The Effect of Wall Media and Fingertip Push-Up Training on the Accuracy of Overhead Passing Technique in Volleyball

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Abstract
Based on results observations made by researcher on Volleyball extracurricular at Khaerul Vocational School Umam , for method exercises performed And taught by sports teacher during This to for student specifically on technique volleyball basics especially on overhead passing technique that is with method practice direct And play One against One between students . Method exercise This done repetitive every do extracurricular without existence modification or change method exercise so that make student Possible fed up And not enough get experience new so that cause lack of significant development on student especially on technique basic overhead pass **Objectives.** This aiming For know How influence Wall Media Exercises and Finger Push Ups To Accuracy Technique Basic Overhead Pass On Students Volleyball Extracurricular vocational school Khaerul Um Lenek Power . This research is a quantitative research with experimental method. With one group pretest posttest design. **Materials and Methods.** This type of research is quantitative research using pre-experimental methods. In this study, the population to be used is the volleyball extracurricular participants at SMK Khaerulumum totaling 30 students. The sample uses purposive sampling. The instrument used to collect data in this study is the Brady wall-volley Test. Data analysis in this study uses the t-test technique, namely by comparing the mean between the initial test (pretest) and the final test (posttest) of the Brady wall volleyball Test. **Results.** Based on the results of the t-test, the calculated t value is -8.203 with a significance of 0.000. The t-table value with df = 29 at a significance level of 5% is 1.782, therefore the calculated t value> t table (8.203> 1.782) and sig 0.000 is smaller than 0.05 (sig <0.05), this means that there is an effect of the accuracy of the upper pass in volleyball after participating in wall media training and finger push-ups, so it can be concluded that there is an Effect of Wall Media Training and Finger Push-ups on the Accuracy of Basic Upper Passing Techniques in Volleyball. **Conclusion.** Based on results analysis And testing hypothesis , can concluded that exercise using wall media and finger push ups influential to accuracy technique basic overhead pass on students Khairul Vocational School volleyball extracurricular Um Lenek Power . By Because that , it is suggested that the method exercise This applied in a way routine by trainer , done independent by students , as well as supported by facility school . Research furthermore expected to study variable other And involving level different education For more results wide .
Keywords : Wall Media Exercises, Finger Push Ups, Upper Pass Accuracy, Volleyball

Introduction

Volleyball is a team sport, played by two teams, each team consisting of six players. The basic principle in playing volleyball is to bounce the ball so that the ball does not fall/touch its own court and try to cross the ball over the net to the opponent's area with the aim that the opponent is unable to return the ball. In volleyball, there are four basic techniques that must be mastered, namely: passing, serving, smashing, and blocking. These basic techniques must be truly mastered because they play a role as a factor in determining the victory or defeat of a team.

Therefore, coaches must teach students about the basic techniques in volleyball. In addition, volleyball requires accuracy and good mastery of basic techniques, because players are required to be able to keep the ball in the air and not touch the ground. In addition, players are required to be able to create strokes that can make opponents unable to control the ball perfectly in order to score points. This process can be created if a player is able to master the basic techniques of volleyball properly and correctly. The accuracy of the basic upper pass technique in volleyball must be mastered by extracurricular students, but extracurricular volleyball students at Kaherul Umam High School are still not optimal and consistent in performing basic upper pass techniques, due to hand movements that are not fast enough and still stiff.

In this case, one way that can be used to improve the accuracy of basic upper pass techniques is training using wall media and finger push ups which aim to train the ability to place the desired ball and train the strength and flexibility of the fingers so that they are not easily injured when doing upper passes. Based on the results of observations made by researchers on volleyball extracurricular activities at SMK Khaerul Umam, for the training methods carried out and taught by sports teachers so far to students, especially in basic volleyball techniques, especially in upper pass techniques, namely by direct practice and playing one on one between students.

This training method is repeated every time they do extracurricular activities without any modification or change in training methods, so that students may get bored and lack new experiences, resulting in a lack of significant development in students, especially in basic upper passing techniques. Meanwhile, the implementation time for volleyball extracurricular activities at SMK Khaerul Umum itself is carried out twice a week and each extracurricular meeting is held for ninety minutes. This is also one of the causes of the ineffectiveness and inefficiency of the training methods taught by sports teachers, because as we know in

volleyball there are several basic techniques that students need to know and be able to do, so that it requires a longer meeting schedule and implementation time.

In addition, it is necessary to modify the training so that students do not feel bored and monotonous with the training taught by the teacher. So that it is expected that there will be more significant development in students after the modification of the training method and with the addition of meeting time, for example three times a week and carried out for 120 minutes in extracurricular activities at SMK Khaerul Umam. From the observations above, it can be concluded that there are still many students who cannot do overhead passes well such as in the preparation, implementation, and ending phases, maybe this is because the training methods taught are monotonous and lack of modification from the teacher (coach), resulting in students being less enthusiastic in participating in volleyball extracurricular activities.

In addition, the extracurricular meeting schedule is a little and short one of the causes of the less than optimal method taught by the teacher (coach), therefore the meeting schedule and implementation also need to be added so that it is more optimal and significant for student development in learning basic volleyball techniques, especially for the upper passing technique. Based on the background mentioned above, the author is interested in conducting a study entitled "The Effect of Using Wall Media and Finger Push Ups on the Accuracy of Basic Upper Passing Techniques in the Khaerul Umam Vocational High School Volleyball Extracurricular".

So this study takes from several research sources concerning wall media and finger push ups which have been stated to have a significant influence on the accuracy of overhead passes in volleyball games.

The exercise using the wall media is done by bouncing the ball towards the wall. In the exercise process, students will analyze errors in the upper passing movement. So, when the exercise using the wall is finished, it is expected to improve the knowledge and skills of upper passing in students (trainees).

This finger push up exercise is used to improve the ability of the fingers, so that it will increase the strength of the fingers and in receiving upper passes the fingers will be stronger. This has an impact on the ability of the fingers to receive the ball by means of upper passes. This upper passing ability is of course one of the basic techniques that is quite important for volleyball players. By improving the player's ability to receive the ball with upper passes, the ball will be easier to control and easy to pass, so that other players will find it easy to play. Push-ups are efficient arm muscle strength exercises because they can be done in limited spaces and outdoors. This exercise is effective because it involves the muscles of the arms

and shoulders, and can strengthen the chest muscles, shoulders, and help regulate breathing (Saputra, Syafrial, & Sofino, 2018).

Based on results analysis And testing hypothesis , can concluded that exercise using wall media and finger push ups influential to accuracy technique basic overhead pass on students Khairul Vocational School volleyball extracurricular Um Lenek Power . Research This important Because give solution practical in improvement overhead passing skills are still become weakness common among students . Novelty from study This located on combination method exercise simple However effective yet Lots applied in a way systematic . By Because that , it is suggested that the method This applied in a way routine by trainer , done independent by students , as well as supported by facility school . Study furthermore expected to study variable other And involving level education different For more results wide .

Materials and Methods
Study Participants.

This type of research is quantitative research using pre-experimental methods. Pre-experimental research is research that is intended to determine whether or not there are effects of "something" imposed on the subjects being studied (Sumadi, 2009: 92). In this study, the research subjects will be given an initial test first. Furthermore, the research subjects will be given treatment in several meetings, then the research subjects will be given a final test to determine the effect of the treatment. This is in line with the opinion of Muhajirin & Panorama (2017: 158) one experimental group is measured for its dependent variable (pre-test), then given a stimulus, and its dependent variable is measured again (post-test), without any comparison group.

Research Population According to Hendryadi (2019) Population is an object/subject that has a certain quantity and characteristics determined by the researcher to be studied and then conclusions drawn by the researcher. In this study, the population that will be used is the volleyball extracurricular participants at SMK Khaerulumum, totaling 30 students. Research Sample Part of the population that will be taken for research and the results of the research are used as a representation of the population as a whole. Thus, the sample can be stated as part of the population taken with certain techniques or methods to be studied and generalized to the population according to Hendryadi (2019) The sample of this study was the volleyball extracurricular participants at SMK Khaerulumam, totaling 30 students.

Data collection in this study was by measuring the ability to pass the volleyball. The instrument used to collect data in this study was the Brady wall-volley Test in Suharno (2015) with a test validity level of 0.86 and a test reliability of 0.936.
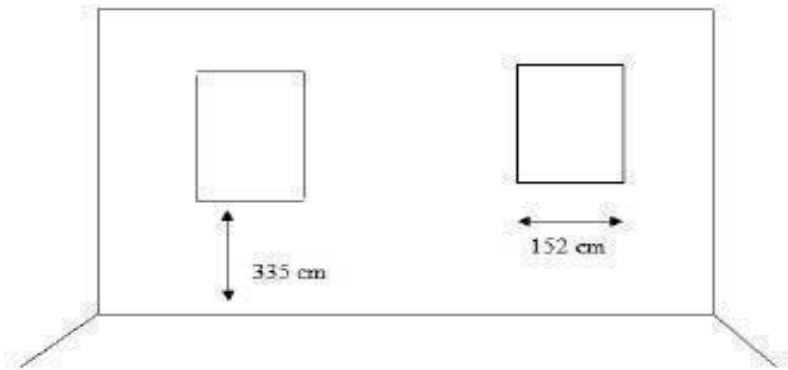

Figure 1. Brady Wall Volley Test

The data of students' upper passing ability was taken twice, namely pretest data, pretest was conducted to measure students' ability in playing volleyball before students learned volleyball playing techniques and before students were given training methods to determine the basic abilities possessed by students in playing volleyball, especially upper passing and posttest, Posttest was conducted after students received treatment in the form of training with wall media and finger push ups. Posttest is a test conducted to measure students' abilities after learning the basic techniques of playing volleyball. During the pretest, the method of data collection was that the test participants stood with a distance of 100 cm, to start the test the ball was thrown by the test participants themselves, after hearing the sound of the liperi and turning on the stopwot after being thrown the test participants did an upper pass with a height of 335 cm. The test was conducted for 60 seconds or one minute and the score was calculated from the number of balls passed. The ball is considered valid if the ball enters the specified circle line that was installed during that time, students did the upper passing test 1 time, and the posttest was conducted after students received training treatment using wall media and finger push ups in the same way. The distance between the pretest and posttest is a minimum of 18 meetings.

Data analysis in this study used the t-test technique, namely by comparing the mean between the initial test (pretest) and the final test (posttest) of the Brady wall volleyball test. Before testing the hypothesis, a prerequisite test is needed. Testing the measurement data related to the research results aims to help the analysis become better. For this reason, a prerequisite test is needed first, which includes a normality test. In this study, the data testing

method used is a parametric statistical test. In parametric tests, there are three requirements that need to be considered, namely: The measurement scale of the variables must be numeric. Data distribution must be normal. Data Analysis Test The normality test is an initial requirement that must be carried out before analyzing research data. According to Sugiyono (2017), the normality test is used to examine the normality of the variables studied, whether the data is normally distributed or not. If the data analyzed is not normally distributed, then it must be analyzed using nonparametric statistics (Budiwanto, 2017). The analysis technique used in the normality test is the Kolmogorov-Smirnov method

Results

The description of the research data was conducted to facilitate the presentation of the research data. The results of the descriptive analysis of the data on the ability of the basic upper passing technique with wall media training and finger push-ups in the research are presented as follows.

Table 1. Pretest and Posttest of Basic Technical Ability of Upper Passing in Wall Media and Finger Push-Up Exercises

Description Statistics					
	N	Min	Max	Mean	Std Dev
Pretest	30	2	23	8.20	6.211
Posttest Md	30	4	28	11.20	7,078
Posttest Puj	30	4	28	11.20	7,078
Valid N	30				

From the results of the descriptive analysis of the pretest data above, the upper passing ability of the extracurricular students of SMK Khairul Umam obtained a maximum value of 23.00, a minimum of 2.00, a mean of 8.20, and a standard deviation value of 6,211. From the results of the descriptive analysis of the wall media posttest data above, the upper passing ability of the extracurricular students of SMK Khairul Umam obtained a maximum value of 28.00, a minimum of 4.00, a mean of 11.20, and a standard deviation value of 7,078. From the results of the descriptive analysis of the finger push up posttest data above, the upper passing ability of the extracurricular students of SMK Khairul Umam obtained a maximum value of 28.00, a minimum of 4.00, a mean of 11.20, and a standard deviation value of 7,078.

Table 2. Pretest Frequency

	Frequency	Percent	Valid Percent	Cumulative Percent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	4	13.3	13.3	13.3
	3	4	13.3	13.3	26.7
	4	2	6.7	6.7	33.3
	5	5	16.7	16.7	50.0
	6	1	3.3	3.3	53.3
	7	3	10.0	10.0	63.3
	8	1	3.3	3.3	66.7
	10	2	6.7	6.7	73.3
	11	1	3.3	3.3	76.7
	13	1	3.3	3.3	80.0
	17	1	3.3	3.3	83.3
	18	3	10.0	10.0	93.3
	20	1	3.3	3.3	96.7
	23	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

Table 3. MD Posttest and PUJ Posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	3	10.0	10.0	10.0
	5	5	16.7	16.7	26.7
	6	2	6.7	6.7	33.3
	7	1	3.3	3.3	36.7
	8	1	3.3	3.3	40.0
	9	4	13.3	13.3	53.3
	10	3	10.0	10.0	63.3
	11	1	3.3	3.3	66.7
	12	1	3.3	3.3	70.0
	13	1	3.3	3.3	73.3
	14	1	3.3	3.3	76.7
	15	1	3.3	3.3	80.0
	20	2	6.7	6.7	86.7
	21	1	3.3	3.3	90.0
	25	1	3.3	3.3	93.3
	27	1	3.3	3.3	96.7
	28	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

According to Perianto (2011) Before analyzing the research data obtained, it is necessary to first conduct a data analysis requirements test. The analysis requirements that must be met are normality tests. Normality testing using the Kolmogorov-Sminorv test. In

this test, the distribution of data from a normally distributed population will be tested. To accept or reject the hypothesis by comparing the sig price with a significance level of 0.05 with a 95% confidence level of the criteria, accepting the hypothesis if the sig is greater than 0.05. If it does not meet these criteria, the hypothesis is rejected. Results test normality For each research data is as following :

Table 4. Results Test Normality of Research Data

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro- Wilk		
	Statistics	Df	Sig.	Statistics	Df	Sig.
Pretest	.210	30	.002	.846	30	.001
Posttest Md	.201	30	.003	.851	30	.001
Posttest Puj	.201	30	.003	.851	30	.001

From the table above, the sig value (probability) of the pretest variable of the wall media exercise and finger push-ups is 0.002. Because the sig value of the variable is less than 0.05, the distribution of samples based on the distributed population can be concluded that the research variables in the pretest are not normally distributed, so the test that will be carried out to determine the effect of the wall media and finger push-ups is a Nonparametric test or with the Paired Simple T Test. From the table above, the sig (probability) value of the posttest variable of the wall media exercise is 0.003. Because the sig value of the variable is less than 0.05, the sample distribution based on the distributed population can be concluded that the research variable in the posttest is not normally distributed, so the test that will be carried out to determine the effect of the wall media is a Nonparametric test or with the Paired Simple T Test. From the table above, the sig (probability) value of the posttest variable of the finger push-up exercise is 0.003. Because the sig value of the variable is less than 0.05, the sample distribution based on the distributed population can be concluded that the research variable in the posttest is not normally distributed, so the test that will be carried out to determine the effect of finger push-ups is a Nonparametric test or with the Paired Simple T Test.

The Effect of Exercise Using Wall Media and Finger Push-Ups on the Accuracy of Basic Upper Passing Techniques in Volleyball Extracurricular Students of SMK Khaerul Umam Lenek Daya. This test will test the hypothesis whether there is an effect of upper passing accuracy on volleyball games. To determine whether there is an effect of upper passing ability on volleyball games with wall media training and finger push-ups, it was

analyzed using the Paired Simple T Test. Where for the Conclusion Drawing of the study it is stated if the significant t count value> t table with db = (n-1) and the sig value is less than 0.05 (sig <0.05).

Table 5. Paired Simple T Test

T-Test Paired Samples Statistics				
	Mean	N	Std. Dev	Std.Error Mean
Pretest	8.20	30	6.211	1.134
Posttest Md	11.20	30	7,078	1.292
Pretest	8.20	30	6.211	1.134
Posttest Puj	11.20	30	7,078	1.292

From the test results above, it was found that there was a difference in the mean between the pretest and posttest of the wall media with a pretest mean of 8.20 and a posttest mean of the wall media of 11.20 so that it can be concluded that there was an increase in the accuracy of the upper pass in the volleyball extracurricular students of SMK Khaerul Umam. From the test results above, it was found that there was a difference in the mean between the pretest and posttest of finger push ups with a pretest mean of 8.20 and a posttest mean of finger push ups of 11.20 so that it can be concluded that there was an increase in the accuracy of the upper pass in the volleyball extracurricular students of SMK Khaerul Umam.

Table 6. T-Test Paired Samples Test

T-Test Paired Samples Test						
	Mean	Std. Dev	Std.Error Mean	T Value	Df	Sig.(2-Tailed)
Pretest - Posttest Md	-3,000	2,034	.371	-8,078	29	.000
Pretest - Posttest Puj	-3,000	2,034	.371	-8,078	29	.000

From the table above, the results of the Effect of Exercise Using Wall Media and Finger Push-Ups on the Accuracy of Basic Upper Pass Techniques are obtained. Based on the results of the t-test, the calculated t value is -8.203 with a significance of 0.000. The t- table value with df =29 on level significant 5% is 1.782, by Because t count value > t table (8.203>1.782) and sig 0.000 more small from 0.05 (sig < 0.05), p . This means there is influence accuracy of overhead passing on volleyball game after follow wall media exercise and finger push ups , so that can concluded that There is its influence Wall media exercises and finger push ups to accuracy technique basic overhead pass on volleyball game .

Discussion

Overhead passing is one of the techniques often used as a bait (set-up) to serve the ball in doing a smash so that teammates can attack their opponents well, so the overhead passing technique must be done well and correctly. A good and correct overhead pass will make it easier for his teammates to play the ball or attack so that the results are more perfect. To be able to do an overhead pass well and correctly, players must master the movements and techniques correctly. An overhead pass is a ball pass that is done using the tips of the fingers when the ball comes at shoulder height or higher. Passing is intended to provide a pass to teammates to organize an attack into the opponent's area, so that the resulting ball must be easily received by teammates.

This study aims to determine the effect of wall media training and finger push-ups on the accuracy of upper passes in volleyball. The analysis was carried out using the Paired Simple T Test to determine the effect of wall media training and finger push-ups on the accuracy of upper passes in volleyball. In this study, the researcher combined two direct treatments, namely wall media training and finger push-ups to respondents so that they could have a more significant impact on the development of participants related to the accuracy of upper passes, which was shown by the results of data analysis using SPSS. The difference between this study and other studies or relevant studies lies in the treatment or training given. In relevant research, only one training is given, either Wall media exercises alone or just finger push up exercises, while in this study both exercises were combined.

The similarity of this study with relevant research is that both show data analysis that has an influence on the accuracy of upper passing but also has a difference in the t-value produced by data processing using SPSS. For the shortcomings of this study, the researcher did not compare the results of the wall media exercise and finger push-ups, so the researcher did not know which exercise was more influential, because it would be contrary to the hypothesis or initial objective that had been determined by the researcher who wanted to know the effect of wall media exercise and finger push-ups on the accuracy of upper passing in volleyball games. There is also a one sample t-test method in this study, where the research respondents were not divided into two and a pretest was carried out, then two exercises were given at once, namely wall media and finger push-ups and finally a posttest was carried out.

The results of the analysis show that there is an influence on the accuracy of the upper pass before and after the exercise using the wall media and finger push ups. This is indicated by the t-value of -8.203 with a significance of 0.000. The t-table value with df = 29 at a significance level of 5% is 1.782, therefore the t-value> t-table (8.203> 1.782) and sig 0.000

is smaller than 0.05 (sig <0.05), this means that there is an influence on the accuracy of the upper pass in volleyball after participating in the wall media and finger push up exercises, so it can be concluded that there is an influence of wall media and finger push up exercises on the accuracy of the basic upper pass technique in volleyball. Exercises using wall media are carried out by bouncing the ball towards the wall. In the training process, students will analyze errors in the upper pass movement. So, when the exercise using the wall is complete, it is expected to improve the knowledge and skills of upper pass in students (trainees).

This finger push up exercise is used to improve the ability of the fingers, so that it will increase the strength of the fingers and in receiving upper passes the fingers will be stronger. This has an impact on the ability of the fingers to receive the ball by means of upper passes. This upper passing ability is of course one of the basic techniques that is quite important for volleyball players. By improving the player's ability to receive the ball with upper passes, the ball will be easier to control and easy to pass, so that other players will find it easy to play. Push-ups are efficient arm muscle strength exercises because they can be done in limited spaces and outdoors. This exercise is effective because it involves the muscles of the arms and shoulders, and can strengthen the chest muscles, shoulders, and help regulate breathing (Saputra, Syafrial, & Sofino, 2018).

Conclusions

Based on the research results that have been obtained by analysis and hypothesis testing, it can be concluded that: There is an effect of training using wall media and finger push ups on the accuracy of basic upper passing techniques in extracurricular volleyball students at SMK Khairul Umam Lenek Daya. So it can be said that the purpose of this study was achieved, namely there is an effect of training using wall media and finger push ups to improve the accuracy of upper passing in Khairul Umam students and can also be used as a learning reference to improve the accuracy of upper passing in students at school.

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