

The Effect of Modification of Passing Down to the Wall Exercise on the Improvement of Underpass Skills in Volleyball Game Club Galaxy Suban Baru

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Abstract

The problem in this study is the underpass in the new Seban Galaxy club volleyball game which is still not good and correct due to the lack of varied underpass training methods. The purpose of this study was to determine whether there was an effect of the downward to the wall passing modification exercise on increasing the ability to pass under the club galaxy suban baru. This type of research is an experiment. The population in this study amounted to 20 people. The sampling technique in this study used a total sampling technique, the sample in this study consisted of 20 players. The data collection technique used the lower passing ability test. The data analysis technique uses the t-test formula with a significance level of 0.05%. Based on the results of research that has been conducted on club volleyball players in the new Galaxy Suban, the average pretest result is 14.8 and the post-test average is 18.05. From the results of the t-test, it can be seen that $t_{count} > t_{table}$ with t_{count} of 2.912 and t_{table} 2.028 (df 19) so that it can be concluded that there is a significant effect on passing drills down to the wall towards improving the ability to pass under the new suban galaxy club.

Keywords: Volleyball, Underpass Ability, Underpass against the Wall



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INTRODUCTION

Volleyball is the most popular game by people all over the world, especially in Indonesia, besides that, volleyball is a sport that can be played by children to adults. The game of volleyball basically adheres to two principles, namely technique and psychology. Volleyball is one of the team sports that is liked and loved by every individual because volleyball is an interesting, fun and does not require a large amount of money so it can be done easily, all you need is a few friends, a ball, a net and sufficient free space. can be used as a field then the game of volleyball can be done. Muhaimin (2019: 129).

In the game of volleyball there are several basic volleyball techniques. The basic techniques of playing volleyball that must be mastered include under passing, over passing, under serving, over serving and dams (Muhajir, 2014) in Abdul (2017: 1). The basic technique that is very important to master is the basic technique of under passing, because under passing is very useful for defense and can even be used as additional points for the team in winning.

Underpass is useful for receiving the ball under and baiting (Suwarso and Sumarya, 2010) in Abdul (2017: 1). One of the supports for practicing underhand passing is by passing to the wall which aims to improve the accuracy of a player's underpass when receiving service balls and smashes from opponents so that they can receive the ball more accurately and more perfectly. The initial attitude of the player holding the ball with both hands facing the wall, the implementation of the ball being thrown or reflected against the wall and the reflection is trying to be passed to the wall repeatedly so that it can improve the ability of underhand

passing with the accuracy of targeting the ball above the line as a media tool to help accuracy of passing lower.

Based on the observations that researchers have made at the Galaxy Suban volleyball club, it is only known that the coach has not implemented an appropriate training method so that a new training method is needed to make players able to perform the underhand passing technique properly and directed from the feeder (toser) to the players who will do the smash . Because of the importance of the underhand passing technique in volleyball games, players need to get a portion of training and special attention from coaches or coaches. The Galaxy Suban Baru Club is one of the growing volleyball associations or organizations. Club Galaxy Suban was only established in 2021 which is located at Suban Baru Village, Kelekar District, Muara Enim Regency. Club Galaxy Suban was just formed because of the desire to participate in developing young talents in volleyball.

Research conducted by "Shandy Pieter Pelamonia, Hayati, Moh.Wahyudi Pirnanda" entitled "the effect of lower passing exercises using media to the wall using straight-line targets on lower passing abilities". This study aims to collect data, as well as test the results of the accuracy of passing volleyball in lower statistics, the experimental group training and the control group training both had a positive impact on athletes, because the results showed a significant effect.

Based on the research of "Arif Rahman" in this study, the average passing ability in volleyball before direct wall training was 20.76 with a standard deviation of 3.387. The average ability of passing under volleyball after giving direct wall training is 26.0 with a standard deviation of 2.687 and the average difference in passing ability under volleyball before and after giving direct wall training is 5.24 with a p value of 0.000 ($p < 0.05$) . This means that wall training has a direct effect on improving students' volleyball underpassing abilities.

While the research conducted "Deden Rahmat" entitled the effect of learning passing in pairs on lower passing skills in volleyball games, from the results of statistical testing with the t test obtained t count (1.024) $< t$ table (2.68), then accept H_0 means no there is an effect of learning passing in pairs on the skills of underhand passing in volleyball games. From the results of statistical testing with the t test obtained t count (10.236) $> t$ table (2.68), then accept H_1 means the effect of passing learning through the guidance of guides and pairs on lower passing skills in volleyball games at the level of confidence (α) 0 .05 is acceptable. The conclusion in this study is that there is an effect of passing learning through the guidance of guides and in pairs on lower passing skills in volleyball games.

RESEARCH METHODS

According to Sugiyono (2012: 2) variables are anything in any form that is determined by researchers to be studied so that information about this is obtained, then conclusions are drawn. In this case the variables studied: (1) the independent variable in this study was a modification of passing down to the wall, (2) the dependent variable in this study was an increase in down passing. The location of the planned research will be carried out at the Galaxy Suban Baru club volleyball court, which is located in Suban Baru Village, Kelekar District, Muara Enim Regency. When the research plan will be carried out in the afternoon at 15.00-17.00 as many as 16 meetings with details of 1 pretest followed by 14 times of treatment or treatment and 1 time of posttest.

The population is all research subjects (Suharsimi Arikunto, 2010: 173). The population is limited as the number of people who have at least the same characteristics. From this understanding it means that the population is the individual who is used as the object of

research and all of these individuals must have at least one characteristic in common or homogeneity. The population of this study were all female players of the new Galaxy Suban volleyball club, totaling 20 people. According to Sugiyono (2013: 56), the sample is part of the number and characteristics possessed by the population. Sampling in this study was carried out by using total sampling technique. The sample in this study were 20 female players of the Galaxy Suban Volleyball Club.

This research is using experimental method. The method that uses a symptom is called training. With the training given, a causal relationship will be seen as an effect of the implementation of the exercise. The experimental method with matched subjects, abbreviated as M-S, is the separation of each subject pair to the control group and to the experimental group, which will automatically balance the two groups. The research design used was a "one-group pretest-posttest design", namely a research design that contained a pretest before being given treatment and a posttest after being given treatment. Thus it can be known more accurately, because it can be compared with those held before being given treatment (Sugiyono, 2007: 64). This study aims to determine the effect of modification of the bottom to the wall passing exercise on improving the ability to pass under the new suban galaxy club volleyball game.

Treatment Plan

1. Pretest stage, before doing the treatment the player must do an initial test, namely passing down.
2. The treatment stage, giving the treatment of passing down to the wall using a distance of 4.5 m with a wall height of 2.30 m for 14 meetings.
3. Posttest stage, measuring players by conducting a final test of passing under after being given treatment in the form of training

Data Collection Technique

The data collection technique in this study used the underpass test. The data collected in this study were the pre-test underpass data before the treatment was finished and the posttest data after the sample was given treatment using the underpass modification exercise to the wall using a distance of 4.5 m. The data to be collected by this researcher are pretest passing data in volleyball before the sample is given treatment, and posttest data after the sample is given treatment for 16 times. The test instrument used in this study was to obtain volleyball passing data using a volleyball passing test instrument. The goal in the under passing test is to measure volleyball under passing skills. The greater the number of correct moves from the start, subject and ending, the greater the score to be obtained.

RESEARCH RESULTS AND DISCUSSION

Research Result

This study aims to examine the effect of lower passing modification exercises on underhand passing skills in volleyball games at the Galaxy Suban Baru club. The following are the results of the Pretest and Posttest of lower passing skills in volleyball.

Table 1. Data on the Pre-Test and Post-Test of Passing Skills Research Results

| No | Name | Pre-Test | Post-Test | difference | No | Name | Pre-Test | Post-Test | difference |
|----|-----------|----------|-----------|------------|----|----------|----------|-----------|------------|
| 1 | Siti Alia | 12 | 16 | 4 | 11 | Yeni | 17 | 20 | 3 |
| 2 | Siska | 12 | 17 | 5 | 12 | Kurnia | 19 | 22 | 3 |
| 3 | Nevi | 14 | 15 | 1 | 13 | Marsella | 12 | 15 | 3 |

| | | | | | | | | | |
|----|--------------|----|----|---|----|----------|----|----|---|
| 4 | Dinda | 17 | 21 | 4 | 14 | Desty | 17 | 19 | 2 |
| 5 | Silvi | 16 | 20 | 4 | 15 | Nur asia | 15 | 18 | 3 |
| 6 | Asyifa | 18 | 24 | 6 | 16 | Melani | 16 | 20 | 4 |
| 7 | Della | 23 | 25 | 2 | 17 | Bunga | 12 | 17 | 5 |
| 8 | Fitri | 11 | 15 | 4 | 18 | Alvina | 15 | 18 | 3 |
| 9 | Kara Saputri | 9 | 12 | 3 | 19 | Sinta | 13 | 16 | 3 |
| 10 | Sari | 11 | 14 | 3 | 20 | Monika | 17 | 17 | 0 |

The results of the descriptive statistical analysis of the pretest and posttest of lower passing skills in volleyball games are presented in the table below:

Table 2. Pre-Test and Post-Test Statistical Results

| Pre-Test | | Post-Test | |
|---------------|----------|---------------|----------|
| Mean | 14.8 | Mean | 18.05 |
| Median | 15 | Median | 17.5 |
| Modus | 12 | Modus | 17 |
| std deviation | 3.365459 | Std.Deviation | 3.347819 |
| Minimum | 9 | Minimum | 12 |
| Maximum | 23 | Maximum | 25 |
| Sum | 296 | Sum | 361 |
| Range | 14 | Range | 13 |

Based on the table above, in the initial test and final test of lower passing skills in volleyball games before and after being given training on modifying lower passing to the wall for players at the Galaxy Suban club, the average results of the initial test were 14.8 and the final test was 18.05.

Pre-Test Result Data

Before the players get treatment, a pretest is first held in the form of passing down. This test aims to determine the player's lower passing ability before getting treatment (treatment). The results of the underpass test are as follows: the number of participants is 20, the maximum value of the underpass: 23, the minimum value of the underpass: 9, the mean: 14.8, the median: 15, the mode: 12, and the standard deviation: 3.36. Furthermore, the data is presented in a frequency distribution as follows:

Table 3. Description of Pre-Test Results

| No | Interval Class | Frequency | Relative (%) |
|-------|----------------|-----------|--------------|
| 1 | >21 | 1 | 5% |
| 2 | 16 - 20 | 8 | 40% |
| 3 | 11 - 15 | 10 | 50% |
| 4 | 6 - 10 | 1 | 5% |
| 5 | <5 | 0 | 0% |
| Total | | 20 | 100% |

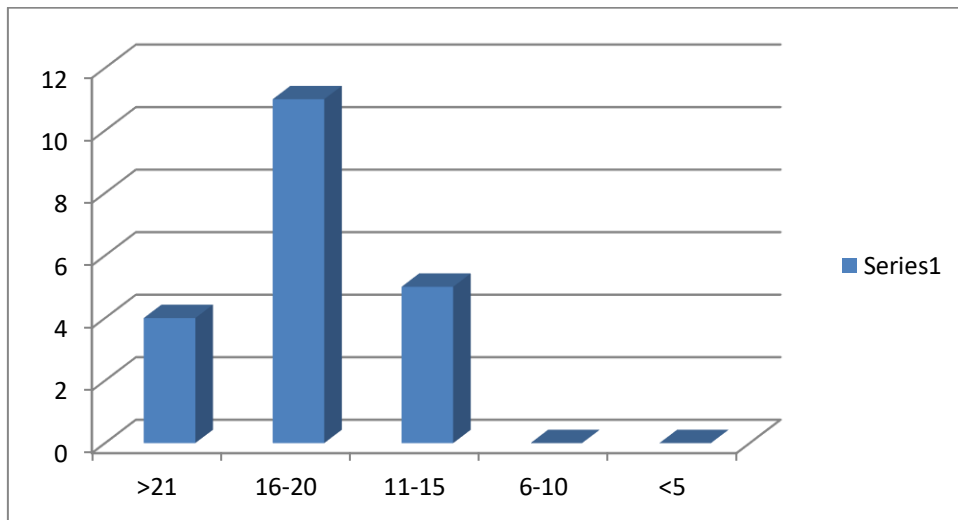


Figure 1. Lower Passing Pre-Test Histogram

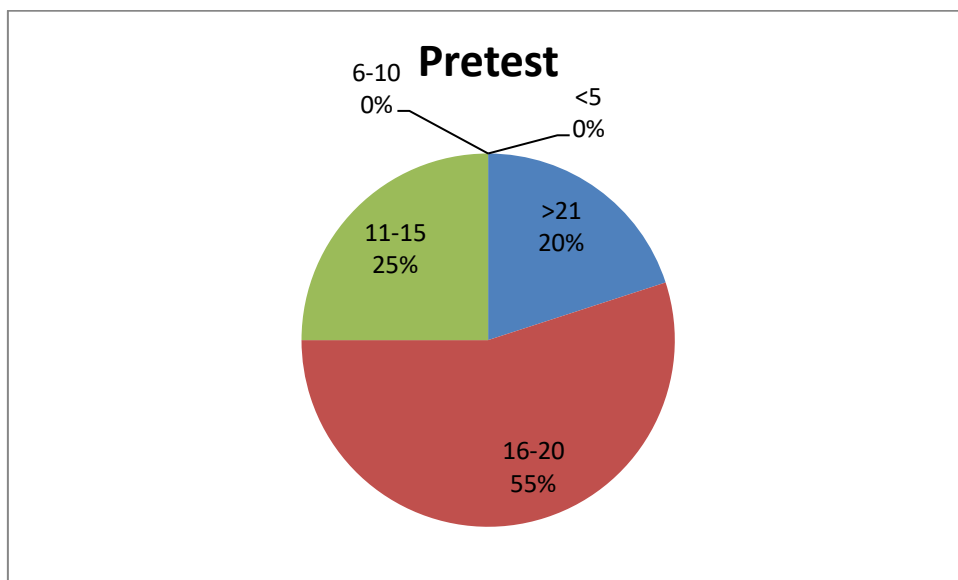


Figure 2. Graph of Pre-Test Percentage Diagram

Post-Test Result Data

After the players received treatment with training material for passing down to the wall modification for 16 meetings, then a bottom passing test was carried out. This test aims to determine the player's passing skills after receiving treatment. The results of the underpass test are as follows: the number of participants is 20, the maximum value of the underpass: 25, the minimum value of the underpass: 12, the mean: 18.05, the median: 17.5, the mode: 17 and the standard deviation: 3.347. Furthermore, the data is presented in the following frequency distribution

Table 4. Description of Post-Test Results

| No | Interval Class | Frequency | Relative (%) |
|-------|----------------|-----------|--------------|
| 1 | >21 | 4 | 20% |
| 2 | 16-20 | 11 | 55% |
| 3 | 11-15 | 5 | 25% |
| 4 | 6-10 | 0 | 0% |
| 5 | <5 | 0 | 0% |
| Total | | 20 | 100% |

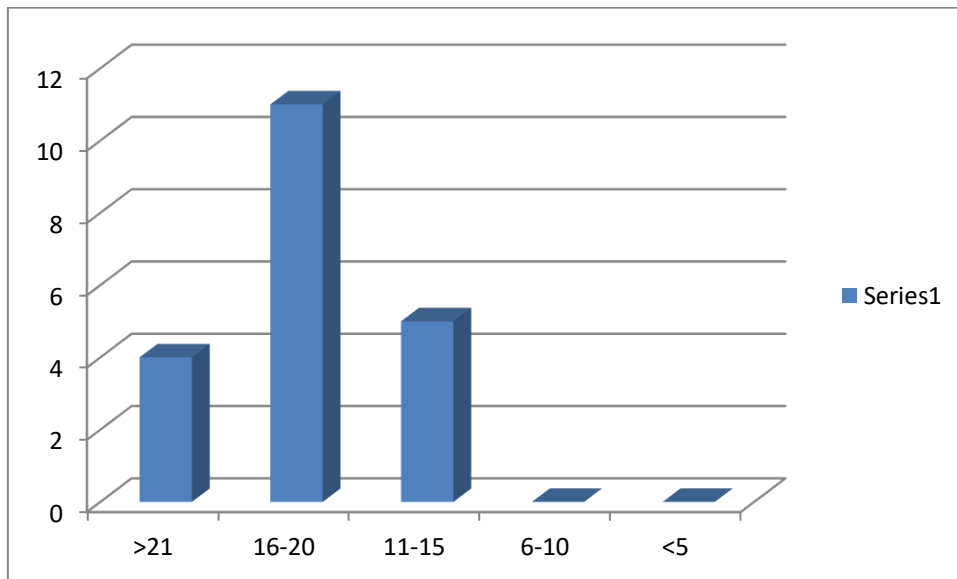


Figure 3. Lower Passing Post-Test Histogram

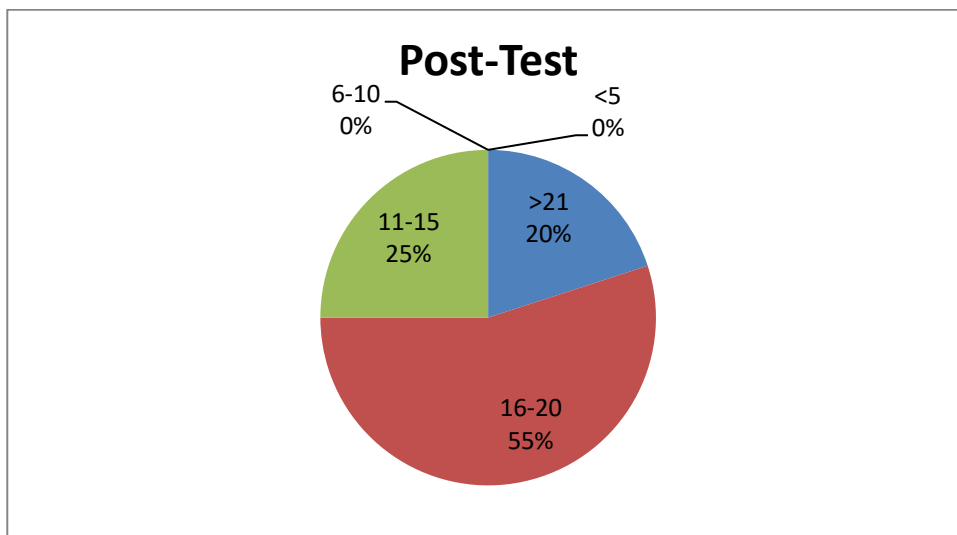


Figure 4. Graph of Post-Test Percentage Chart

Normality test

This normality test is used to determine whether the data to be analyzed is normally distributed or not. The variable normality test is read using the Lilliefors test because the subject is less than 50 and the data is in the form of single data.

Table 5. Summary of Normality Test Results

| | Mean | SD | L_{hit} | L_{tab} |
|----------|-------|------|-----------|-----------|
| Pretest | 14,8 | 3,36 | 0,147 | 0,190 |
| Posttest | 18,05 | 3,34 | 0,123 | 0,190 |

If L count (L_{hit}) is less than L table (L_{tab}) then the data is normal, and if L count (L_{hit}) is more than L table (L_{tab}) then the data is not normal. L_{tab} with $N = 20$ is 0.190. The data obtained from the lower passing pretest before being given treatment and the lower passing posttest after being treated in the table above. From these data it can be concluded that the distribution of the results of the lower passing pretest and posttest is normal.

Homogeneity Test

Homogeneity test was carried out to test the similarities of several samples, namely homogeneous or not. The homogeneity test is intended to test the similarity of variance between the pretest data and posttest data. The decision making criterion is if $f_{count} > f_{table}$ then the sample data is not homogeneous. If $f_{count} < f_{table}$ means that the sample data has a homogeneous variant.

Table 6. Variance Homogeneity Test Data

| | F_{hit} | F_{tab} | Information |
|-----------|-----------|-----------|-------------|
| Pre-Test | 0,99 | 2,15 | Homogen |
| Post-Test | | | |

From the table in the appendix it can be seen that the pretest and posttest scores for lower passing skills in volleyball games are $0.99 < 2.15$ so the data is homogeneous.

Hypothesis Test Results

The t-test was used to test the hypothesis which reads "There is a significant effect of the under-to-wall modification exercise on under-passing skills in volleyball games at Club Galaxy Suban Baru", based on the results of the pre-test and post-test. If the results of the analysis show a significant difference, then the practice of modifying passing down to the wall to increase the ability to pass under the volleyball game of the Galaxy Suban Baru club. The conclusion of the study is stated to be significant if the $t_{count} > t_{table}$.

Table 7. The results of the Pre-Test and Post-Test of Lower Passing Skills

| Group | Average | T count | T table |
|-----------|---------|---------|---------|
| Pre-Test | 14,8 | 2,912 | 2,028 |
| Post-Test | 18,05 | | |

The results of the t-test can be seen that t_{count} is 2.912 and t_{table} is 2.028 (df 19) with a p significance value of 0.000. Because $t_{count} > t_{table}$ 2.028 and a significance value of $0.000 < 0.05$, these results show that there is a significant difference. Thus the alternative hypothesis (H_a) which reads "there is an effect of modification of passing down to the wall training on increasing the ability of underpassing in the volleyball game of Galaxy Suban Baru club", is accepted. This means that modification exercises have a significant effect on improving bottom passing skills in volleyball games at the Galaxy suban baru club.

Discussion

Based on the analysis of research data obtained a significant increase in the group studied. Giving modified training treatment has a significant effect on improving lower passing skills in volleyball games at the Galaxy Suban Baru club. This study aims to determine the significant effect of modification of the bottom to the wall passing exercise on increasing the ability to pass under the volleyball game of the Galaxy Suban Baru club.

The sequence of activities that must be carried out so that in the end it can be concluded are: (1) Held a pretest with the aim that students' lower passing skills are known, (2) Provided treatment for 16 meetings with modification of lower passing to the wall, (3) Then the last one was holding posttest which aims to determine whether or not there is an increase in the lower passing skills of the subject being treated. To find out whether there is a difference or the influence of the bottom-to-wall passing modification exercise on increasing the bottom passing ability, it can be proven by the t-test. The t-test will display the t-count value and its significance.

The results of the t-test showed that there was a significant effect on the modification exercise of passing down to the wall on increasing the ability to pass under the Galaxy Suban Baru club volleyball game, this was evidenced by t count $2.912 > t_{table} 2.028$ and a significance value of $0.000 < 0.05$. Underhand passing skills have increased after carrying out the treatment of lower passing modification exercises to the wall as indicated by the post-test scores being greater than the pre-test values. This is evidenced by the post-test average score of 18.05 which is better than the pre-test average score of 14.8

Based on the results of the study, it can be seen that there are some whose passing skills have increased dramatically. This is because this type of research is a quasi-experimental, meaning that the researcher cannot fully monitor activities outside of the training/treatment schedule given by the researcher. It is possible for children whose abilities have drastically increased because these children also continue to practice outside of the exercise/treatment schedule given by the researcher.

CONCLUSION

Based on the results of the analysis of the data obtained and the discussion of the results of the research conducted at the Galaxy Suban Baru club, the authors draw a conclusion that the hypothesis in this study has been answered, namely that there is an increase in underhand passing skills in volleyball games at the Suban Galaxy club after being given underhand passing training to the wall using a distance of 4.5 m and also given evidence with the results of data analysis and discussion of the results of this study which show that t count is greater than t table. The t count is 2.912 while the t table at a significant level of 5% is 2.028. This shows that there is an increase in lower passing skills at the new Galaxy Suban club which is given training to pass down to the wall using a distance of 4.5 m.

Based on the results of the research that has been done, there are several suggestions from researchers that need to be made: For clubs; Because the bottom-to-wall passing exercise has a beneficial effect on increasing bottom-passing in volleyball games, it is hoped that junior teams who are members of the volleyball sport in improving bottom-passing skills can use this form of bottom-to-wall passing exercise. For coaches/coachers; This research is expected to be one of the input materials for volleyball trainers or coaches at the Galaxy Suban Baru club to apply good and correct training methods in improving lower passing skills in volleyball games. For researchers; It is hoped that researchers who wish to carry out further research can make this research information material and can research with a larger and different number of populations and samples.

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