Improvement of Overhand Pass Learning Outcomes through Cooperative and Reciprocal Learning Models in Extracurricular Volleyball Games in High School

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Keywords: Overhand Pass on Volleyball, Extracurricular, Cooperative Learning, Reciprocal Learning.

Abstract: This study aims to determine the effect of cooperative learning model and reciprocal learning model on the results of learning overhand pass in the game of volleyball in extracurricular students in schools. This research uses experimental method with "randomized pretest-posttest design". The population in this study were students who participated in extracurricular volleyball activities with a total of 32 students. The attachment technique from population to sample using random sampling technique so that the sample used amounted to 30 students. The instrument used is the overhand pass accuracy. Data analysis using prerequisite test consisted of looking for group mean and standard deviation then normality test of all normal distributed data and homogeneity test of all data homogenous and t test. The result of the analysis shows that: (1) Cooperative learning model gives significant influence to the result of students' overhand pass learning in game of volleyball. (2) The reciprocal learning model significantly influences the learning outcomes of students' overhand pass in the game of volleyball. (3) The reciprocal learning model has more significant influence compared to the cooperative learning model on the overhand pass learning outcomes in the volleyball game of students who are tested in this research.

1 INTRODUCTION

Physical education can contribute to students' psychomotor, cognitive and social development. However, to fulfill these results requires the use of several teaching styles (Carrington, 2004; Dyson, 2001). There are several learning models that can be used in implementing the teaching and learning process. Among them are cooperative and reciprocal learning models.

Cooperative learning is a dynamic instructional format that teaches diverse learning to students at different grade levels. Students work together in a heterogeneous group that is structured and small to master the content of the learning materials. They are responsible not only for learning the material but also helping their study group (Millis and Cottell, 1997; André et al., 2011).

The current theory of cooperative learning through group work is that students achieve higher academic achievement, gain better control understanding, improve social relationships, and develop better language skills. Studies have shown that cooperative learning can have a positive impact on social variables including intergroup relationships, ability to work with others, and self-esteem.

This study also examines reciprocal learning (Carrington, 2004; Barrett, 2005). Students practice tasks in pairs, alternating in individual roles to perform tasks and students observe feedback to other students immediately and continuously. The advantage of using this teaching style is that all students can receive increased feedback during the exercise. There are, however, shortcomings, i.e. less students' training or learning time, possibility of giving wrong feedback, and conflicts, verbal abuse or out-of-school talk between students may occur (Carrington, 2004; Dyson, 2001).

The implementation of cooperative learning programs in basketball, volleyball, and traditional Greek dancing sessions enhances social skills and attitudes of sixth grade group work. Cooperative learning show of the ability to encourage support from colleagues in larger classes and positive student-to-student interactions in volleyball and

Fatah, Z., Agus, A. and Dipraja, D.
Improvement of Overhand Pass Learning Outcomes through Cooperative and Reciprocal Learning Models in Extracurricular Volleyball Games in High School.
In *Proceedings of the 2nd International Conference on Sports Science, Health and Physical Education (ICSSHPE 2017) - Volume 2*, pages 429-431
ISBN: 978-989-758-317-9

basketball units with third and fourth grade students. One drawback of the cooperative learning is the lack of time needed to teach something to students and apply it in the classroom, thus it requires more free time from the learning process (Dunn and Wilson, 1991; Kolovelonis et al., 2011).

This study aims to be able to answer several questions 1) is there a development of overhand pass from the implementation of cooperative learning in the process of learning volleyball on students who follow volleyball extracurricular?; 2) is there an increase in overhand pass from the implementation of reciprocal learning in the volleyball learning process to students following volleyball extracurricular?; 3) is there any difference from the cooperative and reciprocal learning model towards the overhand pass learning outcomes in the game of volleyball?

2 METHODS

2.1 Participants

The sample was determined using total sampling technique of 30 students who participated in volleyball extracurricular activity at SMA Pasundan 2 Cianjur West Bandung Regency West Java Province.

2.2 Procedures

The research method used is experimental method with pretest-posttest experimental design. The study took place from May 18 to June 21, 2016, with a two-hour meeting from 14.30 to 16.30 WIB with a total of 18 meetings, 3 times per week.

2.3 Instruments

The instrument used is a volleyball test. Processing is done by using t-test statistic.

3 RESULTS AND DISCUSSION

3.1 Differences in Mean Score of Overhand Pass Value Between Pre and Post-test on Cooperative Learning

Figure 1 shows improvement of overhand pass skills on students who are given cooperative learning model treatment. This is evident from the increase in the average overhand pass score on the students. In the initial test the average score of students is 30.6. While on the final test the student score increased to 31.9.

This implies that giving the cooperative learning model treatment is linear with learning improves of students' overhand pass skills. Correspondingly, the results of statistical calculations show t arithmetic 81.29 and t table 2.05, with a significance level of 0.05. Therefore t count 81.29> t table 2.05, with significance level of 0.05, it means that cooperative learning model gives significant influence to the result of overhand pass learning in volleyball game on students who joined volleyball extracurricular in SMA Pasundan 2 Cianjur.

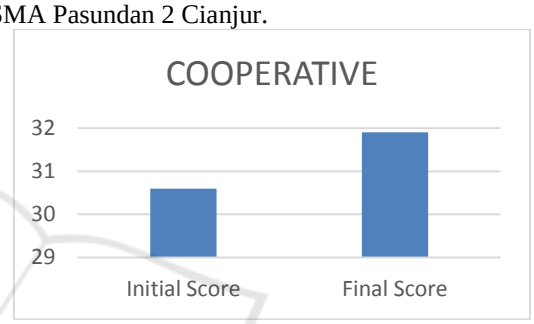

Figure 1: Differences in mean score of overhand pass value between pre and post-test on cooperative learning.

The score of the initial test result and the final overhand pass test with cooperative model is depicted in figure 1.

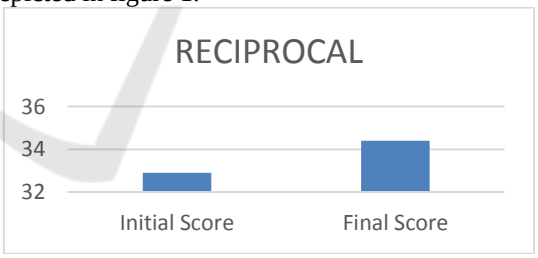

Figure 2: Differences in mean score of overhandpass value between pre and posttest on recriprocal.

Figure 2 shows improvement of overhand pass skills in students who are given treatment of reciprocal learning model. This is evident from the increase in the average score of the students' overhand pass. In the initial test, the students' average score was 32.9. While in the final test the students' score increased to 34.4.

This implies that giving the treatment of reciprocal model is linear with the improvement of overhand pass skills on the students. Correspondingly, the statistical calculations show that t counts 89.16 and t table2.05 with a sig

significance value of 0.05. Therefore t calculate 89,16> t table 2.05, with significance level of 0.05, it means that the reciprocal learning model gives significant influence to the result of students' overhand pass learning in volleyball game in extracurricular activity at SMA Pasundan 2 Cianjur.

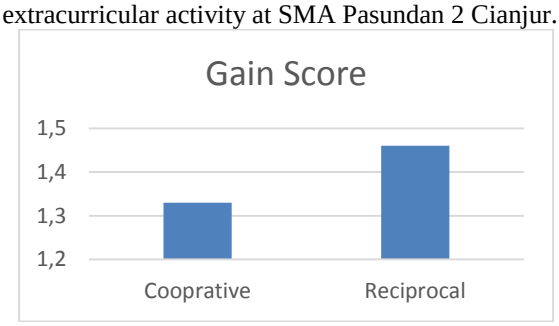

Figure 3: Findings Results of Implementation cooperative and reciprocal model in sport.

Figure 3 shows the average gain of group scores of students who are given cooperative and reciprocal learning model. It can be seen that the average gain of group scores given reciprocal learning was (1.46) greater than the group gain score given cooperative learning model (1.33). This means that the reciprocal learning model has more significant effect compared to the cooperative learning model to the overhand pass learning outcomes in the volleyball game on the extracurricular students in SMA Pasundan 2 Cianjur (Wang, 2012).

This is in line with the results of the statistical calculation of the independent samples test table for the column of variances assumed variables (t-test), it is known that tcount = 4,450 and ttable value 2.05. Due to the value tcount = 4.450> ttable value 2.05, then Ho is rejected and Ha accepted at the level of significance α = 0.05 (5%). This means that the reciprocal learning model is more significant than the cooperative learning model on the learning outcomes of overhand pass in the game of volleyball in extracurricular students in SMA Pasundan 2 Cianjur (Fraenkel, 2006).

4 CONCLUSIONS

Improvement of overhand pass on the volleyball game learning process given cooperative and reciprocal learning models will show positive results. The success of this cooperative and reciprocal model is characterized by the increasing skill of overhand pass on learning volleyball in schools significantly. This model has a significant impact on the overhand pass learning results on the game of volleyball. With the existing theory, it would be better if the research is continued and studied more deeply in order to obtain a higher level of validation of this model and that it can be useful for teachers who use it.

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