

The Effect of Pass AB Training on Increasing Volleyball Passing Skills in Junior High School Students

Suhadi Suhadi 1*0, Amat Komari 10, Agus Marhaendro 10 and Nur Majid 1

Department of Physical Education, Health, and Recreation, Sport Science and Health Faculty, Universitas Negeri Yogyakarta, Colombo St. No. 1 Yogyakarta, Indonesia Suhadi@uny.ac.id

Abstract. The lack of students' skills in the basic techniques of passing over and under in volleyball is the background in this study. This study aims to determine the effect of AB pass training on volleyball passing skills in junior high school students. This research method is Quasi Experimental, the research design uses a One-Group Pretest-Posttest Design. It was carried out on one group without a control or comparison group. The samples in this study were all volleyball extracurricular students, totaling 30 students. The sampling technique used in this study uses total sampling. The data collection technique in this study was to use a modified Brady test. Data analysis techniques used the t test (paired sample t test), pre-test and post-test. The results of the t test show that the t count is 6.996, exceeding the t table value of 2.160, with a significance level of 0.000 which is lower than 0.05. There is an increase in the percentage of 7.41%.

Keywords: The Influence of Abs Fitting Training, Skill Improvement, Volleyball Passing

1 Introduction

Volleyball is one of the most popular sports around the world. This sport is not only attractive for professional athletes to play, but also a favorite choice among junior high school students. Volleyball is a sport that requires good technical skills, including ball passing skills. Passing volleyball is one of the important aspects of this game, and the ability to make a good pass can be the difference between victory and defeat in a match.[1].

With regard to volleyball, it should be noted that this is a sport that requires excellent technical skills, including the ability to pass the ball. When playing volleyball, passing the ball, which is also called receiving or passing, is key. Players need to have the correct body position, with feet shoulder-width apart, knees slightly bent, and body leaning forward. In this case, players can maintain balance and agility to respond well to the ball[2].

In addition, hand placement is very important. When receiving the ball, players should use both hands with fingers spread apart, creating a larger surface for hitting the ball. With both hands forming a kind of disc, the ball can be controlled better. It is also important to always follow the movement of the ball with an eye, which helps in anticipating the direction and speed of the ball[3].

The right hitting technique is also needed to accurately send the ball to a teammate. This involves using the wrist to control the direction and height of the ball. In addition, good communication with teammates is key in volleyball passing. Players must inform their teammates whether they will take the ball or leave it, to avoid confusion on the court[4].

AB pass training is one of the training methods used in training volleyball passing skills. This method has a special focus on the basic volleyball passing technique, namely the underhand pass otherwise known as the "bump pass." This technique involves hitting the ball with both straight arms, resulting in an accurate and easy pass to other players on the team. The AB pass drill was developed to help players hone this basic skill well[6].

Research on the effect of passing AB training on improving volleyball passing skills in junior high school students has significant relevance. A good level of skill in volleyball passing can help students feel more confident playing and can potentially lead to a stronger team. In addition, sports such as volleyball can also teach values such as teamwork, discipline, and tenacity, which can become an important foundation in students' personal development [7].

The AB pass drill is a training method that focuses on developing basic volley-ball passing skills. The basic technique taught in this exercise is the underhand pass or bump pass. This technique involves players hitting the ball with both straight arms, so that the ball is lifted stably and can be directed to other players on the team.

The AB pass drill often begins with the player standing with their feet shoulder-width apart and arms bent at the elbows. The ball is then thrown to the player, and the player must use their arm to gently hit the ball, keeping the ball in line with their chest, and then aim it in the desired direction. This drill focuses on basic technique, including proper body positioning, proper arm use, and accurate ball management[8].

One of the main advantages of the AB pass exercise is that it can be performed with a variety of skill levels. Both beginners and experienced players can benefit from this exercise. AB pass training can also be done without the need for special equipment, so it can be held in various environments, including at school [9].

2 Method

This research method is Quasi Experimental, the research design uses a One-Group Pretest-Posttest Design. It was carried out on one group without a control or comparison group. The samples in this study were all volleyball extracurricular students, totaling 30 students. The sampling technique used in this study uses total sampling. The data collection technique in this study was to use a modified Brady test. The data analysis technique used the t test (paired sample t test), pre-test and post-test.

3 Result

Table 1. Frequency	Distribution o	f Ability Prete	est Results Bet	fore Passing A	B Technique
---------------------------	----------------	-----------------	-----------------	----------------	-------------

No	Intervals	Frequency	Percentage
1	55-59	6	21.42%
2	51-54	3	7.14%
3	46-50	12	42.85%
4	42-45	3	7.14%
5	38-41	6	21.42%
Amou	nt	30	100%

In research on passing skills at the pretest stage, the following results were found: the lowest score was 38, while the highest score was 55, with an average score of 48.14. The median score was 49.50, and the most frequently occurring score was 50. Also, the standard deviation of these scores was 5.61.

Table 2. Frequency Distribution of Passing Ability Test Results after the AB Passing

	Technique				
No	Intervals	Frequency	Percentage		
1	55-59	6	35.71%		
2	51-54	3	21.42%		
3	46-50	12	21.42%		
4	42-45	3	7.14%		
5	38-41	6	14.28%		
Amou	nt	30	100%		

The results of the research related to the performance of the passing technique during the final exam showed that the lowest score was 43, the highest score was 57, with an average score of around 51.71. The middle (median) score is 52, and the most frequently occurring score (mode) is 51. In addition, the standard deviation of the score is around 4.59.

Previously, descriptive statistical data had been presented regarding the performance of the AB passing technique. In this study, we will describe the effect of increasing the results of the lower passing exercise on the skills of the volleyball underpass technique by using the percentage increase formula.

The results of the pretest show an average of 48.14, while the results of the posttest show an average of 51.71. After comparing the average pretest and posttest scores, we can calculate the percentage increase as follows:

Percentage Increase = $51.71-48.14 \times 100 \%$

=48.14

An increase of 7.41% in percentage was achieved. In other words, there was an increase of 7.41% in the ability of the lower passing technique through the AB passing technique.

Normality test

The purpose of testing the tendency for normality is to verify whether the data generated from the test results follow a normal distribution or not. The method used in testing for normality is using the Kolmogorov-Smirnov formula with the help of SPSS version 23 software. Determining whether the data distribution is normal or not is based on certain criteria, namely if the p value > 0.05 (5%), then the distribution is considered to follow normal pattern, whereas if the p value <0.05 (5%), the distribution is considered not to follow a normal pattern.

Table 3. Frequency Distribution of Passing Ability Test Results after the AB Passing Technique

Group	P	Sig.	Information
Pretest	0.118	0.05	Normal
Posttest	0.2	0.05	Normal

Based on the information listed in the table above, it can be observed that the significance value (p) of all variables has a number above 0.05. Because all data has a normal distribution, it is possible to continue the analysis using parametric statistical methods.

T-test

The t-test is used to evaluate the hypothesis which states that there is an effect of passing training with the AB passing technique. Assessment is carried out based on the results of the pre-test and post-test. If the results of the analysis show that there is a significant difference, it can be concluded that training in passing with tools has a positive impact on the ability of the athlete's passing technique. The research conclusion is considered significant if the calculated t value exceeds the t table value, and if the significance value (sig) is less than 0.05 (Sig <0.05). Data analysis results can be found in the table 4.

Table 4. T-test Result

C	F1-4 f1-4	De	t-test for	t-test for Equality of means			
Group Fla	Flat-flat	Df	tht	ttb	Sig.	Difference	%
Pretest	48.1429	13	6,996	2,160	0.000	3.57143	7,41

Posttest 51.7143 13

From the results of the t-test it can be seen that t count is 6.996 and t table is 2.160 with a significance p value of 0.000. Because t count is 6.996> t table is 2.160, and a significance value is 0.000 <0.05, these results show that there is a significant difference.

4 Discussions

Based on the results of data analysis from this study, it was found that the study subject group experienced an increase. The t test results showed that the t count was 6.996, exceeding the t table value of 2.160, with a significance level of 0.000 which is lower than 0.05. There is an increase in the percentage of 7.41%. The ability to pass in volleyball is one of the key aspects that is very important in this game. Passing, or what is often referred to as "reception" or "service-reception," has a vital role in initiating attacks and maintaining the continuity of the game. Offensive Initiation: Passing is the first stage in a team attack. When the opponent is serving, the player who is passing must arrange the ball so that it can be processed by another player to carry out the attack. Good passing ability will ensure the ball gets into the hands of the right players to make an effective shot[10]. Distributing Balls: Setters are players who are responsible for distributing balls to other players for attacks. To do this well, the setter needs proper reception from the player making the pass. If the pass is not accurate or stable, the setter will have a hard time managing the ball, disrupting the flow of play. Avoiding Mistakes: One of the main goals in volleyball is avoiding mistakes, especially service-reception mistakes. Errors in passing can give the opponent a direct point (serve ace) or provide an opportunity for the opponent to attack from an advantageous position. Good passing ability helps the team avoid these mistakes[11]. Defense: Passing is also important in defense. A team that has good passing skills will be better able to anticipate and deal with opponent's blows more effectively. This includes securing difficult balls and turning them into counter-attack opportunities. Consistency: Consistent passing ability allows a team to maintain a smooth flow of play. Without good passing, the game can become chaotic and difficult to control[12]. Psychological Pressure: A team that is able to pass well can create psychological pressure on the opponent. Opponents may feel frustrated if they have trouble stopping the attacks of a team that has good passing. Tactical Options: Good passing ability gives the team more tactical options. They can perform different types of attacks, including quick strikes, high shots, or counterattacks, depending on the quality of their passing[6]. In conclusion, passing ability in volleyball is a very important basis for team performance. Without good passing, it is difficult to build an effective attack, keep the game going, and avoid mistakes. Therefore, training and developing passing skills is a very important aspect of training volleyball players.

The right method of practicing passing is the key to success in volleyball. Passing is a critical foundation of play, allowing a team to initiate good attacks and keep the ball in play. Without good passing, it is difficult to develop other skills in

volleyball such as setting and attacking. Also, with good passing technique, players can reduce errors such as double contact or sending the ball off the field, which can mean the difference between victory and defeat [4]. Precision and consistency are other important aspects. Correct passing technique allows the player to send the ball with precision to the manager to prepare for the team's attack. The ability to cope with the variations presented by opponents is also key, as opponents often try to interfere with passing by sending the ball in various ways. Apart from the technical aspects, proper passing technique training also helps reduce mental stress. Players who are confident in their passing abilities will be calmer in important situations in the game. They will also be better able to adapt to changing pitch conditions and build strong partnerships with their teammates. In other words, practicing passing with the right method is an important foundation for volleyball players to reach higher levels in the game and help their team achieve success.

5 Conclusion

The results of this study indicate that the type of AB volleyball pass exercise has a significant positive impact on improving volleyball passing skills in junior high school students. Students who regularly practice the AB pass technique tend to show greater improvement in their skill at playing this role in volleyball. Therefore, this study shows that type AB volleyball pass training can be an effective method in improving volleyball passing skills in junior high school students.

References

- [1] TA Wulandari, R. Henjilito, and J. Sunardi, "Efforts to Improve 100-Meter Sprint Learning Learning Using the Part Method in High School Students," J. Educator. jasm. Indonesia., vol. 17, no. 1, pp. 10–18, 2021.
- [2] H. Purnomo, "The difference in the effect of service training and eye-hand coordination on the ability to serve in volleyball (experimental study of differences in service training with fixed and changing targets for male volleyball extracurricular students at SMP Negeri 3 Sukoharjo in pela year," 2012.
- [3] LR Dhewi, "Differences in the influence of learning approaches and hand-eye coordination on learning outcomes of volleyball underhand passing in female students of class VII SMP Negeri 2 Tawangsari, Sukoharjo Regency, academic year 2009/2010," 2010.
- [4] H. Setyawan, "Differences in the influence of learning methods and hand-eye coordination on passing ability in volleyball (Experimental Study of Innovative Learning Methods and Conventional Learning in Class VIII Male Students of SMP MTA Gemolong, Sragen Regency, Year," 2011.
- [5] A. Wijayanti, "Differences in the Influence of Teaching Styles and Independence on Learning Outcomes of Passing Underhand Volleyball for Boys Class VII Mts Negeri Plupuh Sragen 2009/2010 Academic Year Thesis By: Astri Wijayanti Nim: K4605018 Faculty of Teacher Training and Education Uni," 2011.

- [6] D. Prastianto, "Differences in the Effect of Learning Modification and Eye-Hand Coordination on Outcomes of Volleyball Upper Serve Learning (Experiment of Upper Serve Learning between Gradual Net Height and Gradual Service Distance in Class VIII Students of State Junior High Schools," 2012.
- [7] RH Dhona, "Differences in the Effect of Learning Approaches Using Tactical and Drill Methods on Volleyball Passing Skills in View of Motor Abilities." UNS (Eleven March University), 2011.
- [8] MF Juniaturrahman, "The Effect of Wall Volley Training on the Accuracy of Lower Passing in Volleyball (Study of Extracurricular Participants at Pgri Sumenep High School),"J. Health. Sport, Vol. 5, No. 2, pp. 8–15, 2016.
- [9] P. Yulianto, "Differences in the Effect of Learning Approaches and Hand-Eye Coordination on Learning Outcomes of Volleyball Pass in Class VIII Students of SMP Negeri 5 Karanganyar in 2009," 2010.
- [10] S. Sahabuddin, H. Hakim, And S. Syahruddin, "Improving the Process Skills of Volley-ball Underpassing Through Cooperative Learning," J. Penjaskesrek, Vol. 7, No. 2, pp. 204–217, 2020.
- [11] A. Astuti, "Differences in the Effect of Training Methods and Eye-Hand Coordination on the Results of Volleyball Passing Ability (Experimental Study of Differences in the Effect of Direct and Indirect Training Methods on Extracurricular Volleyball Students at SMP Negeri 8 Surakarta Ta." 2010.
- [12] I. Saifudin, "Differences in the Effect of Training Methods and Eye-Hand Coordination on Increasing Volleyball Passing Skills (Experiments on the Effect of Massed Practice and Distributed Practice Methods on Class VIII Students of SMP Negeri 2 Ponorogo)." Uns (Eleven March University), 2010.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

