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THE INFLUENCE OF DRILL BALL AND FOOTWORK TRAINING ON JUMPING SMASH BADMINTON ACCEPTANCE AT PB FORZA JUNIOR PURWODADI 2020

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Abstract

This study aims to determine the effect of the ball drill and footwork method on the acceptance of the Jumping Smash athlete PB Forza Junior Purwodadi Grobogan.

This study used the Two Groups Pre-test-post-test Desing design. The population in this study were 25 athletes, PB Forza Junior Purwodadi. The sampling technique used purposive sampling, with the following criteria: (1) the attendance list was at least 75% (activeness following the training), (2) the players were PB badminton athletes. Forza Junior Purwodadi, (3) the minimum length of exercise is 6 months. (4) This study was carried out under the Covid 19 health protocol, where the maximum limit of people in a building is at least 20 people. Based on these criteria, 14 athletes were fulfilled. And research is carried out in different places to comply with these health protocols.

The results show that (1) The results of the analysis show that there is an increase in the acceptance of the Jumping Smash athlete PB Forza Junior Purwodadi before and after the Drilling smash training method exercise. This is indicated by the value of t count = 10.331> t table 2.17, and a significance value of 0.000 <0.05, with a percentage increase of 83%. (2) The influence of the Footwork training method on athletes PB Forza Junior Purwodadi acceptance of Jumping Smash with that t count 12.021 and t table 2.17 (df 12)) with a significance value of p of 0.000. Therefore t count 12.021> t table 2.44, and a significance value of 0.000 <0.05, with a percentage increase of 43%. (3) The ball drill method is more effective in the acceptance of Jumping Smash athletes PB Forza Junior Purwodadi than the Footwork training method, with the difference in the average postest is 1.143.

Keywords: *Ball Drill, Footwork, Jumping Smash*

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INTRODUCTION

Sport is any systematic activity to encourage, foster and develop physical, spiritual and social potential (UU no. 3 2005 article 1 no 4) Meanwhile, sports actors are every person and/or group of people who are directly involved in sports activities which include sportsmen, sports coaches and sports personnel (Law no 3 of 2005). 2005 chapter 1 no 5).

With very strong support from the government of the Republic of Indonesia regarding a sports system that protects and supports all sports players, the author hereby wants to make a research about the sport of Badminton. Badminton is an achievement sport that is very popular in the archipelago, especially in the Central Java region and in Grobogan district. Badminton is a small ball sport that uses a shuttlecock as a substitute for the ball for the game, as for that.

This game also requires a racket, which we also know as a racket tool for playing badminton. Badminton is a game that has several game categories in it, one of which is men's singles, women's singles, men's doubles, women's doubles and also mixed doubles. Badminton or what is also known as badminton is a sport that was first discovered in India, there are many changes that have occurred from time to time regarding the regulations and infrastructure regarding the sport of badminton. These developments must also always be followed by our nation so that In the future, Indonesia will still be one of the countries that is feared for the badminton sports sector.

Badminton has several basic techniques, these basic techniques include foot movements or what is known as Footwork, service, and forehand and backhand shots. There are also advanced punching techniques which are often used as training material for athletes in this archipelago to perfect their abilities. Some of these techniques include the smash attack technique, the long high back lob technique, the trick ball attack technique, the dropshot, the surprise drive attack technique and the technique of hitting in front of the net.

The history of the development of the game of badminton in Indonesia has become almost popular in several regions in Indonesia, especially in the Central Java region, including centers for training superior Indonesian seeds. Places in Central Java include Kudus, Solo Semarang, and so on, don't forget that the Grobogan area also has a club which is under the auspices of the Grobogan All Indonesian Badminton Association (PBSI), this club is called PB Forza, one of the clubs which is currently in a period of struggle and competition between other regional clubs in the Kudus and also Pati areas which have previously developed rapidly. As with other sports, to be able to play badminton well you also need to master the basic techniques in playing badminton. The basic techniques in playing badminton include Service, Forhand Shot and Jumping Smash, which is one of the weapons of badminton athletes every time they compete. Smash is a blow that is very hard and dives sharply towards the opponent's defense area. This technique must be very

well mastered by a badminton athlete, because this technique can be one of the mainstay techniques for an athlete to always get points when competing. Meanwhile, jumping smash is a smash technique by jumping upwards to speed up the movement and of course speed up the speed when the athlete is going to carry out the smash attack. So Jumping smash is one technique that should not be ignored in training or clubs throughout Indonesia. To be able to master the basic technique of Jumping smash well, someone needs to practice to be able to do it well and correctly.

To be able to do a perfect and good Jumping Smash, there are several other factors that also influence our success in doing Smash, one of which is a good and correct training program. A good and correct training program is a training program that is structured and has a prominent impact in the future when we often use this training method, one of the training methods is Ball Drill Training and Footwork Training methods. At this time, athletes' ability to master the Jumping Smash stroke is still low as seen from the first observation I made on the 4th.

February 2020, I still see that the training program provided is still not suitable and not right for athletes. Moreover, the athletes at PB Forza have not really been trained using training methods that lead to Jumping Smash acceptance and PB Forza still does not provide a variety of training so that athletes do not get bored with everyday training, even though training variations are very important to do. Drill is an exercise with practice that is carried out repeatedly or continuously to gain practical skills and dexterity regarding the knowledge being studied. Footwork is a technique for adjusting your footsteps to be more effective when playing badminton on the court. Hermawan Aksan (2013: 61) Footwork training aims to train foot movements to explore and master the field. By mastering the field and good movement speed, the athlete will get the right hitting position.

The explanation above can be concluded that the influence of ball drill and footwork training can influence the reception of jumping smashes in badminton. From this experimental test we will prove this effect, and will turn this research into an experiment looking for training methods for athletes and coaches in Indonesia. Based on the description above, researchers are interested in studying in more depth the "Effect of Ball Drill and Footwork Training on Acceptance of Badminton Jumping Smash at PB Forza Purwodadi".

METHODS

This research is experimental research that uses a two-group pretest-posttest design by dividing it into two groups, namely one group is given treatment and the other group is given treatment. According to Solso & Macline in (Untung Nugroho 2018: 30) Experimental research is research in which at least one variable is found to be manipulated to study cause-effect relationships.

FINDINGS AND DISCUSSION

Findings

1. Description of Subjects, Location and Time of Research

The subjects of this research were 14 junior badminton athletes at PB Fotza Grobogan Purwodadi Yogyakarta. The PB Forza Grobogan training location is at GOR Sugos Purwodadi. This research was carried out on July 7 2020-finished at GOR Sugos Purwodadi. The pre-test was taken on July 7 2020 and the post-test on August 27 2020. Treatment was carried out over 16 meetings with training frequency 3 times a week, namely on Tuesday, Thursday and Saturday.

2. Description of Research Data

The Jumping Smash Acceptance Test was held to measure Jumping Smash Acceptance in the game of badminton. The test is carried out by each athlete doing 12 strokes. If the shuttlecock leaves the playing field or does not cross the net, it is worth zero. Group A was given Ball Drill training and group B was given Footwork method treatment. The results of research on the acceptance of Jumping Smash athletes at PB Forza Junior Grobogan Purwodadi are described as follows:

a. *Pretest and Posttest Drill Training Method Group*

Pretest results obtained minimum value = 6, maximum value = 8, average (mean) = 6 with standard deviation (std. Deviation) = 0.690, while for the posttest minimum value = 9, maximum value = 11, average (mean) = 9 With standard deviation (std. Deviation) = 0.786.

When displayed in graphical form, the Pretest and Posttest acceptance of Jumping Smash for badminton athletes at PB Forza Grobogan in the Ball Drill training method group are presented in the bar diagram in Figure 9 as follows:

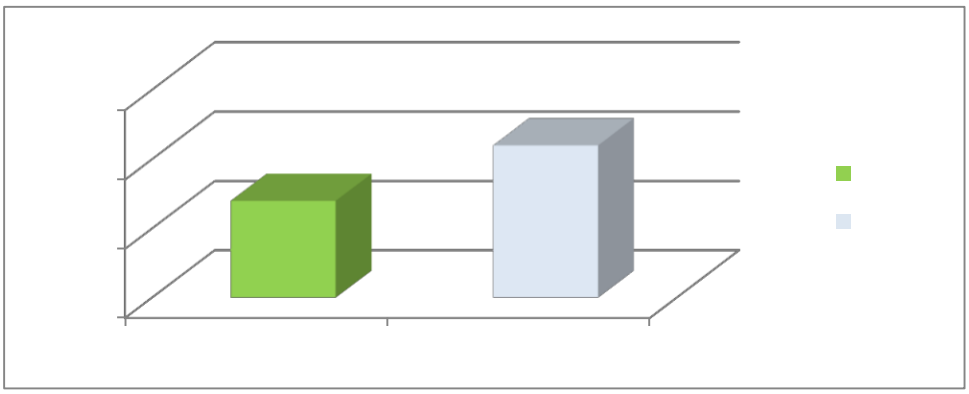

Figure 1. Pretest and Posttest Bar Diagram for Group A (Source: research)

From the picture above it can be concluded that before being given the ball drill training program the average result from the group A test was 7, then after being given the ball drill training program the average of the group A test increased to 11, then the ball drill had an effect in accepting the Jumping Smash for PB Forza Junior Purwodadi athletes.

b. ***Pretest and Posttest Footwork Training Method Group***

Pretest results obtained minimum value = 6, maximum value = 8, average (mean) = 6 with standard deviation (std. Deviation) = 0.690, while for the posttest minimum value = 9, maximum value = 11, average (mean) = 9 With standard deviation (std. Deviation) = 0.786. Complete results are presented in table 3 as follows.

Table 1. Pretest and Posttest Results of the Footwork Training Method Group

Group B Footwork Pretest and Post-test Data			
Subject Number	Pretest	Post-test	Difference
1	8	11	3
2	8	10	2
3	7	9	2
4	7	10	3
5	7	9	2
6	7	10	3
7	7	9	2
Mean	7	9	2
SD	0,48795	0,48795	0,690065559
Min	7	9	2
Max	8	11	3

When displayed in graphical form, the Pretest and Posttest acceptance of Jumping Smash badminton athletes at PB Forza Grobogan group with the Ball Drill training method are presented in a diagram stem in figure 9 as follows: Before being given the ball drill training program, the average result from the group A test was 7, then after being given the ball drill training program, the average result from the group A test rose to 11, then the ball drill had an influence on the acceptance of Jumping Smash for PB Forza Junior athletes Purwodadi.

3. Data Analysis Results

a. Prerequisite Test

1) Normality test

The normality test is intended to determine whether the variables in the study have a normal distribution or not. The normality test calculation uses the Kolmogorov-Smirnov Z. formula with processing using the SPSS 16 computer program. The results are as follows.

Table 2. Normality Test

Group	P	Sig	Information
Group A Pretest	0,699	0,05	Normal
Group A Post-test	0,571	0,05	Normal
Group B Pretest	0,141	0,05	Normal
Group B Post-test	0,141	0,05	Normal

From the results of table 4 above, it can be seen that all data has a p value (Sig.) > 0.05. So the variables are normally distributed. Because all data is normally distributed, the analysis can be continued with parametric statistics. Complete results are presented in the appendix.

2) Homogeneity Test

The homogeneity test is useful for testing the similarity of samples, namely whether or not the variance of samples taken from the population is uniform. Homogeneity rule if p> 0.05. So the test is declared homogeneous, if p < 0.05, then the test is said to be inhomogeneous. The homogeneity test results of this research can be seen in table 5 as follows:

Table 3. Homogeneity Test

Group	df1	df2	Sig,	Information
Pretest	1	12	0,188	Homogeneous
Post-test	1	12	0,583	Homogeneous

From table 5 above, it can be seen that the Pretest value is sig.p > 0.05 so that the data is homogeneous. Because all data is homogeneous, data analysis can be continued with parametric statistics.

b. Hypothesis Testing

The hypothesis in this study was tested using a paired t test and an independent t test using SPSS 16, the results of the hypothesis test are as follows:

1) Comparison of Pretest and Post-test Training Method Groups Ball Drills

The first hypothesis reads "There is an influence of the Drill ball training method on the acceptance of Jumping Smash by badminton athletes in PB Forza Junior", based on the results of the pretest and post-test. If the results of the analysis show a significant difference, ball drill training has an influence on increasing athletes' smash reception. The research conclusion is declared significant if the calculated t value > t table and the sig value is smaller than 0.05 (Sig < 0.05). Based on the results of the analysis, the data in table 6 is as follow.

Table 4. T-Test Results of Pre-Test and Post-Test Ball Drill Training Method Group Test

Group	Average	T – test For Equality of Means				
		t ht	t tb	Sig.	Difference	%
Pretest	7,14	10,331	2,44	,000	3,714	83%
Post-test	10,86					

From the results of the t-test it can be seen that the t count is 10.331 and the t table2.17 (df 6) with a significance p value of 0.000. Because t count is 10.331 > t table 2.44, and the significance value is 0.000 < 0.05, then this result shows that there is a significant difference. Thus the alternative hypothesis (Ha) which states "there is an influence of the ball Drill training method on the Jumping Smash Acceptance of PB Forza Junior Purwodadi Grobogan badminton athletes", is accepted. This means that Ball Drill training has a significant influence on increasing Jumping Smash Acceptance for PB Forza Junior Purwodadi Grobogan Badminton athletes. From the pretest data, the average was 7.14, then during the post-test the average reached 10.86. The magnitude of the increase in Jumping Smash Acceptance can be seen from the difference in average value, namely 3.714, with a percentage increase of 83%.

2) Comparison of Pretest and Posttest Training Method Groups Footwork

The second hypothesis states "There is an influence of the Footwork training method on the Jumping Smash Acceptance of PB Forza Junior Badminton athletes in Purwodadi Grobogan based on the pre-test and post-test results. If the results of the analysis show a significant difference, then the hitting pattern training method will have an influence on increasing the athlete's Jumping Smash Acceptance. Conclusion research is declared significant if the calculated t value > t table and the sig value is smaller than 0.05 (Sig < 0.05). Based on the results of the analysis, the data in table 7 is as follows.

Table 5. T-test Pretest and Post-test Results of Method Groups Footwork Training

Group	Average	T – test For Equality of Means				
		t ht	t tb	Sig.	Difference	%
Pretest	7,29	12,021	2,44	,000	2,429	43%
Post-test	9,71					

From the results of the t-test it can be seen that the t count is 12.021 and the t table 2.17 (df 12) with a significance p value of 0.000. Because t count is 12.021> t table 2.44, and the significance value is 0.000 < 0.05, then this result shows that there is a significant difference. Thus the alternative hypothesis (Ha) which states "there is an influence of Footwork training methods on the acceptance of Jumping Smash by PB Forza Junior Purwodadi Grobogan badminton athletes", is accepted. This means that Footwork training has a significant influence on increasing the Jumping Smash Acceptance of PB Forza Junior Badminton athletes in Purwodadi Grobogan. From the pretest data, the average was 7.29, then during the post-test the average reached 9.71.

The magnitude of the increase in Jumping Smash Receipts can be seen from the difference in average value, namely 2,429, with a percentage increase of 43%

3) Comparison of Posttest Group A with Group B

The Independent Sample t test was used to test the third hypothesis which reads "The Ball Drill training method is more effective on the Jumping Smash Reception of PB Forza Junior Purwodadi Grobogan badminton athletes than the Foowork training method", can be determined through the posttest between group A and group B. Based on the results of the analysis, the data obtained in table 8 are as follows.

Table 6. Posttest t test for Group A and Group B

Group	Average	%	T – test For Equality of Means			
			t ht	t tb	Sig.	Difference
Ball Drill	10,86	83%	2,954	2,17	0,583	1,143
Footwork	9,71	43%				

From table 10 of the t test results above, it can be seen that the t count is 2.954 and the t-table (df = 12) = 2.17, the significance value of p 58 is 0.583. Because t count is 2.954 < t table = 2.17 and sig. 0.583 > 0.05, meaning there is no difference between posttest group A and group B posttest.

Based on the results of the analysis, it shows that the percentage increase in the Drill training group was better than the punch pattern group, and the posttest average, with an average difference of 1,143. Thus the hypothesis which states "The Ball Drill training method is more effective in the Jumping Smash Reception of PB Forza Junior Purwodadi Grobogan badminton athletes than the Footwork training method", is accepted

CONCLUSION

Based on the results of data analysis, description, testing of research results, and discussion, conclusions can be drawn, namely:

1. There is an influence of the ball drill training method on PB Forza Junior Purwodadi Grobogan badminton athletes' smash reception, with a percentage increase of 83%.
2. There is an influence of the footwork training method on the jumping smash acceptance of PB Forza Junior Purwodadi Grobogan badminton athletes, with a percentage increase of 43%.
3. The ball drill training method is more effective in the jumping smash reception of PB Forza Junior Purwodadi Grobogan badminton athletes than the footwork training method, with a post-test average difference of 1.143.

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