



The Effect Of Game Training Methods On Improving Underhand Passing In Volleyball By Pst Bengkulu Athletes

Fransiskus Hendra Aribowo ¹⁾, Suwarni ²⁾, Feby Elra Perdima ³⁾

^{1,2,3} Universitas Dehasen Bengkulu

e-mail: fransiskushendraaribowo47@gmail.com

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Abstract. This study aims to determine the effect of game training methods on improving underhand passing in volleyball among PST Bengkulu athletes. This study used a quantitative approach with an experimental design to measure the effect of game training on improving PST Bengkulu athletes' underhand passing skills. The study subjects consisted of 32 athletes divided into two groups: an experimental group that participated in a drill training program and a control group that received no special intervention. Data analysis of the pre-test of the game training method group with a sample size of 32 obtained a highest score of 53, a lowest score of 41, an average of 46.96, and a median of 47. The post-test of the underhand passing group in the drill training method obtained a highest score of 59, a lowest score of 45, an average of 51.81, a median of 51.50, and a standard deviation of 3.93. The results of the paired t-test showed a calculated t value (10.14) that was greater than the t-table value (2.145), indicating that the research hypothesis was accepted. It can be concluded that the game training method has a significant influence on improving the underhand passing skills in volleyball of PST Bengkulu athletes.

Keywords: *Skills, Underhand Pass, Volleyball.*

INTRODUCTION

Law Number 3 of 2010 concerning the National Sports System (SKN) serves as the legal basis for sports achievement in Indonesia. This law regulates how sports development, coaching, and training are carried out to produce high-achieving athletes at both the national and international levels. This law emphasizes sports achievement as a way to enhance the nation's dignity, honor, and reputation globally. The game training method also encourages athletes to develop communication and teamwork skills. In each practice, they learn to communicate with teammates, strategize, and cooperate in game situations. This is a crucial aspect of volleyball, where team coordination is essential. By implementing the game training method, PST Bengkulu not only focuses on improving individual skills but also strengthens teamwork. When athletes understand and collaborate with each other, overall team performance improves. This is a crucial asset for PST Bengkulu to achieve higher levels of achievement.

In addition to technical skills and teamwork, game training methods also contribute to athletes' mental development. Athletes learn to manage the stress and pressure that arise during training and games. The ability to remain calm in difficult situations is an invaluable skill in competitive sports. Volleyball development in Bengkulu City, especially at PST, also presents its own challenges. The lack of facilities and support for sports development is one obstacle. However, with the right methods, such as game training methods, athletes can maximize their potential despite limitations.

LITERATURE REVIEW

Volleyball is a sport that requires good technical skills, and the underhand pass is one of the most important basic skills. In Bengkulu City, volleyball coaching has become a primary focus for developing promising young athletes. PST Bengkulu, as one of the main clubs, strives to optimize training to improve these skills. The game training method is an innovative approach to sports coaching, where training is conducted in the form of games. This method not only makes training more engaging but also helps athletes learn in a more realistic context. By using this method, athletes can experience real game situations, which can significantly improve their skills.

The game training method has the main advantage of creating relevant and enjoyable learning situations for athletes. Furthermore, one reason the game training method is effective is because athletes are directly involved in game situations. They learn to handle pressure and make quick decisions when facing opponents. This is especially important in volleyball, where quick reactions and precise passing can determine the outcome of a game. At PST Bengkulu, the game training method is implemented by designing various drills that mimic matches. Athletes not only practice individual passing techniques but also practice them in more complex situations, where they must adapt to the movements of teammates and opponents. This approach helps athletes internalize the skills they learn.

METHODS

This study used a quantitative approach with an experimental design to measure the effect of Game training on improving the underhand passing skills of PST Bengkulu athletes. The study subjects consisted of 32 athletes divided into two groups: an experimental group that participated in a drill program and a control group that received no specific intervention. Before and after the training period, both groups underwent an underhand passing skills test to evaluate changes. This test was designed to measure the accuracy and consistency of underhand passes in different situations.

The drill program implemented in this study lasted eight weeks, with training frequency three times per week. Each training session consisted of a warm-up, underhand passing drills, and a cool-down. The drills were designed to improve technique and strength, with a focus on proper contact points and correct body positioning. Data obtained from the skills test will be analyzed using descriptive and inferential statistics to determine whether there are significant differences between the experimental and control groups after the training program.

To support the validity and reliability of the data, this study will also collect additional data through observations and interviews with coaches and athletes. Observations will be conducted during training sessions to record the development of athletes' technique and behavior in underhand passing. The interviews aimed to gain insight into the athletes' experiences during the training program and how they perceived their skill improvements. With this comprehensive methodology, the research results are expected to provide a clear picture of the effect of drill training on underhand passing skills in volleyball.

RESULTS

Initial Test Results Data (*Pre Test*) for the Game Training Method Group

Based on the analysis of the initial test data (*pre-test*) of the game training method training group with a sample size of 32 , the highest score was 53 , the lowest score was 41 , the average (*mean*) was 46.96 , and the median was 47. For more details, please see the frequency distribution table below:

Table 1. Frequency Distribution of Initial Test (Pre Test) Game training method.

Interval Class	Absolute Frequency	Relative Frequency (%)
41-42	4	12.5
43-44	5	15.62
45-46	6	18.75
47-48	5	15.62
49-50	6	18.75
51-52	4	12.5

Based on the data obtained, the number of participants who obtained scores in the range 41-42 and 51-52 was 4 people, with a relative frequency of 12.5%, which shows that the scores in this range have the least number of occurrences. Furthermore, scores in the range 43-44 and 47-48 were obtained by 5 people, with a relative frequency of 15.62%, which means that this range has a greater number of participants than the class with the lowest frequency, but still less than the range with the highest frequency. The interval classes 45-46 and 49-50 had the largest number of participants, namely 6 people, with a relative frequency of 18.75%, indicating that scores in this range appeared most frequently among all existing interval classes. From this distribution it can be concluded that most participants obtained scores between 45 and 50, which reflects the tendency for participants' scores to be more concentrated in this range compared to other ranges. The following data is presented in the form of a histogram below :

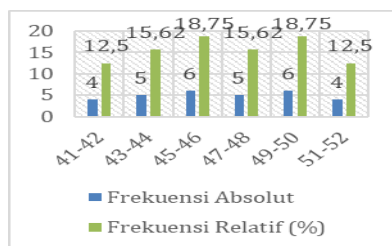


Figure 1: Histogram of the Initial Test (Pre Test) of the game training method.

Final Test Results Data (Post Test) for the Game Practice Method Group

The final test results (*post test*) for the underhand passing drill group obtained the highest score of 59, the lowest score of 45, the average (*mean*) 51.81, median 51.50, standard deviation (SD) 3.93. (For more details, please see the frequency distribution table below.)

Table 2. Frequency Distribution of the Final Test (Post Test) Practice Group Game practice method

Interval Class	Absolute Frequency	Relative Frequency (%)
41-42	4	12.5
43-44	5	15.62
45-46	6	18.75
47-48	5	15.62
49-50	6	18.75
51-52	4	12.5

Based on the research results, the distribution of the number of underhand passes performed by athletes in 60 seconds showed considerable variation. Each participant had different results, reflecting differences in skill and ability in underhand passing techniques. This

variation can be used as a basis for analyzing the distribution of athlete performance patterns in the training sessions.

Based on the data distribution obtained, there were 4 participants who obtained scores in the ranges of 41-42 and 51-52, with a relative frequency of 12.5%. This indicates that scores in these two ranges were the least frequent in the data distribution. This means that only a small number of athletes obtained lower passing scores in this range, so it can be categorized as a less dominant result.

Furthermore, scores in the 43-44 and 47-48 ranges were obtained by 5 individuals, with a relative frequency of 15.62%. This range has a higher number of participants than the lowest-frequency category, but still fewer than the range with the highest number of participants. This indicates variation in athlete performance that requires further analysis to determine the factors influencing these results.

Meanwhile, the 45-46 and 49-50 ranges had the largest number of participants, namely 6 people, with a relative frequency of 18.75%. This range indicates that most athletes obtained the number of underhand passes within this range, which means that their underhand passing skills tend to be concentrated in this number. In other words, this range can be considered the most common achievement in this study.

Overall, this distribution pattern indicates that most participants scored in the 45 to 50 range, reflecting a major trend in the results. These findings can serve as a basis for evaluating the effectiveness of training programs and determining strategies for improving athletes' underhand passing skills. For clarity, the data is presented in the form of a histogram, which more visually illustrates the distribution pattern of athletes' underhand passing results.

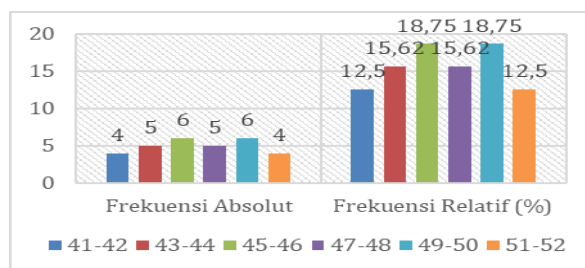


Figure 2 Histogram of the Final Test (*Post Test*)

Normality Test

From the results of processing the Normality test data with the Liliefors Test, the normality figures for the data distribution were obtained as in the following table:

Table 3. Summary of Test Results Data Normality
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistics	df	Sig.	Statistics	Df	Sig.
Pretest	.091	32	.200*	.963	32	.322
Posts	.163	32	.131	.966	32	.390

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The table above shows that the test results for the initial test data (pre-test) of the drill training group have a value of 0.200 with a probability of 0.200. Using $\alpha > 0.05$, it can be concluded that the pre-test data is normally distributed. This indicates that the distribution of

data before treatment (pre-test) does not experience significant deviations from the normal distribution, allowing the test results to be used as a basis for comparison with the post-test data.

Testing Hypothesis

After the analysis requirements test has been conducted and all data from each research variable meets the requirements for further statistical testing, the next stage is hypothesis testing. This testing aims to determine whether the proposed hypothesis can be accepted or rejected based on the results of the data analysis. In this study, one hypothesis was proposed: The game training method has a significant effect on the underhand passing skills of PST athletes.

Table 4. Summary Results Testing Hypothesis First Paired Samples Statistics

	Mean	N	Standard Deviation	Std. Error Mean
Pair pretest 1	46.9688	32	3.55132	.62779
posts	52.3750	32	4.37552	.77349

Paired Samples Correlations

	N	Correlation	Sig.
Pair pretest & posttest 1	32	.729	.000

Paired Samples Test

	Paired Differences						T	df	Sig. (2-tailed)
	Mean	Standard Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair pretest 1	-	-5.40625	3.01458	.53291	2.49312	4.31938	10,145	31	.000

Based on the table above, it can be seen that the t-value (10.14) is greater than the t-table (2.145) . Therefore, Ho is rejected and Ha is accepted , which means that the research hypothesis can be accepted. In other words, there is sufficient statistical evidence to support that the treatment given has an influence on the skills tested.

Based on the results of the data analysis that has been conducted, in this study, one hypothesis is proposed, namely: The game training method has a significant influence on the underhand passing skills of PST athletes.

CONCLUSION

Based on the results of the research that has been conducted, it can be concluded that the game training method has a significant influence on improving the underhand passing skills in volleyball athletes of PST Bengkulu. The results of the t-test show that there is a significant difference between the pre-test and post-test, where the t-count value (10.14) is greater than the t-table (2.145), which indicates that the research hypothesis is accepted. This is reinforced by a correlation value of 0.729, which indicates a fairly strong and positive relationship between the pre-test and post-test results. With thus , it can concluded that treatment in the form of method game practice contributes positive to improvement underhand passing skills athlete.

SUGGESTION

Based on the conclusions of the research results, the following recommendations can be made:

1. Based on the results of this study, it is recommended that volleyball coaches at PST Bengkulu continue implementing game training methods in their training programs, given the positive impact shown on improving athletes' underhand passing skills. Furthermore, coaches are advised to vary the types of games or drills used to keep athletes motivated and prevent boredom with the existing routine. Game variation can enhance athletes' learning experiences while also developing other technical skills that support the overall game of volleyball.
2. Further research is recommended, involving a larger sample size and over a longer period of time, to obtain a more comprehensive picture of the effectiveness of game training methods in improving volleyball technical skills. With a larger sample size, research results can better represent field conditions and provide more accurate information regarding the method's impact on athletes' overall skills.

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