



## The Effect of Drill Serve Forehand Training on Badminton Forehand Serve Accuracy Results

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### ABSTRACT

*This research aims to determine the Forhand Drill Service Training Method on Badminton Forhand Service Accuracy Results in PB PUSRI Palembang Athletes. The type of research used is experimental and with a research design using one group pretest and post test design experiments. PB Pusri Palembang athlete research population. The sample in this study were PB PUSRI Palembang athletes, totaling 30 athletes. The instrument used is the forhand serve assessment test. The data analysis technique is processed using the T test. Based on the results of the T test, the count is > 22.284 with a t table of 2.045, with a confidence level of 0.95 or 95% ( $\alpha=0.05$ ). So there is a difference after doing it, the data for the two groups of forehand service pretest and forehand service posttest have significant differences regarding forehand service. This research concludes that there is an influence of the forehand serve drill on the results of badminton forehand serve accuracy in PB PUSRI Palembang athletes.*

**Keywords:** *Badminton Forehand Serve; Drill Method Training; Accuracy.*

### INTRODUCTION

Badminton is a game played in singles or doubles where this game requires timing and good physical condition (Suratman & Mesiyani, 2016). In physical education, sports and health (PJOK) there is learning material for small ball games namely badminton. One of the materials taught in badminton is serving (Mulyadi, 2021). Badminton has become a popular sport among all social strata because apart from playing it can also provide physical exercise for all people: men, women, children and even the elderly. Aryanti & Hartati (2020) Badminton is a game played by hitting a shuttlecock over the net to the opposing team. The basic badminton technique that a person must master is the service

technique. Technique is a skill that must be mastered by someone to be able to play a sport (Festiawan, 2020). Basic serving techniques are used to start a match and can add winning points (Qalbi et al., 2017). A very effective serve for flying the Shuttlecock into the opponent's field. Serve attacks are carried out by measuring the strength of the blow and the serve is done well and correctly, will gain an advantage or get points from the opponent. Sadewa (2016) Serving is the initial capital to be able to win the match. A player who cannot serve correctly will suffer a fault. For this reason, serving has an important role for athletes, because if the serve is at the net or out, the opponent will get a point, so the serve must be done well (Faishal, 2019). In badminton matches, apart from getting points, serving is also one of the keys to winning (Hammado et al., 2020). Practicing good serving technique is not easy, it requires many repetitions and a long time and must be introduced and trained from an early age to form the foundation of good technique (Ishak et al., 2022).

One type of badminton serve is the long forehand serve. Aryanti et al., (2018) The long forehand serve is done by hitting the shuttlecock high and far towards the back of the opponent's court (Sahabuddin, 2023). The long forehand serve technique requires strong power so that the resulting shot does not exceed the opponent's playing area. Dita et al., (2022) states that in the game of badminton, the components of physical condition that stand out are speed, agility, explosive muscle power and general endurance. Zarwan & Hardiansyah (2017) Achievement of badminton performance can be optimal if training is done from an early age (Datukramat, Z. A., & Jusrianto, 2019). With programmed time and more practice opportunities, it is hoped that these children will grow into good and reliable badminton players (Hakim et al., 2022). For someone to be able to do the badminton long forehand serve technique, it takes practice. One type of exercise that can be used is the drill method. The drill method instructs athletes to carry out steps correctly and repeatedly (Kusuma, 2018).

Training aims to help athletes improve performance and skills, where according to (Akhbar, 2019) That the purpose of training is to help improve a person's skills and physical condition to achieve predetermined goals. Nursehah (2021) Drill training is an activity with exercises carried out frequently or continuously to develop practical skills and dexterity related to the information obtained, in accordance with several definitions given above (Resika, 2020). The repetition training method (drill) is the repetition of training content with very high load intensity at intervals that bring perfect (full) recovery .

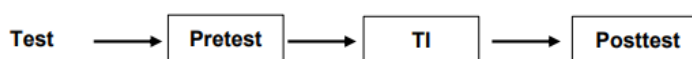
Observations in the field. The training carried out must be in accordance with the steps that have been instructed so that technical skills can be mastered optimally. The Drill method can optimize an athlete's ability when repeating forehand serves. An effective way

to improve technique in the game of badminton in order to increase performance requires training that has a component or strategy that can be used as a reference for athletes to produce athletes who excel. Badminton Association (PB) is a forum for developing badminton athletes. The number of badminton clubs in the Palembang area is growing rapidly, one of which is PB Pusri, whose address is PT Pusri Palembang, Jalan, Sei Selayur, Kec. Kalidoni, Palembang City, South Sumatra 30162. Maximum training to master badminton playing techniques well includes long serve shots. Results of previous research by Guntur et al., (2020) research results obtained  $t_{hitung}$  as big as 9,55 and  $t_{tabel}$  1,68. The drill training method can influence the results of long badminton serves and students are happy and enthusiastic about doing them.

Based on the reasons for the problems above, why researchers are interested in conducting research, because most of the PB. Pusri Palembang athletes, when serving forhand, do not hit the shuttlecock correctly, which can cause the direction of the ball to fall unstable or not right when it enters the opponent's court, causing the player to did not get maximum points. Therefore, the researcher took this research by using training tools such as drill training, by applying this training method the aim is that PB Pusri Palembang athletes can improve their accuracy. So, the advantage of the title of this research is that researchers know whether or not there is an effect of forhand serve drill training on forhand serve accuracy, which previously this drill exercise had been tested by Artha (2021) The results of research using the drill method can influence badminton smash results. So, from the conclusion of these reasons, the researcher was interested in conducting research with the title of this research being "The Effect of Drill Method Training on the Accuracy of Badminton Long Forehand Serves in PB Pusri Palembang Athletes".

## METHOD

This research uses an experimental type of research using a one group pretest and posttest research design. The aim of this research is to determine whether or not there is an influence of the independent variables on the related variables (Sugiyono, 2019).



**Figure 1.**  
Research Design

The variables in this study consist of the independent variable, namely the drill serve

forehand and the dependent variable, namely the badminton forehand serve. The population of this study was 38 athletes and the sample used was 30 PB Pusri Palembang badminton athletes.

The instrument for collecting this data measures the forehand serve in badminton both from the pretest and posttest. Data analysis techniques are the methods used to obtain or analyze data. This data analysis aims to test the acceptance or rejection of the hypothesis formulated. Data analysis is a step in this research activity that really determines the accuracy or misunderstanding of the research results (Yusuf, 2019). The analysis technique used in the research is "test". The analysis technique used in the research is the "t test" and uses SPSS version 2.9 to calculate the results.

## RESULTS AND DISCUSSION

The results of the pretest data for the experimental group with the highest data being 28 and the lowest data being 12, mean 18.60, mode 15, standard deviation 4.739 with a curve slope of 451. Meanwhile, the experimental group's posttest data with the highest data was 38 and the lowest data was 18, with a mean of 27.63, a mode of 18 with a standard deviation of 6,646 with a curve slope of 062. The following is a comparison table image between the pretest and posttest of the experimental group.

**Table 1.**  
List of Improved Pretest and Posttest Results

Results	N	Highest Data	Highest Data	Mean	Difference between Pretest and Posttest Means	Modus	SD
Pretest	28	12	12	18,60	9,03	15	4,739
Posttest	30	38	18	27,63		18	6,646

Testing for normality of data results was carried out using the Shapiro-Wilk SPSS 29 test, with the data testing criteria lying between (-1) until (+1)  $(-1 < sk < +1)$  (Sugiono, 2017) then the data results are normally distributed. The normality test results can be seen in the table below:

**Table 2.**  
Normality Test

	Tests of Normality					
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Prettes	.143	30	.120	.937	30	.074
Posttes	.124	30	.200*	.934	30	.063

## Hypothesis testing

The hypothesis used in the research is the alleged influence of forhand drill serve method training on the results of badminton forhand serve accuracy in PB PUSRI Palembang athletes. Hypothesis testing was carried out using the SPSS 26 One Sample Test.  $H_a$  test criteria are accepted if  $t_{hitung} > t_{tabel}$  atau jika  $t_{hitung} < t_{tabel}$  on  $\mu 0,05$  ( $Dk = N - 1$ ). The results of the hypothesis test can be seen in the table below:

**Table 3.**  
 Uji Hipotesis

		Paired Differences								
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	Prettes - Posttes	-9.033	2.220	.405	-9.862	-8.204	-22.284	29	<,001	<,001

Based on the table above, it can be concluded that the Drill forhand serve method training results in the accuracy of the Badminton forhand serve in PB PUSRI Palembang athletes, with a value of  $t_{hitung} > t_{tabel}$  ( $22,284 > 2.045$ ). It can be concluded  $H_a$  accepted and  $H_0$  rejected.

From the analysis of the data that has been described, it can be seen that the PB PUSRI Badminton athletes have taken part in the Dril serve forhand training for sixteen meetings with fourteen times the treatment was very active and serious, in the sense of correctly following the training. Even though physicality is their main priority when participating in training. The forhand serve drill drill can be done well and correctly according to the author's directions. This can be seen from the athletes' activities during training at each meeting, always seriously following the training given. Arikunto (2014) states that the total sampling technique is where if there are less than 100 subjects it is better to take all the subjects so that this research can be said to be population research, but if the number of subjects is large it can be taken between 10% - 15% or 20% - 25% or more.

Sukirno (2015) Exercise is an activity carried out systematically, with an increasing amount of load carried out repeatedly over time. As for Fahrizqi et al., (2021), training is needed to achieve an achievement in sports, training must be done correctly, programmed or structured, and continuously. Some characteristics of training Arom, (2021) are as follows: (1) A process to achieve a better level of ability in sports that requires proper time and planning, (2) The training process must be regular, meaning that the training must be

eventful, continuous and progressive in nature, the training given from simple to to complex, (3) Every exercise must have goals and objectives. Exercise is a sports activity carried out systematically, progressively and repeatedly over a long period of time aimed at developing human physiological and psychological functions to achieve predetermined goals. which was previously tested by this drill exercise Lestari et al., (2017)The results of research using the drill method can influence badminton smash results.

This study aims to determine the effect of Drill forehand serve training on the accuracy of badminton forehand serves in PB PUSRI Palembang athletes, where the Drill forehand serve training was treated for 4 weeks, with a frequency of four meetings a week. From the pretest data, the average value was obtained. 18,60 While the posttest obtained an average score of 27,63. It turns out that by practicing the Drill forehand serve four times a week for one month there was an improvement as seen through the difference between the pretest and posttest scores.

Based on the results of statistical calculations "t-test" the results obtained, meanwhile  $T_{tabel}$  is 2,045 which is obtained from the T distribution table with dk  $(30-1) = 29$  and level of trust 95% ( $\alpha=0,05$ ) listed in the table. The hypothesis testing criterion is accepted  $H_a$  if  $T_{hitung} > T_{tabel} (1- \alpha)$  and reject  $H_0$  if  $T_{hitung} < T_{tabel} (1- \alpha)$ , because  $T_{hitung} (22,284) > T_{tabel} (2,045)$  then there is a significant difference between the pre-test and post-test, thus the  $H_0$  hypothesis is rejected and the  $H_a$  hypothesis is accepted.  $H_a$ 's statement is: There is an influence of the Drill forehand serve method training on the results of PB PUSRI Palembang badminton forehand service accuracy.

## CONCLUSIONS AND SUGGESTIONS

This research concludes that forehand serves drill training can affect increasing the accuracy of forehand serve results. Practising using the serve drill method can have a big influence on hitting accuracy because it can increase the accuracy of serving hits on target. Based on the research results and based on the presentation of data that has been described previously and normality tests, hypothesis testing with test data statistics are carried out t, obtained  $T_{hitung} (22,284)$  and  $T_{tabel} (2,045)$ , then there is a significant difference between the pretest and posttest, thus  $H_a$  is accepted, it can be concluded that there is an influence of forhand serve drill method training on the accuracy of badminton forhand serves in PB PUSRI Palembang athletes. This research design is very simple, namely using a pretest-posttest one group design, the author suggests that future researchers can use a different



research design, for example, pretest-posttest two groups (control experiment) and can add research samples.

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