

# Drills Exercise Method Improving Passing Ability In Volleyball

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**Abstract.** The problems that occur are that the students often make mistakes in playing volleyball, especially passing. This study aims to determine how effect of right and left sideways drill and which one is more influential on the volleyball passing ability of the students of MTs Negeri 3 Tegal. The research used an experimental method in the form of "Pretest-Posttest Group Design". The designs were divided into 2 groups using the ABBA formula. The results of the analysis are: 1)  $t\text{-count } 18,735 > t\text{-table } 2,093$  (there is the effect of right sideways drill), 2)  $t\text{-count } 16,199 > t\text{-table } 2,093$  (there is the effect of left side drill) , 3) Right side drill drill is more influential compared to the left side drill. The conclusions of the study are 1) right and left sideways drill exercises have a significant effect on volleyball passing, 2) right side drill drills have more effect in improving volleyball passing skills. Suggestions in this study are that all trainers, especially at MTs Negeri 3 Tegal, are advised to use the right-side drill method during practice

**Keywords:** Drills Exercise, Passing, Volleyball

## 1 Introduction

Volleyball is a sport that originated in Holyoke Massachusetts. This game consists of two opposing teams of 6 players each. There are several variations of the game to choose from. According to Morgan, volleyball can be played flexibly anywhere, whether it's indoors or outdoors. The most important thing is the existence of the field as a fighting arena. The main objective of this game is to drop the ball in the opponent's area to get points.

Sport is an inseparable part of human life. Regular exercise will really help humans to achieve physical and spiritual health. At school, there are many sports that are studied, one of which is volleyball. Volleyball is played or competed in groups. Therefore, cohesiveness in a team is essential to be maintained so that the team is able to win every game. Even so, the individual skills of each player cannot be underestimated so that the cooperation will be more solid.

Physical education is defined as an education that includes a variety of physical (physical) activities to acquire adequate physical skills and performance. He utilizes a variety of physical activities to develop physical abilities, intelligence, emotional and character-consciously and systemically. Physical education has long been asked as a vital aspect in educational education; he relies on campaigns for a clean environment and a healthy lifestyle, seeking to escalate physical fitness for anyone involved in the educational process.

Physical education is essentially an educational process that utilizes physical activity to produce holistic in individual qualities, both physically, mentally, and emotionally. Physical education will not achieve its goals without a careful plan in the learning process. As a primary factor in the success of all learning processes, the ability of teachers to present teaching materials to students is required to be very good. Therefore, they need to be equipped with a comprehensive and effective set of knowledge, materials, and teaching methods based on the class situation and the character of the students.

MTs Negeri 3 Tegal is a school with adequate infrastructure, one of which is in sports. It is located in Lebaksiu District, Tegal Regency, Central Java. Volleyball is one of the materials in physical education that is superior to other sports. lack of basic technical skills in volleyball will greatly affect the quality of the game. The problem that often occurs when competing in volleyball is that they do not master the basic techniques, one of which is the passing (bottom pass). This is quite unfortunate, because the bottom pass is a basic skill that every player in volleyball should master. Therefore, training with the drill is needed in order to increase the ability of students to pass down. This is because the drill is repetitive, all students are asked to practice consistently or continuously so that they are able to make their skills more mature. Various descriptions have been mentioned, researchers are interested in conducting research about How Drills Exercise Improving Passing Ability In Volleyball.

### **1.1 Objectives**

MTs Negeri 3 Tegal is a school with adequate infrastructure, one of which is in sports. It is located in Lebaksiu District, Tegal Regency, Central Java. Volleyball is one of the materials in physical education that is superior to other sports. lack of basic technical skills in volleyball will greatly affect the quality of the game. The problem that often occurs when competing in volleyball is that they do not master the basic techniques, one of which is the passing (bottom pass). This is quite unfortunate, because the bottom pass is a basic skill that every player in volleyball should master. Therefore, training with the drill is needed in order to increase the ability of students to pass down. This is because the drill is repetitive, all students are asked to practice consistently or continuously so that they are able to make their skills more mature. Various descriptions have been mentioned, researchers are interested in conducting research about Drills Exercise Method Improving Passing Ability in Volleyball.

## 2 Literature review

Passing techniques with the actual playing practice method can improve the results of passing tests under the volleyball players (Barlian et al., 2019). In volleyball passing ability is a very basic technique. To be able to pass the ball accurately, it is necessary for the athlete to have the corresponding passing technique. In volleyball passing technique seems simple but it is actually a very delicate and complex technique that requires high wrist strength (Liu et al., 2021). A suitable exercise to improve the ability of passing in volleyball is drills exercise. This is because the drill training method is an activity to do the same thing over and over again and seriously which aims to strengthen and perfect a skill so that it becomes permanent. The drill method in volleyball techniques such as serving, passing which is done repeatedly makes students or athlete become skilled at doing it and it can be said that they have the skills to play volleyball. The application of the drill method through teaching methods where children carry out training activities so that children have higher dexterity or skills than what they are learning.

## 3 Methods

This study was conducted using experimental with pre test and posttest design of two conditions underhand passing in volley ball: 1) highest result of under passing 2) lowest result of under passing. The participant of the study was 60 student in MTS Negeri 3 Tegal. In this design form, I divide into two groups that have been determined to be samples. Furthermore, pretest to determine the initial condition of the student's ability to do underhand passing volleyball. After that, the results will be sorted from highest to lowest and divided into two groups. Furthermore, they will carry out posttest after being given treatment, which is the effect of the treatment itself. The sampling technique in this study was to use a random sampling technique, namely random sampling without regard to the existing strata in the population (Sugiyono, 2018). The students of MTs Negeri 3 Tegal were randomly selected to be included in this study. An experiment that matched and uses a correlated samples uses a t-test. The data were then analyzed using descriptive statistical analysis and t-test. To analyze the data further, use the short t-test formula (short method) as follows:

$$t = \frac{MD}{\sqrt{\frac{\sum d^2}{N(N-1)}}}$$

Description:

- t : data analysis results
- MD : mean difference between *pretest* and *posttest*
- N : number of pairs of
- $\sum d^2$  : the number is determined N-1

(Sutrisno Hadi, 2015)

After various data are collected and processed, the hypothesis test carried out will provide an answer whether the hypothesis is rejected or accepted. The simplest hypothesis, minimal from

a theoretical point of view, is called the null hypothesis. The term nil refers to the absence of differences between samples in the object under investigation (Hadi, 2015).

The results of the statistical analysis of the t-test formula are then inputted into a t-table at a significance level of 5% with a degree of freedom (dk) 19. From this analysis, the following hypotheses will be concluded:

- 1). if the t-count value obtained from statistical calculations is the same or greater than t-table means significant, then Ho is rejected and Ha is accepted;
- 2). if the t-count value obtained from statistical calculations is smaller than the t-table which means it is not significant, then Ho is accepted and Ha is rejected.

#### 4 Data collection

Add data collection here. The following is a summary of the data on the results of the pretest and posttest of the results students of MTs Negeri 3 Tegal 2021, namely:

**Table 1.** Description of Statistics

<b>Descriptive Statistics</b>					
	N	Minimum	Maximum	Mean	Std. Deviation
		m			
right pretest	20	4.00	14.00	7.7000	2.83029
posttest	20	16.00	23.00	19.4000	1.81804
left pretest	20	4.00	13.00	7.5500	2.76205
left posttest	20	15,00	23.00	18,8500	2,05900
Valid N (listwise)	20				

From the table above, it can be seen that the mean result of the pretest exercise treatment drill was 7.70 with the lowest result being 4 and the highest 14. While the mean result posttest experimental group 1 is known to get a mean of 19.40 with the lowest result of 16 and the highest of 23. Then pretest of experimental group 2 before being treated with drill left-side posttest Experimental group 2 is known to have a mean of 18.85 with the lowest result being 15 and the highest being 23. The t-test was used to reveal whether the passing of the students of MTs Negeri 3 Tegal got the effect of drill right and left sideways pretest and posttest. The following is the data from the analysis results:

**Table 2.** T test results of the *pretest* and *posttest* drill drills right side

	t	Sig. (2-tailed)	Mean Difference
PreTest & Post Test Right	-	,	-11,70000
	18,735,		
	000		

From the results of the t test, it can be seen that the t count is 18,735, with a significance level of 5% at the degree of validity 19 at the t table value of 2,093. That is, the value of t arithmetic > t table (18.735 > 2.093) and p-value 0.000 < 0.05. These results demonstrate that Ho is

rejected; have drill drills been shown to have a significant impact on passing ability under volleyball. The existence of this difference indicates that the *drill* on the right has an effect on the *passing* students' bottom

**Table 3.** T test of the results of the *pretest* and *posttest* exercises *drill* left side

	t	Sig. (2-tailed)	Mean Difference
PreTest & Post Test Left	-16,199	,000	,-11,35000

The t-count value obtained is 16,199 with a significance level of 5% at the validity degree 19 at the t-table value of 2.093. These results demonstrate that the value of t arithmetic  $>$  t table ( $16,199 > 2,093$ ) and the value of  $p$   $0.000 < 0.05$ . From here,  $H_0$  was rejected; practice *drill* has been shown to have a significant effect on the underpassing skills of the students.

**Table 4.** T test results of *pretest* and *posttest* exercises *drill* right and left side

	t	Sig. (2-tailed)	Mean Difference
PreTest & Post Test Right	-18,735,000	,000	,-11,70000
PreTest & Post Test Left	-16,199	,000	,-11,35000

The t-count value of *pretest* and *posttest* exercise *drill* is -18,735, while for the t-count value of the *pretest* and *posttest* exercise *drill* left-side. Both were measured with a significance level at the degree of validity of 19 at a t-table value of 2.093. The results from the *drills* proved to have a significant effect on the *passing* students' increasing underpassing skills and the *drills* sideways *right*. The results of the research show that the *drill drill* right side *drill* create a significant difference in the volleyball bottom pass skills of MTs Negeri 3 Tegal students in 2021. The results of data analysis for *drill drills* that have been carried out show t count of  $18,735 >$  t table of 2,093 and for the analysis of the *drill* left side, the t-count result is  $16,199 >$  2,093, which means that there is a significant change. From the results of the comparison of the mean of each experimental group, it is known that the results of *drill drills* right side have more effect on baiting ability under volleyball compared to left side exercises.

## 5 Results and discussion

The research was carried out using an experimental method, namely by treating the effect of drill right and left side passing down volleyball of MTs Negeri 3 Tegal students. The stages in conducting this research are: 1) taking initial data to find out the students' initial abilities. Then from the results obtained, sorted from the largest to the smallest to be divided into two experimental groups. The experimental group 1 drilled right sideways and experimental group 2 drilled left side 2) Then carried out treatment according to the experimental group. 3) posttest to determine the student's ability after being given treatment.

## 6 Conclusion

Based on the results of the research and discussion, it was concluded that one, after analyzing the drill, it turned out to have a significant effect on the passing volleyball bottom. Second, after analyzing the drill, it turned out to have a significant effect on the passing volleyball bottom. Third, the drill drill is more influential than the drill left side passing volleyball bottom.

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