

The Effect of the Drill Method in Improving Smash Accuracy in Badminton Games

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Abstract

The results of observations in PB. Fajar Cempako there are many players who are not able to smash by positioning balls that can kill the opponent, so the opportunity to score points through smash is less than optimal. Most players show limitations in mastering basic smash techniques, such as body position, contact time with the shuttlecock, and wrist control. This study aims to determine the influence of the drill method in increasing the accuracy of smash in badminton games in PB clubs. Dawn of Cempako. The research method used in this study is an experimental method with a preexperimental type. The study population was 10 athletes with research sampling using total sampling. The data collection technique used a badminton smash accuracy test. The data analysis techniques used were normality tests, homogeneity tests, and hypothesis tests using an independent t-test type of samples t test assisted by spss 25 for windows. The results of the study showed that there was an influence of drill method training in improving the accuracy of badminton game smash in PB clubs. Fajar Cempako is seen from the tcal value of 6.943 > ttable of 2.228 and the value of sig. 0.000 < 0.05. The percentage of the effect of drill method training in improving the accuracy of badminton game smash in PB clubs. Fajar Cempako by 87%. From these results, it can be concluded that drill method training can improve the accuracy of athletes' smash with good and accurate smash accuracy.

Keywords: Smash Precision; Drill Method; Badminton

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1. INTRODUCTION

The game of badminton is a game that requires good physical ability, techniques, tactics, and competition strategies as well as mature mental preparation (Ichsanudin & Aguss, 2020). The essence of the game of badminton is to get points by inserting a shuttlecock into the opponent's field which is limited by a net 1.55 m high from the floor surface, which is done on the basis of certain rules of the game (Yuliawan, 2017). Becoming a reliable badminton player requires various conditions, one of which is mastery of basic techniques. In badminton, there are various basic techniques, including racket grip, punch techniques, standing posture, and position and *footwork* (Hutomono & Eksan, 2023).

In particular, there are several basic techniques of badminton (Yuliawan, 2017) Explain the basic techniques of badminton, namely from how to hold rackets (*grips*), *stance* (standing posture), *footwork* (foot movements), and strokes (*strokes*). Apart from the basic techniques mentioned, but it also involves techniques related to the game of badminton. (Saputra, 2023) Add such as *overhead stroke* and *underhand stroke*. A badminton player must be able to master the technique of *overhead stroke* and *underhand stroke*. According to (Kusnadi, 2020) All of these types of shots must be done using the correct *grip* and *footwork* as well as with regular exercises.

The basic technique of *smash* in badminton is very important for athletes to have. Stuttgart (Tober et al., 2021) *Smash hits* have the important meaning of being able to give opponents a little time to get ready or return any short balls they have hit up. A *smash shot* is said to be good if it meets three criteria, namely; fast, precise and accurate. Purnama (Wardani et al., 2022) The *smash hit* is decisive in getting points. *Smash is an overhead punch* that is directed downwards and done at full power. This punch is identical to an attacking punch. The main objective is to kill the opponent. *Smash punches* are a form of hard punches that are often used in badminton games.

Smash punches are used extensively in doubles. High-speed motion cinematography has shown that an overhead smash loses about two-thirds of its initial velocity by the time the ball reaches the opponent on the other side of the court. The sharper the angle made, the less time the opponent has to react. In addition, the more accurate the smash, the wider the field the opponent must cover. Therefore, the use of smash in badminton games is to attack and shut down the opponent's defense with the intention of gaining points (Sulistiyono, 2021) From

the results of research by (Subarkah & Marani, 2020) having a good basic hitting technique will have an influence on the duration or time of the game, rallies so that it can result in victory for the badminton player.

The training method applied in this study is the *drill method*. *Drill* is a type of exercise that requires a lot of repetition to produce movements that are close to automatic (Artha, 2021). According to Osifo (Saprida et al., 2023) The *drill method* can hone and familiarize athletes in practicing their basic techniques that will be improved. *Drills* can also actively improve learning, so that students are not only able to maximize their skills but also able to change bad habits in learning. (Baihaqi & Hadi, 2022) Explaining that the provision of the drill method for each movement will accelerate students in mastering movement skills.

Based on the results of observations in PB. Fajar Cempako there are many players who are not able to *smash* by positioning balls that can kill the opponent, so the opportunity to score points through *smash* is less than optimal. Most players show limitations in mastering basic *smash* techniques, such as body position, contact time with the *shuttlecock*, and wrist control. Players often have difficulty maintaining consistency in performing accurate *smashes* during matches due to a lack of practice that emphasizes the real-life situation of the game.

The *pattern of smash* training is also less noticeable, training is more often done in physical training and games. When playing, most of the *smash* results made by students are too wide to the right and left, so that *smash* punches that should generate points for themselves, actually generate more points for the opponent. Based on observations, the results were obtained that when doing *smash learning*. To overcome these weaknesses and obstacles, the researcher uses the *drill* method. The *drill* method used as a focus or target when doing badminton *smashes* also requires athletes to be able to improve badminton *smash* properly and correctly. The purpose of this study is to determine the influence of the drill method in increasing the accuracy of *smash* in badminton games in PB Fajar Cempako clubs.

2. RESEARCH METHODS

The research method used in this study is the experimental method. The design used is the One Group Pretest-Posttest Design Experiment, which is a research design that contains a pretest before being given treatment and a posttest after being given treatment. The research site was conducted at the Cempako Badminton Sports Hall, Palembang City, which is located on Jalan 26 Ilir, Bukit Kecil District, Palembang City, South Sumatra 30121. In this study, the population of this study is all PB club athletes. Fajar Cempako has 10 athletes. Sampling uses total sampling due to the number of samples in the PB. Fajar Cempako is very few. Data collection uses the Badminton Smash Accuracy Test with the aim of measuring the level of accuracy and determination of the testee in doing *smash*. The data analysis technique is using statistical data analysis techniques. This data analysis is used to analyze quantitative data in the form of student learning interests by being processed using a T-test through a statistical application, namely SPSS 25 for windows.

3. RESULTS AND DISCUSSION

Results

Before data analysis is carried out, a prerequisite test for data analysis will be carried out which includes a normality test and a homogeneity test. The full prerequisite test results can be seen in the appendix, and the following will be presented a summary of the prerequisite test results obtained.

Data Normality Test

The normality test was tested on each of the research data obtained during the pretest and posttest. The normality test was carried out using the *One Sample Kolmogorov Smirnov Test formula*, and the work was done using the computer assistance of the SPSS 25 program. The data is normally distributed if the significant value (Sig) obtained from the calculation is greater than 0.05. The following are the results of the normality test obtained.

Table 1. Normality Test Results

One-Sample Kolmogorov-Smirnov Test	
Asymp. Sig. (2-tailed)	.200

Based on table 1. The results of the normality test above were obtained a significant value of the pretest data drill method with a statistical test value of 0.092 and an Asym value. Sig (2-tailed) was $0.200 > 0.05$ while the significant value of the posttest data drill method with a statistical test value of 0.120 and an Asym value. Sig (2-tailed) is the same as the pretest value, so it can be concluded that the pretest and posttest data values in this study are all normally distributed.

Data Homogeneity Test

The homogeneity test is a test used by researchers to read the results of a hypothesis test using the *paired t test*. The homogeneity test was carried out to test the similarity of the sample, namely uniform or not the variance of samples taken from the population. The test results can be declared homogeneous if $p > 0.05$. The results of the homogeneity test of this study can be seen in the following table:

Table 2. Homogeneity Test Results

Drill Practice Method	Levene Statistic	df1	df2	F	Information
Pretest	3.901	1	10	0,064	Homogen
Posttest					

From the results of the *test of homogeneity of variances* for the pretest and posttest values, it can be concluded that the data is homogeneous because the sig. p value of 0.064 is greater than 0.05 so that the data can be concluded that it is homogeneous. Based on the results of the homogeneity test whose data is homogeneous, the data is eligible to continue the analysis.

Hypothesis Test (Paired Sample t Test)

Paired sample t test is one of the testing methods used to assess the effectiveness of treatment, marked by differences in the average before and after treatment. The results on the accuracy data of the badminton *game smash* can be seen in the following table:

Table 3. Paired Sample T Test Results

Drill Practice Method	t _{Table}	t _{Count}	Sig t	Information
Pretest	2,228	6,943	0,000	Ho rejected
Posttest				

From the results of the *paired samples test*, it can be seen that the tcount is $6.943 > t_{table}$ is 2.228 and the significance value is $0.000 < 0.05$, so this result shows that there is a significant difference. Thus the hypothesis reads "There is an effect of drill method training to increase the accuracy of *badminton game smash* in PB clubs. Fajar Cempako" was accepted. This means that the badminton *smash drill* training program using wall targets has a significant influence on improving the accuracy of badminton *smash* games in PB clubs. Dawn of Cempako. The magnitude of the change in the accuracy of the *badminton game smash* in PB clubs. Fajar Cempako can be seen from the difference in average scores, which is 105 (805-700) greater than before being given a lower passing training program using wall targets. Meanwhile, to calculate the percentage of the influence of drill method training on improving the accuracy of *badminton game smash* in PB clubs. Fajar Cempako between pretest and posttest uses the formula as follows: Percentage increase = $(700/805) \times 100\% = 87\%$. The percentage of the effect of drill method training in improving the accuracy of *badminton game smash* in PB clubs. Fajar Cempako was 87% while the remaining 13% ($100\% - 87\%$) was influenced by other variables of badminton training programs that were not studied.

Discussion

The drill passing program using wall targets has a significant influence in improving the accuracy of *badminton game smash* in clubs PB. Fajar Cempako. The magnitude of the change in the level of the participant's lower passing ability can be seen from the difference in the average score, which is 105 (805-700) greater than before being given a lower passing training program using a wall target.

The results of the study were carried out (Andriani et al., 2022) That the drill *practice method* can increase the accuracy of *smash* in badminton where the preliminary test data with results for the drill practice method with a mean of 25.50 and a standard deviation of 3.923. After treatment and analysis of the final data (*posttest*), the

results for the drill practice method were obtained with a mean of 29.20 and a standard deviation of 1.874. Other research conducted by (Febrisyah et al., 2022) that *drill* practice affects the accuracy of *smash* of badminton athletes at PB Kiber Sambas, with the average value of the accuracy of *smash* pretest of 63.53 *posttest* results of 66.2. And after going through the influence test, it was obtained that the *t*-test value of 8.29 was greater than the *t*-table value of 2.14479 which means that the hypothesis was accepted. With a percentage increase in *smash* accuracy after treatment of 10.9%. Based on the comparison of the results of the mean *difference* and mean pretest, it can be known the percentage of the effect of drill method training in increasing the accuracy of *badminton smash* games in PB clubs. Fajar Cempako so that this study can provide input to badminton players to improve the *smash* ability of athletes through *the drill* method, but of course variations of training are also needed so that they are not boring.

The method using the drilling *smash* method brings together the gap between physical conditions, strength and coordination that is more precise in the method. practice with repeated or continuous practice to gain practical skills and dexterity about the knowledge learned. More than that, it is hoped that the knowledge or skills that have been learned will be permanent, steady and can be used at any time by the person concerned, this is the main factor of learning success for increasing the accuracy of *smash* in a more optimal badminton game. There is an increase in *smash* in athletes because the drill *smash* method is a form of training by doing repeated *smashes* can get students used to doing *smash* movements, so that athletes feel used to or increasingly automate movements. Giving the drill method to each movement will accelerate students in mastering movement skills.

4. CONCLUSION

Based on the results of research that has been carried out, it is proven that training with drill exercises can increase the accuracy of *badminton game smash* in clubs PB. Fajar Cempako. The results of the research can be used as a consideration for badminton coaches in making appropriate training programs to improve the accuracy of *smash* shots. Thus the training will be effective and will get results according to what the coach expects. For badminton athletes to continue to try to improve their training, so that it will improve their ability to play badminton, especially the accuracy of *smash* and succeed in achieving maximum achievement.

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