Eyes, Elbow, Follow Through) training method on free throw shooting skill. *Journal of Physical Education and Sport*, 22(12), 3200–3205.  
<https://doi.org/10.7752/jpes.2022.12407>
- Pane, B. S. (2015). Peranan Olahraga Dalam Meningkatkan Kesehatan. *Jurnal*

- Pengabdian Kepada Masyarakat*, 21(79), 1–4.  
<https://jurnal.unimed.ac.id/2012/index.php/jpkm/article/view/4646>
- Sihotang, H. (2023). Metode Penelitian Kuantitatif. In *Pusat Penerbitan dan Pencetakan Buku Perguruan Tinggi Universitas Kristen Indonesia Jakarta*. <http://www.nber.org/papers/w16019>
- Sudjarwo. (2015). *MENINGKATKAN PEMBELAJARAN SHOOTING BOLA BASKET DENGAN MENGGUNAKAN MEDIA GAMBAR* Heri Rustanto. 12.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R & D*. CV. Alfabeta.
- Supriatna, E. (2023). *Metode Bermain Dalam Pembelajaran Shooting Bola Basket*. 3, 3329–3339.
- Timur, M. P., Purbosari, P. M., & Siswi, D. A. (2024). PENGARUH MEDIA PEMBELAJARAN AUDIO VISUAL TERHADAP PEMBENTUKAN KARAKTER SISWA SEKOLAH DASAR. *SENTRI: Jurnal Riset Ilmiah*, 3(2), 586–610. <https://doi.org/10.55681/sentri.v3i2.2299>
- Ulfah, & Opan Arifudin. (2021). Pengaruh Aspek Kognitif, Afektif, Dan Psikomotor Terhadap Hasil Belajar Peserta Didik. *Jurnal Al-Amar (JAA)*, 2(1), 1–9.