

Drill Training Method for 6 Weeks Improves Bottom Passing Ability at Volleyball Academy KU-17

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ABSTRACTS: This research aims to determine how increasing the drill training method affects the bottom passing ability at Volkas Volleyball Academy KU-17. The population used in this research was Volkas Volleyball Academy KU-17, taken using the purposive sampling method and a sample of 15 people. The test in this study was used to obtain lower passing score data during the pretest and posttest. The analysis method in this research used the paired sample t-test. The results of hypothesis testing using a paired sample t-test produce a sig value of $0.000 < 0.05$ with a calculated t value of $-4.878 < 2.1445$, which means that H_0 is rejected and H_a is accepted, it can be concluded that there is an influence of drill method training on increasing passing—bottom at Volkas Volleyball Academy KU-17. The results of this study produced data that there was an increase in lower passing at Volkas Volleyball Academy KU-17, as evidenced by the paired sample t-test sig value of $0.000 < 0.05$ with a calculated t value of $-4.878 < 2.1445$, which means that H_0 was rejected and H_a accepted. With pretest test results of 40.2 and posttest test results of 45.67. Based on the results and discussion of research that has been carried out, it is concluded that the drill training method can improve lower passing in volleyball games, especially at Volkas Volleyball Academy KU-17

KEYWORD: Volleyball, bottom, drill training method.

1. INTRODUCTION

Sport is a physical fitness activity that can strengthen the body's muscles (Abi et al., 2022). Exercise can also maintain body fitness and reduce stress (Ankasari et al., 2021). The human body needs exercise; if done well and regularly, exercise can have a good influence on the development of the body (Atsani, 2020). Apart from providing development to the body, exercise can also positively influence human spirituality (Pratiwi et al., 2020). Sports consist of several branches, one of which is volleyball. The sport of volleyball is very popular among people, from children to adults (Atmianti et al., 2022).

Volleyball is played using a ball bounced into the air over a net, hoping that the ball will fall into the opponent's area to win points (Syafe'i et al., 2021). PBVSI revealed that volleyball is a sport where the game consists of 2 teams on a field separated by a net (Muhajidin & Wibowo, 2016). This volleyball game requires mastering techniques such as passing, serving, smashing, and blocking (Saputra & Gusniar, 2019). This basic technique found in volleyball is very much needed and has an important role in a game (Atmianti et al., 2022).

Basic volleyball technique is a very important component in the game of volleyball. Therefore, volleyball athletes are encouraged to perform these basic techniques well (Ratimiasih, 2021). One of the techniques that volleyball players must have is the passing technique. In volleyball, passing is passing the ball to a teammate using certain techniques (Atmianti et al., 2022). This passing technique is done in two ways: from above (top passing) and below (bottom passing). Underpassing is played using both hands.



Underpassing is usually done when receiving service and an attack from the opposing team (Alek et al., 2021).

Based on observations at the Volkas Volleyball Academy KU-17, it was stated that there were still errors in making lower passes. Passing often deviated and did not reach the setter when the participant fed the ball (Ruslan & Duhe, 2021). Underpassing can be trained using several methods. One method that can train underpassing abilities is using the drill training method (Yahya & Sutriyono, 2020). The drill training method is a method used to improve passing in volleyball. The form of training in this drill method is to carry out movements repeatedly and continuously to increase the movement intensity of the athlete (Jayanti & Nasuka, 2021).

Previous research found included research conducted by (Alwijaya, 2018). Cycle I was carried out before the drill training method, and cycle II carried out the drill training method. This research produced data on student learning outcomes related to lower passing; in Cycle I, there were 15 students who had completed their learning outcomes, or 65.22%, and 8 people whose learning had not been completed, or 34.78%. Meanwhile, in cycle II, 21 students completed their learning results, or 91.31%, and 2 students who did not complete it, or 8.70%. Applying the drill training method in this research improved student learning outcomes, as evidenced by students' completeness in carrying out lower-passing learning activities using the drill training method. This research is relevant to the research that the author will conduct by choosing the drill training method to improve down passes in volleyball games.

Based on the problems above, the author chose to conduct research entitled "Drill Training Method for 6 Weeks Improves Bottom Passing Ability at Club Volkas Volleyball Academy KU-17" to carry out passing training using the drill training method to help participants in passing and develop dexterity, accuracy, and skills in athletes.

2. METHODS

This research uses quantitative methods with an experimental approach. The research design used is a one-group pretest-posttest design, namely by taking measurements on an object before and after being given treatment (Simarmata et al., 2021). The tests given in this research were twice, namely pretest and posttest. The pretest is carried out before treatment, while the posttest is carried out after treatment. Treatment with drill method training is carried out three times a week, namely on Tuesday, Wednesday, and Friday, with a training duration of 120 minutes (exercises are carried out 18 times in 6 weeks).

This research was conducted at the Volkas Volleyball Academy in Banjarnayar Hamlet RT 03/RW 01, Banjarwati Village, Paciran District, Lamongan Regency. The population in this study were athletes who were members of the Volkas Volleyball Academy. The sampling technique in this study used a purposive sampling method with certain criteria (Sugiyono, 2013), including (1) athletes who are members of the Volkas Volleyball Academy; (2) Volkas Volleyball Academy athletes who actively participate in training at least 3 times in a row; (3) Volkas Volleyball Academy KU-17 athletes. Based on these criteria, the sample obtained in this study was 15 athletes.

Data collection was carried out by carrying out pretest and posttest tests in the following way: (1) The player stands in front of the target holding a volleyball; (2) After a signal to start, a player makes a down pass by bouncing the ball towards the target; (3) Players are given 60 seconds to make a down pass; (4) The ball reflected by passing must hit the target by the rules; (5) Each pass that hits the target will be given a score of 1.

3. RESULT

Based on the results of the data analysis obtained, it will be presented as follows:

Table 1. Descriptive Statistics

| | N | Min | Max | Mean | Std. Deviation | Variance |
|---------------------------|----|-----|-----|-------|----------------|----------|
| PRETEST | 15 | 12 | 56 | 40.20 | 11.977 | 143.457 |
| POSTEST | 15 | 25 | 64 | 45.67 | 12.442 | 154.810 |
| Valid N (listwise) | 15 | | | | | |

The descriptive test results on this data with an N value of 15 produced a minimum value of 12 and a maximum value of 56, with a total value (sum) of 603. This data also produced an average value (mean) of 40.20, a standard deviation of 11.997, and a variance value of 143.457.

The normality test determines whether the data to be analyzed has a normal distribution (Nurjana et al., 2022). After calculating the normality test on the data, the following results were obtained:

Table 2. Normality Test

| One-Sample Kolmogorov-Smirnov Test | | | |
|------------------------------------|-----------|----|-------|
| | Statistic | N | Sig. |
| Pretest | 0.122 | 15 | 0.200 |
| Posttest | 0.133 | 15 | 0.200 |

Based on the table above, the pretest and posttest scores are $0.2 < 0.5$, where it can be concluded that the data obtained from the pretest and posttest on lower passing at the Volkas Volleyball Academy KU-17 is normally distributed.

After carrying out the normality test and homogeneity test of the data, hypothesis testing is continued. Hypothesis testing in this study used the paired sample t-test. The paired sample t-test was used to determine the significance and increase in volleyball underpassing ability by providing the drill training method (Putra & Sistiasih, 2021). The results of the paired sample t-test in this study are as follows:

Table 3. Paired Sample T-Test

| Paired Sample t-test | | | | |
|----------------------|--------|----------------|----|-----------------|
| | Mean | Std. Deviation | n | Sig. (2-tailed) |
| Pretest-Posttest | -5.467 | 4.340 | 15 | 0.000 |

The results of hypothesis testing using a paired sample t-test produce a sig value of $0.000 < 0.05$ with a calculated t value of $-4.878 < 2.1445$, which means that H_0 is rejected and H_a is accepted, it can be concluded that there is an influence of drill method training on increasing passing. Bottom at Volkas Volleyball Academy KU-17. The percentage increase in lower passes at Volkas Volleyball Academy KU-17 can be calculated using the following calculation:

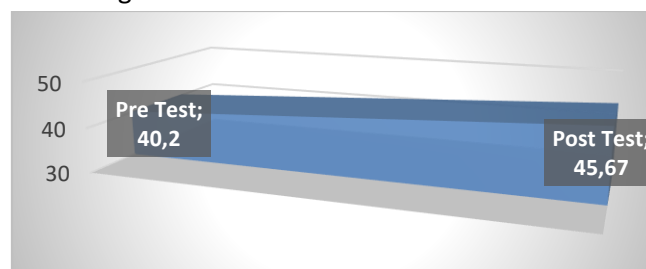


Figure 1. Pretest-Posttest Average Score



The data above show that the drill training method improves lower passing in volleyball games, especially at Volkas Volleyball Academy KU-17, with pretest test results of 40.2 and posttest test results of 45.67.

4. DISCUSSION

The research results show that drill training influences students' bottom passing. The bottom pass is needed to receive the serve spike in the direction of the ball that is moving hard (hard-driven). Not only that but the bottom pass is intended to feed the ball well to the attacker (Iskandar, 2018). Passing under the volleyball is done by opening the legs parallel to the shoulders with the knees bent to form a stance. The hands are brought together and swung until they are parallel to the shoulders, accompanied by the body movement of throwing the ball (Daulay & Nasution, 2021). Therefore, obtaining the ability and skill to pass down well requires practicing suitable training to improve the ability of the down-passing technique by using the drill training method (Hidayat & Rifki, 2020).

The drill training method is a method used to improve passing in volleyball. The training method used in this drill method is to carry out movements repeatedly and continuously to increase the movement intensity of the athlete. This drill method is highly recommended for passing training so athletes have good passing skills (Isman et al., 2020). Several advantages of this drill training method include: 1). training using this method can increase accuracy and speed in implementation; 2). In implementing this method, the concentration is a little, 3). This method can automatically make complex and complicated movements (Muhajidin & Wibowo, 2016).

The drill training method can be applied to volleyball games to improve abilities, especially in making down passes (Irwanto, 2017). Apart from that, the drill training method has the advantage of enriching movements by reinforcing movements so that the athlete can perform the lower passing movement correctly and then correct a friend's movement when performing the lower passing. From the results of the data analysis, the pretest and posttest values were $0.2 < 0.5$, where it can be concluded that the data obtained from the pretest and posttest on lower passing at the Volkas Volleyball Academy KU-17 were normally distributed. After the data normality test was carried out, a data homogeneity test was carried out, which produced pretest and posttest data sig values of 0.537 and 0.950, which means it is greater than 0.05 and has a calculated f value of 0.986 and 0.264, which means it is smaller than the f table value of 4.747. This indicates that the pretest and posttest data do not show differences or have the same variance, so the data can be homogeneous. After testing the normality and homogeneity of the data, a hypothesis test was carried out using a paired sample t-test. The test results produced paired sample t-test sig value data of $0.000 < 0.05$ with a calculated t value of $-4.878 < 2.1445$, which means that H_0 is rejected. H_a is accepted, so it can be concluded that drill method training influences increasing passing, with pretest test results of 40.2 and posttest test results of 45.67. This increase likely occurred due to the drill training approach, which supports developing lower passing results in athletes. The research provided evidence that the drill training method can improve the volleyball bottom passing ability of Volkas Volleyball Academy KU-17 athletes. The research results are in line with research conducted by Muh. Edi Alwijaya (2018) stated that the drill training method's application improved student learning outcomes as evidenced by student completeness in carrying out lower passing learning activities using the drill training method. Based on the results of this research, the drill training method has been proven to be used to improve underpassing techniques. The drill training can stimulate athletes to move and carry out underpassing exercises continuously. As a result, the passing ability of Volkas Volleyball Academy athletes has improved compared to before (Ankasari et al., 2021).



5. CONCLUSION

Based on the results and discussion of the research that has been carried out, it is concluded that the drill training method can improve bottom passing in volleyball games, especially at Volkas Volleyball Academy KU-17, with a pretest test result of 40.2 and a posttest test result of 45.67. The suggestions put forward in this research are that athletes are expected to be able to perform good lower passing techniques in volleyball games to score points in each match. Apart from that, this research still has many shortcomings for future researchers, so it is hoped that it will overcome them.

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