

# THE EFFECT OF A TACTICAL APPROACH TO THE BASIC TECHNIQUES OF UNDER VOLAR PASSING IN CLASS VII STUDENTS AT MTsN 4 KARAWANG

Evi Susianti<sup>1\*</sup>, Irma Rizki Nawawi<sup>2</sup>, Astri Ayu Irawan<sup>3</sup>, Johansyah Lubis<sup>4</sup>

<sup>1,2,3</sup>Health and Recreation Physical Education Study Program, Faculty of Teacher Training and Education, Universitas Singaperbangsa Karawang

<sup>4</sup>Coaching Science Study Program, Faculty of Sports Science, State University of Jakarta  
[sabeum.evi@gmail.com](mailto:sabeum.evi@gmail.com)<sup>1\*</sup>, [astriayuirawan2@gmail.com](mailto:astriayuirawan2@gmail.com)<sup>2</sup>, [johansyah.sport@unj.ac.id](mailto:johansyah.sport@unj.ac.id)<sup>4</sup>.

**Abstract:** The aims of this study was to know the influence the student's tactical approach model (model pendekatan taktis) bottom passing on volleyball basic technique in seven grade at MTsN 4 Karawang. To answer the formulation of research problem that has been formulated, researcher used a quantitative approach with control group design. One classes of students were selected to be the samples of this research, VII C class of 48 divided by two group as experiment group 24 students and as control group 24 students. There are three stages in this study, pretest, treatment and posttest. Both of experimental and control group were given pretest and posttest. The experimental group was taught by using tactical approach model (model pendekatan taktis), while the control group was taught by using conventional method. The data of the study were analyzed by using SPSS 22 for windows. This research finding showed that the experimental group had higher writing score than control group. It can be seen from the posttest mean of experimental group was 10.13, while the mean of control group was 9.46. Meanwhile, the result of calculating effectiveness show the influence tactical approach model (model pendekatan taktis) for experiment group was 9%, while for control group was 5.6%. it means the influence student's bottom passing on volleyball in experimental group was higher than control group by using conventional method. In conclusion, the statistical computation showed that tactical approach model (model pendekatan taknis) can influence student's toward bottom passing on volleyball basic technique in seven grade MTsN 4 Karawang.

Keywords: Tactical Approach Model, Bottom Passing on Volleyball Basic Technique.

## 1. Introduction

Education is one form of effort to improve the quality of human resources. Education, in the sense of a basic and planned effort to realize a lifelong learning process, touches all the joints of life, all levels of society, and all ages. Awareness of the importance of education has encouraged various efforts and attention from all levels of society towards every development of the world of education, it is very necessary to develop it starting from the basic level to be able to compete and survive with the conditions of the times which are always evolving over time, so in the learning process it must be able to develop abilities. students as a whole in order to have good quality human resources to answer the existing challenges

The goals of education will be achieved if all parties participate, be it students, parents, teachers, government, educational institutions and the community. Of course, when we discuss educational goals, this is closely related to teaching and learning activities in which in the process, students are the main target which is expected to achieve good learning success.

Physical education is a medium to encourage the development of motor skills, physical abilities, knowledge, reasoning, appreciation of values (attitudes-mental-emotional-spiritual-social), and habituation of a healthy lifestyle which aims to stimulate balanced growth and development. According to (Rahayu 2013: 01). It is fully realized that along with progress in all fields of life, especially science and technology, the task of the world of physical education, health and recreation is to produce quality

human resources for the progress of the nation. Therefore education should be managed, both in quality and quantity. This can be achieved if learners can complete their education on time with good learning outcomes.

The implementation of physical education learning in schools tends to still use a tactical approach, which is an approach that focuses more on students to master technical skills. In this approach, students usually only work on assignments given by the teacher, without being required to solve problems that may be encountered in a lesson. According to Juliantine and Toto Subroto (2013: 8). The learning model is basically a form of learning that is illustrated from beginning to end which is typically presented by the teacher. In other words, the learning model is a frame for the application of learning approaches, methods and techniques. There are also various learning models, namely PAIKEM, direct instruction, cooperative learning models, inquiry learning models, sports education learning models, tactical approach models, personal learning models, peer learning models. teaching. In this case the researcher only focuses on the use of a tactical learning approach model.

The tactical play approach has been increasingly used in Physical Education teaching at every level, because it is a fun and effective teaching approach in teaching games but is delivered in a modern model. According to Griffin, Mitchell and Oslin in Juliantie (2013: 131) explain: There are three main conditions that occur in the application of game learning for understanding, namely: interest and satisfaction in games and the form of games used as positive motivators and dominant in task structures. In general. Students always want to play some kind of game. Because students almost always apply techniques and skills in a game situation. Students prefer to see the need for development. Juliantie (2013: 131) suggests that simulation activities (form of games) need to reflect the integrity of the game and inspire to focus on developing tactical skills.

In an educational context, volleyball has been included in the curriculum. So that students can feel and know how volleyball actually is. However, it is very unfortunate

because the model used in teaching volleyball in schools is the same as the model applied in volleyball schools or volleyball clubs which focuses more on mastering the basic techniques of passing volleyball underneath. Passing is a basic volleyball technique that every volleyball player must master (Destriana et al., 2020). The method of passing training is appropriate to improve the results of learning to pass volleyball games (Abrasyi et al., 2014). The volleyball game development model is effective for improving the volleyball skills of male players (Muslimin et al., 2020)

The use of the tactical approach model is faced with being able to overcome the problems that have been stated above. The tactical approach is expected to be able to develop basic volleyball technical skills. The tactical approach becomes an innovation in overcoming problems that arise in a lesson. Based on the problems that have been stated above, the volleyball learning process encourages the writer to make changes through a tactical approach that is able to develop the basic technical skills of volleyball underpassing.

## **2. Methods**

Researchers used experimental methods in this study. The aim is "to find whether there is an effect of treatment between cause and effect, which is to compare between the controlled variables (independent variables and dependent variables)" (Sugiyono, 2013: 107). This experimental method is defined as a research method used to find the effect of certain treatments on others under controlled conditions. The experimental method is a way of teaching, in which students conduct an experiment about the results of the observations that are conveyed to the class and evaluated by the teacher. In addition, the researcher wants to know the effect of the independent variable on the dependent variable being investigated or observed. Related to this experimental method, Sugiyono (2013: 3) argues that: "in general, research methods are defined as a scientific way to obtain data with specific purposes and uses." In the teaching and learning process with this experimental method, students are given the opportunity to

experience or do it themselves, follow the process, observe an object, analyze, prove and draw their own conclusions about an object, state or process of something..

The design used was the Pretest-Posttest Control Group Design. In this design, there were two groups that were randomly selected (random), then given a pretest to determine the initial state, whether there was a difference between the experimental group and the control group. Pretest results are good, if the value / score of the Experiment group is not significantly different. The treatment effect is (O2-O1) - (O4-O3)

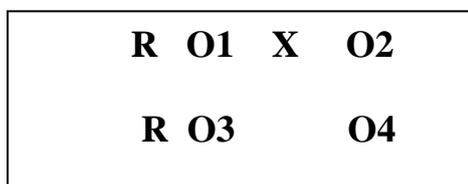


Figure: 1 Pretest-Posttest Control Group Design

Source: *Suntoda Andi dkk (2014) Model Penelitian Jasmani FPOK UPI Bandung*

The sampling technique used by the researchers was purposive sampling. According to Sugiono (2011: 124) purposive sampling is a technique of determining the sample with certain considerations. From this statement, the research will take one class directly with the consideration of the researcher by taking one class totaling 48 students, then divided into two groups, namely the experimental group with 24 students and the control group with 24 students in class VII C. treatment (treatment) using a tactical approach model while the control group was not given treatment and used conventional techniques or lectures. The research instrument that the author uses in this study is a practical test of volleyball underhand passing skills. Analysis of t-test data. T-test is a method used to test a two-sample comparative hypothesis (Sugiyono, 2012: 196). This is based on the opinion of Riduwan (2012: 213) that the two-sample t-test is classified as a comparison test (comparative test). The purpose of this test is to compare (differentiate) whether the two data (variables) are the same or different. The formula for calculating the t-test, namely:

$$t = \frac{(\bar{X}_1 - \bar{X}_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

The calculation of effectiveness is used to measure the percentage effect of using the method used in each sample group (Farida, 2013: 44-45). The following is the formula for its effectiveness:

$$\frac{\text{Mean post - test} - \text{Mean Pretes}}{\text{Mean pretes}} \times 100\%$$

### 3. Result and Discouision

#### a. Normality T-test

In this study, Shapiro-Wilk in SPSS 22 was used to analyze the normal distribution. The researcher determined the following hypothesis: Ha = data in the experimental group and control group are normally distributed. H0 = data in the experimental group and control group are not normally distributed. After stating the hypothesis, the probability value is then analyzed using the Shapiro-Wilk formula. Decision making regarding normality is if the probability <0.05 then the data distribution is not normal, if the probability > 0.05 then the data distribution is normal. The results of the normality test show that the probability of the experimental group is 0.052 and the control group is 0.54. Both the scores of the experimental and control groups are higher than the significant level (0.05). The results show that the alternative hypothesis is accepted. Then the two groups in the pretest are normal distribution.

#### b. Homogeneity T-test

The homogeneity test is needed to determine whether the data obtained from the experimental group and the control group is homogeneous or not. Homogeneity test analysis used Levene's test in SPSS 22. Analyzing the probability level with a significant level of 0.05. the decision on the homogeneity of variance is the probability of > 0.05, which means that Ha is accepted and Ho is rejected. Meanwhile, if the probability <0.05 Ha is rejected and Ho is accepted, the probability level is 1.063 (Levene's statistic). That means the probability is

higher than 0.05 ( $1.063 > 0.05$ ). Therefore, the variants of both the experimental and control groups were homogeneous because the alternative hypothesis was accepted.

c. Independent T-test Pre-test

The formula for independent t-test in SPSS 22 revealed significant differences in pretest between the experimental and control groups.  $H_a$  = There is a significant difference between the two samples  $H_0$  = There is no significant difference between the two samples. The mean of the experimental group was 9,2917, while the mean of the control group was 8,9583. This shows that the mean of each group has a difference. Additionally, the two-tailed test (sig 2-tailed) was 0.467. As a result, it was not significant since the probability result was higher 0.05 ( $0.467 > 0.05$ ). therefore  $H_0$  is accepted that there is a significant difference between the experimental and control groups in the pretest.

d. Post-test Normality Test

In this study, Shapiro-Wilk in SPSS 22 was used to analyze the normal distribution. The researcher determined the following hypothesis:  $H_a$  = data in the experimental group and control group are normally distributed.  $H_0$  = data in the experimental group and control group are not normally distributed. After stating the hypothesis, the probability value is then analyzed using the Shapiro-Wilk formula because the respondents are less than 50 students. Decision making regarding normality is if the probability  $< 0.05$  then the data distribution is not normal, if the probability  $> 0.05$  then the data distribution is normal. The results of the normality test show that the probability of the experimental group is 0.053 and the control group is 0.81. Both the scores of the experimental and control groups are higher than the significant level (0.05). The results show that the alternative hypothesis is accepted. Then the two groups in the pretest are normal distribution.

e. Post-test Homogeneity Test

The homogeneity test is needed to determine whether the data obtained from the experimental group and the

control group is homogeneous or not. Homogeneity test analysis used Levene's test in SPSS 22. Analyzing the probability level with a significant level of 0.05. the decision on the homogeneity of variance is the probability of  $> 0.05$ , which means that  $H_a$  is accepted and  $H_0$  is rejected. Meanwhile, if the probability  $< 0.05$   $H_a$  is rejected and  $H_0$  is accepted. The probability level yield was 2,513 (Levene's statistic). That means the probability is higher than 0.05 ( $2.513 > 0.05$ ). Therefore, the variants of both the experimental and control groups were homogeneous because the alternative hypothesis was accepted.

f. Independent Post-test T-test

The formula for independent t-test in SPSS 22 revealed significant differences in pretest between the experimental and control groups.  $H_a$  = There is a significant difference between the two samples  $H_0$  = There is no significant difference between the two samples. The mean of the experimental group was 10,125, while the mean of the control group was 9,4583. This shows that the mean of each group has a difference. Additionally, the two-sided test (sig 2-tailed) is 0.000. As a result, it was not significant since the probability outcome was higher 0.05 ( $0.000 < 0.05$ ). therefore  $H_a$  accepted that there was a significant difference between the experimental and control groups in the pretest.

g. Effect Size Effect size

calculation is used to determine how strong the average difference between the experimental group and the control group by comparing the post-test average scores of the two groups. The results of the calculation are as follows:

h. Effectiveness

The calculation of effectiveness is needed to determine the percentage effect of the method used in the experimental group and the control group. In this study, the experimental group used the tactical approach method, while the control group was not treated. From the results obtained, it can be seen that the use of the tactical approach

method has an effect on the experimental group by 9% on the basic techniques of lower passing. Meanwhile, the control group only had an effect of 5.6%. So it can be concluded that the tactical approach method has an increasing influence on the basic techniques of underpassing in volleyball class VII MTsN 4 Karawang.

#### 4. Discussion

In this study, researchers used an instrument in the form of a volleyball ball underpass test. First, the researcher used the normality test (Shapiro-Wilk) to test the normality of the data from the experimental group and the control group before and after being given treatment as a condition of using the t-test formula. Based on calculations using SPSS 22, the results showed that the data in the experimental group and the control group before being given treatment were normally distributed.

The results of the analysis using statistics, in the pre-test, the results of the normality test of the experimental group and the control group were obtained at 0.52 and 0.54, respectively. Where the acquisition of the two groups is higher than the significant value of 0.05, so that  $H_0$  is accepted, which means the basic technical value of passing under the two groups is normally distributed. To find out the difference between the experimental group and the control group in the pre-test before being given treatment, the researcher calculated the homogeneity of the data in the experimental group and the control group. Then the researcher used SPSS 22 (Levene's test) to test homogeneity, then the results were  $1.063 > 0.05$ , then  $H_0$  is accepted, it can be concluded that students in the experimental group and the control group have the same basic technique of underpassing. Then the data is homogeneous. After it is known that there is no difference in the pre-test data between the experimental group and the control group before being given treatment. Furthermore, given treatment with the learning method, namely the tactical approach model in the experimental group, and the control group was not given treatment using conventional methods..

After being given treatment in the experimental group, the same method is

used to calculate the post-test data in the experimental group and the control group. The post-test data of the two groups was calculated for the normality test (Shapiro-Wilk) using SPSS 22 and the results showed that the post-test data of the experimental group and the control group with the results of the experimental group was 0.53 and the control group was 0.81, the value of both groups was greater than 0.05, so the distribution normal. Furthermore, the researcher tested the independent t-test using SPSS 22 in order to determine whether the application of the tactical model had an effect on the basic techniques of volleyball underpassing. Then the results get  $467 > 0.05$ , then  $H_0$  is rejected. Regarding the results of the volleyball learning process between the control group and the experimental group, the author considers learning using a tactical approach model has a significant effect on the basic techniques of volleyball underpassing. After calculating the post-test data in the experimental group and the control group, the effect size is calculated. The effect size is used to determine how strong the difference in the average between the experimental group and the control group is by comparing the post-test average scores of the two classes. Based on the calculation results, the  $ES = 0.41$  is obtained. Then seen from the effect size criteria, these results have the strength of the difference in the average score in the experimental group and the control group is high. So it can be concluded that the tactical approach model is better than the control group in learning volleyball underpassing.

The researcher also calculated the effectiveness, which aims to determine the percentage effect of the method used in the experimental group and the control group. In this study, the experimental group used a tactical approach model while the control group was treated with conventional methods. Based on the results of the calculation, the experimental group had an effect of 9% on the basic technicalities of volleyball underpassing. Meanwhile, the control group only had an effect of 5.6%. So it can be concluded that the application of the tactical approach model has a significant effect on the basic technicalities of underpassing in volleyball learning for VII grade students of MTsN 4 Karawang.

According to Tarigan (2001: 8) the tactical approach emphasizes playing and places learning technical skills in the context of playing, providing opportunities for students to see how relevant technical skills in actual game situations, Provide explanations to students about the goals to be achieved and how to achieve them clearly, Provide the widest possible opportunity for students to express. Meanwhile, according to Rothstein (1990; in Lang & Evans, 2006) it provides an atmosphere that encourages them to face risks. Encourage students to look at problems creatively, and give them time as needed. Be a sensitive teacher and be ready to accept students' feelings. So thus, it means that by using a tactical approach model that is applied to students in fact it is able to improve the basic techniques of passing under in volleyball learning.

## 5. Conclusion

This research has succeeded in improving the results of the basic techniques of passing under in student volleyball learning through the application of a tactical learning model. This is also evidenced by the calculation of the effectiveness of the experimental group and the control group. In this study, the experimental group used a tactical approach model while the control group used conventional techniques. Therefore, the tactical learning model can be an alternative technique used by teachers in learning the basic techniques of passing under in volleyball learning.

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