MJPES
Musamus Journal of Physical Education and Sport (MJPES)
ISSN 2622-7835 (online), ISSN 2622-7827 (print)
Volume 6, No. 1, October 2023 Pg. 224- 233
http://ejournal.unmus.ac.id/index.php/physical

Extracurricular Students' Lob Shot Accuracy was Improved by Drilling Training and Patterned Strokes Method

Mochamad Reza Aditiya Maskun[1 *], Khaeroni[2], Iwan Setiawan[3]

[1,2,3] Physical Education Program, Universitas Negeri Jakarta, Indonesia

*Corresponding author: Mochamad Reza Aditiya Maskun, e-mail: rezaaditiya0511@gmail.com

Received: 15 September 2023, Accepted: 07 October 2023, Published: 31 October 2023

Abstract

Objectives. The purpose of this research is to investigate the impact of drilling methods and patterned strokes on the precision of students' lob shots in badminton. By identifying the most effective training methods, badminton extracurriculars can create more focused and effective training programs. This research is unique in its emphasis on accuracy in lob shots, rather than simply precision of movement as in previous studies.

Materials and methods. This study employs a comparative quantitative approach that utilizes an experimental method with a Two-group pretest-posttest Design to investigate the lob hit accuracy of badminton players. The research was conducted at Padindi Vocational School, West Jakarta, with a sample size of 20 students who participated in the badminton extracurricular. The total sampling technique was used to divide the participants into two distinct treatment groups, with 10 individuals in the group that used the drilling drill method and the other 10 in the group that employed the patterned strokes method. The obtained data on lob hit accuracy was collected through test instruments.

Results. Based on the results of the Independent Sample T-Test, it can be concluded that the drilling training method is more effective than the patterned strokes training method in improving the accuracy of lob shots. The t count obtained from the test was 2.425, which is higher than the t table value of 2.10092.

Conclusion. The research study found that both the drilling training method and the patterned strokes training method had a positive impact on improving the accuracy of lob shots. The average score before the training for the drilling method was 6.40 which increased to 8.60 after the training. Similarly, for the patterned strokes training method, the average pretest score was 6.70 which improved to 7.20 after the training. These findings suggest that both of these training methods can be effective in enhancing the accuracy of lob shots.

Keywords: Badminton, Lob Shot, Method, Drilling, Patterned Strokes.

DOI: 10.35724/mjpes.v6i1.5532

Introduction

Badminton is a sport that involves using a racket and specific techniques to hit the shuttlecock to win the game. One of the most important techniques in badminton is the lob shot, which is used to change the game strategy by throwing the shuttlecock to the opponent's area far behind them. The accuracy of the lob shot plays an important role in determining scores and overall game strategy. It is essential to understand how the exercise method can influence a student's ability to perform the lob shot correctly. This is evident in every place where badminton is played, whether it be inside a room or out in the open field (Hasibuan et al., 2020).

Badminton is a sport that has gained significant public attention due to its achievements, which can be seen through the various pathways of assistance and guidance provided by educational and training programs run by the Unity Branch Management of Badminton in Indonesia (PBSI Pengcab). This forum is one of the ways the general public can show support for the development of badminton and contribute to reaching the highest level of achievement. Many areas now have their own badminton schools or training programs to promote the sport from a young age. The achievements in this sport are the result of consistent, methodical exercise by students with the help of qualified trainers, managers, appropriate facilities, and infrastructure for training. In addition to its beneficial training elements such as tactics, techniques, physical fitness, and mental toughness, badminton requires specific skills such as serving, forehand, backhand, drop shot, lob, and smash.

To play badminton well, one needs to master several techniques. One of the most important techniques required in badminton is the lob shot. This technique involves hitting the shuttlecock from the back of the court, usually from behind the opponent, and directing it high up in the air towards the opponent's backcourt.In addition to mastering the lob shot, there are several other basic techniques that must be learned in badminton. These include holding the racket correctly (grips), maintaining an alert stance, proper footwork, and different types of strokes. It is important to master these basic techniques in order to excel in the sport (Lengga et al., 2020).

In sports, exercises play a significant role in developing skills and improving the performance of athletes or students. In badminton, two common methods of practice are drilling and patterned strokes. The drilling method involves repeating a particular technique over and over again to automate movement and improve precision. On the other hand, patterned strokes involve a series of blows with certain patterns that combine various techniques. Increase accuracy badminton lob shot , performed patterned drilling and stroke exercises . A number of method exercise in badminton revealed by (Dahniar Widya Puspita Dewi et al., 2021) Shadow

training, also known as shadow practice, is an exercise in badminton where the player hits without a shuttlecock. The aim of shadow practice is to increase footwork, speed, power, hold, and strengthen the athlete's beginner blow. Stroke practice, on the other hand, is an exercise where players make stroke variations to improve their technique. This exercise is completed when the athlete beginner controls the method of holding the racket, footwork, and all basic techniques.

Drilling training is a method of training aimed at increasing the accuracy of an individual or as a method used for learning movement skills like the deep lob shot in badminton. Drilling practice is a method where a player focuses on one movement or technique repeatedly to increase accuracy and strength of the blow. By doing drilling practice, a player can identify any weakness in their technique and fix it by repeating the movement many times. Drill practice is an exercise carried out repeatedly or sustainably to acquire skills and automate movements (Fitriadi & Barlian, 2019).

Patterned strokes according to (Primayanti, 2019) involves a series of sequential and continuous strokes that combine different techniques. It is performed repeatedly to create a harmonious and integrated suite of techniques. This allows for the creation of a cohesive form and a cohesive playing style.

Padindi Vocational School is an institution that offers extracurricular activities, one of which is badminton. However, there are some existing problems in the implementation of the program. One of the issues is the lack of proficiency among participants in the lob shot. Their results are not satisfactory, as they tend to miss the target. Moreover, some students become bored during the exercise due to their insufficient skills in playing badminton. Therefore, it is crucial to identify the most effective method to improve the accuracy of the student's lob shot. A study is conducted to investigate the influence of different drilling methods and patterned strokes to achieve this goal. By having a better understanding of the most effective exercise methods, the extracurricular badminton program can be designed with purposeful and impactful exercise programs..

As for research This in line with Studies that have been conducted by (Fitriadi & Barlian, 2019) proves in a way whole results study find that More lob drilling practice effective in increase ability lob shots compared with patterned lob strokes exercise . Then research conducted by Muhtadis, et al., (2020) that providing treatment drilling drills bait throw influential towards results forehand lob and deliver influence of 56.15% compared before treatment is carried out . Then research conducted by (Cahyaningrum et al., 2018) with results is exercise combination shadow with drilling and practice combination shadow with both

strokes can increase ability speed reaction and accuracy of badminton smash . Then by (Ariyanto et al., 2020) that results study obtained more drill method Good its influence rather than method exercise pattern blow to feather lob skill parrying at Athletes unity hair parry Keinan Jaya Guworejo Sragen Year 2021. Based on the background of the research, the objective of this study is to compare the accuracy of student lob shots in extracurricular badminton at Padindi Vocational School, West Jakarta, using two different methods: exercise drills and patterned stroke exercises.

Materials and Methods

Study participants

The study focuses on a group of 20 students who participate in the badminton extracurricular program at Padindi Vocational School. This group represents the entire population being studied.

Study organization

This study employs a quantitative approach using a quasi-experimental, or pseudo, method. The research design utilized is the Two Groups Pretest-Posttest Design, which involves a pretest before treatment is administered and a posttest after treatment is administered. The study compares the effectiveness of two methods: the Drill Training method and the Strokes Exercise method. The design of the study is depicted in the figure below, which illustrates the pseudo-experimental method utilizing the pretest-posttest design.:

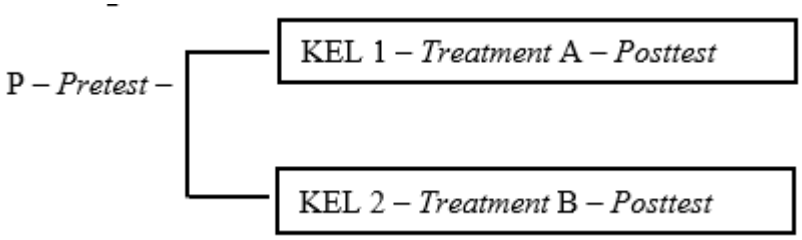

Figure 1. Procedure Flow Study

Description :

P	= Population
Pretest	= Test beginning accuracy lob shot
KEL 1	= Group 1 (K1)
KEL 2	= Group 2 (K2)
Treatment	= Using Method Training *Drill*
Treatment B	= Using Method Training *Strokes* Patterned
Posttest	= Test end accuracy lob shot

In research, there are two main methods for selecting a sample - the apply method and the total sampling method. The apply method involves selecting a portion of the population to be studied, while the total sampling method takes the entire existing population into account.

With the total sampling method, the existing population becomes the sample used for the research.

Statistical analysis.

The instrument used for conducting research and carrying out studies is crucial for accurate data collection and documentation. In this particular study, the accuracy of badminton lob overhead shots will be measured and analyzed. The instrument of choice for conducting this test is (Alhusin M.S, 2007) recommended apparatus:

Table 1. Instrument Study

No	Indicator	Sub Indicator
1	Preparation	1) Grip Handshake or gun. 2) Return to position wait or accept . 3) Rotate the shoulders with the soles of the feet are raised in part back . 4) Move holding hand _ racket to on with head racket leads to on
2	Implementation	1) Laying body weight on the back leg . 2) Move hands that don't dominant to on For guard balance . 3) *Backswing movement* put wrist hands on the situation bent . 4) Do it impact on the racket with *the shuttlecock* is located on head as momentum.
3	Follow Through	1) Hands swing to front traverse body 2) Use the momentum of the movement swing For return to part middle field

Results

Before starting the group treatment drilling method, a pre-test is conducted to assess the accuracy of the lob shot in the group. Once the pre-test is completed, the group receives treatment in the form of drilling practice. After undergoing the treatment, the group conducts a post-test to evaluate the changes that have occurred due to the applied exercise method. The pre-test and post-test results of the group treatment drilling method are presented below.

Table 2. Pre- Test and Post- Test Drilling Method

	N	Median	Variance	Std. Deviation	Min.	Max.	Range	Mean
Pre-test	10	6.00	5,600	2,366	3	10	7	6.40
Post-Test	10	8.50	0.933	0.966	7	10	3	8.60

The table above shows that when the group underwent pre-test treatment using the drilling method, they obtained the lowest mark of 3, while the highest mark is 10. The average

mark obtained by the group during the pre-test was 6.40. However, during the post-test, there was an increase in the results. The lowest value obtained was 7, while the highest was 10. The average mark also increased during the post-test for this group, becoming 8.60.

For the group that underwent treatment with the patterned strokes method, their pre-test accuracy especially for a lob was lower. Then, this group received treatment exercises using the patterned strokes method. After that, they underwent a post-test to see the influence caused by the treatment given. The following are the results of the pre-test and post-test in the group that underwent treatment using the patterned strokes method.

Table 3. Pre- Test and Post- Test Patterned Strokes Method

	N	**Median**	**Variance**	**Std. Deviation**	**Min.**	**Max.**	**Range**	**Mean**
Pre-test	10	6.50	2,456	1,567	4	9	5	6.70
Post-Test	10	7.00	2,400	1,549	5	10	5	7.20

The results above show the pre-test results of group treatment for stroke patterns. The lowest value obtained was 4, while the highest was 9, with an average of 6.70. The post-test results showed an improvement, with the lowest value obtained being 5, and the highest being 10, with an average of 7.20.

Prerequisite Test Results

1. Normality Test

Collected data can said to be normal if test results with Kolmogorov Smirnov obtained Sig value is more big from 0.05 (> 0.05). Results of the normality test on the collected data with using SPSS 26 is as following .

Table 4. Normality Test Results

Group Treatment	**Test**	**Kolmogorov-Smirnov test**		
		Statistics	**Df**	**Sig.**
Drilling	Pre-Test	0.167	10	0.200
	Post-Test	0.187	10	0.133
Patterned	Pre-Test	0.197	10	0.200
Strokes	Post-Test	0.155	10	0.200

The test results indicate that all the data collected have a significance level above 0.05, meaning that the data follows a normal distribution.

2. Homogeneity Test

Test this intended For prove that the data has been collected originate from the same population . Following is homogeneity test results from the data collected with using SPSS 26.

Table 1. Homogeneity Results

	Category	Levene Statistics	df1	df2	Sig.
Accuracy Data Lob Shot	*Based on mean*	0.199	1	18	0.163
	Based on median	0.63	1	18	0.239
	Based on median and with adjusted df	0.63	1	17,650	0.244
	Based on trimmed mean	0.186	1	18	0.173

When making decisions about the homogeneity of data based on mean, it's important to consider the significance level. If the significance value is greater than 0.05, then the data is considered to be homogeneous. From the table, we can see that the significance level is 0.163, which is greater than 0.05. This means that the data is considered homogeneous.

Hypothesis Test Results

Taking decision For hypothesis use method parametric with using Independent Sample T-Test. Testing This For see difference influence from application drilling method with application patterned strokes method . Decision taken with compare t count with t table. Number of samples tested is 20 people, so the t table is deep testing This is 2.10092. Following is Independent Sample T-test test results .

Table 6. Independent Sample T-Test Results

	T-Test for Equality of Means						
Accuracy Lob Shot	**t**	**df**	**Sig. (2-tailed)**	**Mean Difference**	**Std, Error Difference**	**Lower**	**Upper**
Equal Variances Assumed	2,425	18	0.26	1,400	0.577	0.187	2,613

The table above shows that the count of results is 2,425. This means that the count is larger than the table's value (2.425 > 2.10092). Based on these results, it can be concluded that the accuracy of the Intermediate lob shot Drill method is different from that of the patterned strokes method. The drill method has a greater influence compared to the patterned strokes method.

Discussion

In this study, we aim to compare the effects of two different practice methods, namely the drill method and the patterned strokes method, on the accuracy of lob shots in badminton. The experiment was conducted on 20 students who participate in extracurricular badminton activities at Padindi Vocational School in Jakarta. The students were divided into two groups, with 10 students in each group. The first group received the drill method as their practice treatment, while the second group received the patterned strokes method as their practice treatment.

Before receiving treatment with different exercises, the second group conducted a pre-test to measure the accuracy of their lob shot. This pre-test provided a baseline to measure the accuracy of the students' lob shot before they received treatment with different exercise methods. The group that practiced using the drill method showed improvement in the accuracy of their lob shot, as seen from the average value of the experienced lob shot accuracy, which improved from 6.40 during the pre-test to a higher value during the post-test after they received treatment with the drill method. Average value accuracy lob shot during the post-test is of 8.60. This result similar with research conducted by (Fitriadi & Barlian, 2019) shows that that there is influence ability lob shot from the previous one use drill method is 57.17 to 68.17. Similar results were also shown in the applied group method practice patterned strokes . When pre-testing the group This obtain average value of accuracy lob shot of 6.70. Then , after get method practice patterned strokes , average accuracy value lob shot experienced increase . This thing seen from the post-test results show -average value of 7.20.

Based on the results of the Independent Sample T-Test, there is a difference in the influence exerted between the two methods of exercising lob shots. The obtained t count was as high as 2.425, which is greater than the t table of 2.10092. This implies that there is a difference in influence between the drill practice method and the patterned strokes practice method. Further calculations indicate that the drill practice method is more influential in improving the accuracy of lob shots compared to the patterned strokes practice method. This conclusion similar with research conducted by (Fitriadi & Barlian, 2019)also found that method more drill practice effective than practice patterned strokes in increase ability lob shot .

Conclusion

The present study aimed to investigate the impact of different exercise methods on the accuracy of lob shots among participants of extracurricular badminton at Padindi Vocational School, West Jakarta. Specifically, the study compared the outcomes of two exercise methods: exercise drilling and patterned strokes. The research involved pre-test and post-test evaluations of the participants' performance. The results revealed that the application of the exercise drilling method led to a significant improvement in lob shot accuracy, as the average score increased from 6.40 during the pre-test to 8.60 during the post-test. Similarly, the implementation of the patterned strokes method resulted in a higher average score of 7.20, compared to 6.70 during the pre-test.

Moreover, the study examined the difference in the impact of the exercise drilling method and patterned strokes method on the accuracy of deep lob shot game badminton among participants of extracurricular badminton at Padindi Vocational School, West Jakarta. The results of the Independent Sample T Test indicated that there was a statistically significant difference between the two exercise methods. The t count obtained from the test was 2.425, which was greater than the critical t-value (2.10092). Therefore, the study concluded that the exercise drilling method was more effective in enhancing the accuracy of lob shots than the patterned strokes method.

References

Alhusin M.S, S. (2007). *Gemar Bermain Bulutangkis*. Seti-Aji.

Ariyanto, F. A., Santoso, S., & Febrianti, R. (2020). Perbedaan Pengaruh Pendekatan Sistem Latihan Drill Dan Pola Pukulan Terhadap Keterampilan Lob Bulu Tangkis Pada Atlet Persatuan Bulu Tangkis Keinan Jaya Guworejo Sragen Tahun 202. *Jurnal Ilmiah Penjas (Penelitian, Pendidikan, dan Pengajaran)*.

Cahyaningrum, G. K., Asnar, E., & Wardani, T. (2018). Perbandingan Latihan Bayangan dengan Drilling dan Strokes Terhadap Kecepatan Reaksi dan Ketepatan Smash. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, *4*(2), 159. https://doi.org/10.29407/js_unpgri.v4i2.12328

Dahniar Widya Puspita Dewi, Widiastuti, & Samsudin. (2021). Badminton Smash Skill Training Model For High School Beginners Students. *Gladi : Jurnal Ilmu Keolahragaan*, *12*(04), 237–247. https://doi.org/10.21009/GJIK.124.03

Fitriadi, S., & Barlian, E. (2019). Pengaruh Latihan Drilling Lob Dan Strokes Lob Berpola Terhadap Peningkatan Kemampuan Pukulan Lob Atlet Bulutangkis Putra Pb. Illverd Kota PadanG. *Jurnal Patriot*, *1*(1).

Hasibuan, N., Dlis, F., & Pelana, R. (2020). Forehand Lob Technique Model in Badminton Using Drill. *ACTIVE: Journal of Physical Education, Sport, Health and Recreation*, *9*(2), 84–90. https://doi.org/10.15294/active.v9i2.37929

Lengga, S. W., Adi, S., & Fadhli, N. R. (2020). *Metode Latihan Drill Untuk Meningkatkan Keterampilan Backhand Overhead Clear Pada Atlet Bulutangkis Usia 8-12 Tahun*.

Primayanti, I. (2019). *Pengaruh Latihan Drill Dan Latihan Pola Pukulan Terhadap Kemampuan Smash Bulutangkis Pada Pb Liansa Junior Masbagik Lombok Timur Tahun 2019*. *6*.

Information about the authors:

Mochamad Reza Aditiya Maskun, MRAM: rezaaditiya0511@gmail.com, https://orcid.org/0000-0001-6119-1072, Department of Physical Education, Jakarta State University, Indonesia .

Khaeroni , M.Pd: Physical Education Study Program , Jakarta State University, Indonesia

Dr. Iwan Setiawan , M.Pd: Physical Education Study Program , Jakarta State University, Indonesia

Cite this article as : Mochamad Reza Aditiya Maskun , et al (2023), Extracurricular Students' Lob Shot Accuracy was Improved by Drilling Training and Patterned Strokes Method, *Musamus Journal of Physical Education and Sport (MJPES) ,* Volume 6, No 1, 2023, 224-233, https://doi.org/10.35724/mjpes.v6i1.5532