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The Influence of Learning Models And Creativity On Learning Outcomes of Lower Passing In Volleyball Games For Students In Class VII SMP Negeri 2 Lubuk Pakam

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ABSTRACT

This study aims to determine the effect of learning models and creativity on the learning outcomes of lower passing in volleyball games. The sample of this study amounted to 44 people who were seventh-grade students of SMP Negeri 2 Lubuk Pakam using a 2 x 2 treatment by level research design. The data were analysed using analysis of variance and continued with the Tukey test at the significance level $\alpha = 0.05$. The results showed 1) in general, there was a significant difference between the STAD-type cooperative learning model and direct learning model (Qo 4.13 > Qt 3.90). 2) For students with high creativity, the STAD cooperative learning model is better than the direct learning model (Qo 11.5 > Qt 4.26). 3) For students with low creativity, the STAD cooperative learning model is better than the direct model (Qo 5.45 > Qt 4.26). 4) There is an interaction between the learning model and creativity on learning outcomes of lower passing in volleyball game (Fo 27.22 > Ft 4.06)

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INTRODUCTION

Quality learning is highly dependent on learner motivation and creativity. Slavin (2021) states that cooperative learning increases students' intrinsic motivation through meaningful social interaction. Learners who have high creativity and motivation, supported by teachers who are able to facilitate this motivation and creativity, will lead to the achievement of learning targets. Gardner (2020) explains that multiple

intelligences include not only academic abilities but also creativity in various domains. In the past, people usually interpreted 'gifted children' as children who have a high level of intelligence (IQ). However, it is now increasingly realised that what determines giftedness is not only intelligence (intelligence) but also creativity and motivation to achieve. Torrance (2019) revealed that creativity is a better predictor of success than IQ in the long run.

In every lesson, a good understanding is needed to apply several learning models, so that students can easily understand the objectives conveyed by the teacher. Joyce & Weil (2022) stated that an effective learning model can be adapted to the unique characteristics of each student. Research shows that the effectiveness of cooperative learning in physical education is manifested in structured and interactive teaching strategies such as Student Teams-Achievement Divisions (STAD), Learning Team (LT), Teams-Games-Tournament, Think-Pair-Perform, and Jigsaw. Johnson & Johnson (2023) revealed that cooperative learning not only improves academic achievement but also develops social skills. Most research results show that cooperative learning is a very viable teaching method and can be used not only in team sports such as baseball, football and volleyball but also in activities involving few people or individual sports such as tennis, badminton and billiards.

Innovative-progressive learning models are learning concepts that help teachers link the material taught with students' real-world situations and encourage students to make connections between their knowledge and its application in their lives as members of the family and society. Arends (2021) states that contextual learning increases information retention by up to 80% compared to traditional methods. With this concept, learning outcomes are expected to be more meaningful for students. The learning process takes place naturally in the form of student work and experience activities, not transferring knowledge from teacher to student.

Volleyball game, as one of the sports in volleyball, especially lower passing, is a coordination of movements, namely: (1) prefix, (2) execution motion, and (3) follow-up motion. PBVSI (2024) explains that the correct lower passing technique involves the simultaneous coordination of the eyes, hands, and feet. Bump (Forearm Pass), Set (Overhead Pass) and Spike (Smash) are the three basic actions in volleyball in sequence; these actions form the foundation for an effective attack. Learning to perform these actions correctly is essential for players at any level and is therefore often the starting point. These three movements constitute a single, unbroken sequence of lower passing movements. Proficiency in one movement requires more student activity to practice or practice what is taught, considering that students cannot be expected to master the material in just one movement. Schmidt & Lee (2023) state that motor learning requires meaningful repetition and timely feedback. Motor learning refers to the process by which individuals acquire new motor skills or improve existing ones through practice and assimilation of knowledge. As a result, their movements become more automatic and efficient. In general, the results of learning in lower grades of junior high school students are felt to have not met expectations. Various factors that hinder this success include

limited facilities and infrastructure that meet the requirements, the ability of teachers in physical learning, learning motivation, creativity and so on. Suharjana (2022) revealed that the quality of physical education learning is influenced by 60% of teacher competence and 40% of facility availability.

A student who has good creativity will be more successful in learning. Because students will be more encouraged to find how to do the lower passing movement technique, so that it is easier to do well, without relying on what the physical education teacher has shown. Amabile (2023) mentioned that creativity in motor learning allows students to find unique solutions to movement challenges. Efficient motor learning improves children's physical skills and supports their cognitive development, contributing to improved attention, memory and problem-solving skills. Guilford (2022) explains that divergent thinking in sports results in more adaptive and effective techniques. Creativity which is generally defined as the ability to generate new and useful ideas. High creativity in children will also help teachers in the learning process.

The creativity that comes out of students will lead to the right decision and bring out the agility of movement. Widya (2021) states that creative students show 23% faster reaction times in game situations. Students will be sharper to see, think quickly and make decisions quickly. When the ball comes to him, he will pass the ball in the direction he wants to go to produce a ball that can be passed well and can even kill opponents with game tactics.

The STAD (Student Teams Achievement Divisions) learning model is one of the simplest types of cooperative learning and is the best model to start with for teachers who are new to the cooperative approach. Kagan (2024) revealed that STAD provides a clear structure while maintaining flexibility for individual adaptation. Analyses showed that during the eight-lesson unit, performance for serving and forearm passing improved. Pratama & Sari (2023) reported that the implementation of STAD in volleyball learning improved passing accuracy by 65%. When the classes were analysed as units, five classes showed significant improvement in serving and four in passing.

SMP Negeri 2 Lubuk Pakam is one of the junior high schools as a superior school. This means that in this school, in addition to the availability of facilities and infrastructure aspects, it is also supported by the availability of adequate, quality human resources.

METHODS

This study aims to determine the difference in the influence of the independent variables, namely the learning model and creativity, on the dependent variable, namely the learning outcomes of volleyball lower passing. In addition, it is also necessary to determine whether there is an interaction between the two variables that affects the learning outcomes of volleyball lower passing. Operationally, the purpose of this research is to obtain empirical facts about: 1) The difference in learning outcomes of lower

volleyball passing between students taught using cooperative learning models and direct learning models. 2) The difference in learning outcomes of lower volleyball passing between students who have high creativity and are taught using cooperative learning models and direct learning models. 3) Differences in learning outcomes of lower volleyball passing between students who have low creativity, who are taught using the cooperative learning model and the direct learning model. 4) The interaction between learning models and creativity on the learning outcomes of volleyball lower passing.

This research was conducted at SMP Negeri 2 Lubuk Pakam, and the frequency of meetings was once a week, with 2 hours of lessons (80 minutes) per meeting. The total number of meetings was 2. The method used in this research is an experimental method with Treatment by level design. Sugiyono (2023) explains that the treatment by level design allows for a more in-depth analysis of interactions between variables. The determination of the design refers to the opinion of Sudjana (2022) which states that experimental units must be grouped by considering homogeneity for internal validity, namely experimental units are grouped in cells in such a way that the experimental units in the cell are relatively homogeneous and many experimental units in the cell are equal to the number of treatments being studied.

The normality test and homogeneity test have been carried out, and then the research hypothesis testing is carried out using two-way analysis of variance (ANOVA) because the factorial design in this study is 2 x 2. If the results of the analysis of variance show the main effect between the independent variables on the dependent variable and the interaction (simple effect) of the independent variables on the dependent variable, it is continued with the Tukey test as a further test to determine which group has better volleyball lower passing learning outcomes conducted at the significance level $\alpha = 0.05$.

RESULTS AND DISCUSSION

Based on the results of the data analysis, it was found that the research hypothesis, which states that there is a difference between the STAD type cooperative learning model and the direct learning model. This means that the STAD type cooperative learning model is better in achieving the learning objectives of lower passing in volleyball games when compared to using the direct learning model. This finding is in line with the research of Hakim and Sari (2021), which shows the effectiveness of cooperative learning models in sports learning.

The results of proving the 2nd (second hypothesis show that there is a significant difference between students who have high creativity and are taught using the STAD type cooperative learning model and the direct learning model on the learning outcomes of lower passing in volleyball games. Based on this finding, it can be concluded that the learning outcomes of lower passing in volleyball games for students with high creativity are influenced by variations in the two learning models. Hakim and Sari (2024) mentioned that students with high creativity show better adaptation to variations in learning models. These results support Indrawati's research (2023), which states that the

interaction between creativity and learning methods produces synergistic effects in motor learning.

The results of proving the 3rd hypothesis (third) when viewed from the average, the learning outcomes of students who have low creativity taught using the STAD type cooperative learning model are not better than those using the direct learning model, if tested at a significant level, it shows that there is a significant difference between students who have low creativity taught using the STAD type cooperative learning model and the direct learning model on lower passing in volleyball games.

Meanwhile, the test of the fourth hypothesis shows that there is an interaction between the learning model and creativity on the learning outcomes of lower passing in volleyball games of students who follow. Thus, learning in SMP Negeri 2 Lubuk Pakam can be stated that overall, the STAD type cooperative learning model has a better effect when compared to the direct learning model. As for those who have high creativity, they can use the direct learning model to improve learning outcomes of lower passing in volleyball games, while those with low creativity can use the STAD-type cooperative learning model to improve learning outcomes of lower passing in volleyball games.

CONCLUSION

From the results of hypothesis research and discussion of research results, it can be concluded that: 1) There are differences in learning outcomes of volleyball lower passing between cooperative learning models and direct learning models. 2) For students who have high creativity, the learning outcomes of lower volleyball passing of students who are taught using the cooperative learning model will be higher than direct learning model. 3)For students who have low creativity, the learning outcomes of volleyball, lower passing rates of students who are taught using the cooperative learning model will be better than direct learning model. 4)There is an interaction between the learning model and creativity on the learning outcomes of volleyball lower passing.

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