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The Effect of STAD Type Cooperative Learning Model on Attitude of Responsibility and Learning Outcomes of Football Playing Skills at Secondary School

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ABSTRACT

The purpose of this study was to determine the effect of the student team achievement division type cooperative learning model on the attitude of responsibility and learning outcomes of football playing skills at secondry school. The sample used was 20 students who participated in extracurricular football. This study used an experimental method with a pre-test and post-test control group design. The results of the paired sample t test show that the significance value (2-tailed) of the attitude of responsibility in the experimental group is 0.013 <0.05, while the playing skills are 0.000 <0.05, therefore H0 is rejected and Ha is accepted. The results of the independent sample t test stated that the significance value (2-tailed) of the attitude of responsibility was 0.024 <0.025, while the playing skills were 0.000 <0.025. In addition, from the results of the N-Gain Score test, it was found that the average percentage of students' responsibility attitudes for the experimental group was 44.68%, the value was in the range of 40-45, which means that the use of the student team achievement division type cooperative learning model is less effective. While the average percentage of playing skills in the experimental group is 65.57%, the value is in the range of 56-75 which means that, the use of the cooperative learning model of student team achievement division type is quite effective.

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1. INTRODUCTION

Creative physical education implemented in schools is an important part to help learners achieve all aspects of the national education goals (Zachopoulou & Trevlas, 2006). It is not only movement skills that are targeted in physical education, but other aspects such as social attitudes and behaviour, ways of thinking, ways of making decisions, and other aspects, can be obtained through physical education learning (Bailey & Bailey, 2007).

Physical education not only develops movement skills, but aspects of critical thinking, emotional stability, reasoning, social skills and moral activities can develop through physical education (Deakin et al., 2014). Physical education is essentially an educational process that utilises physical activity to produce holistic changes in individual quality, both in terms of physical, mental and emotional (B. Dyson, 2014).

In the micro scope of learning, there is a shift in the way and style of teaching teachers who initially used the education model and the development of values needed to instil a love of movement turned into a sports training pattern with the main objective of making children skilled in sports (Bailey & Bailey, 2007).

One of the main problems in physical education learning in schools is the ineffective learning process (Ntoumanis, 2001). After the author observed the learning carried out at secondry school, it turned out that the learning model used was the sports education model. This model emphasises the psychomotor aspect so that the ultimate goal is that students can perform motion tasks properly and correctly. The sport education learning model develops students' skills and physical conditions rather than directing students to the affective dimension, developing moral behaviour, developing social values such as discipline, responsibility, cooperation, and helping each other.

This tendency occurs because of the teacher's mistake in choosing a learning model, so that the cognitive, affective, psychomotor domains, and the development of students' moral behaviour receive less attention (Sönmez, 2017). If these problems are not immediately addressed by physical education teachers in schools, it is feared that the generations created lack quality education with the achievement of poor learning outcomes. Therefore, physical education teachers need to find solutions to overcome the problems that occur, one of which is by using an appropriate learning model (B. P. Dyson & Barratt, 2017).

2. METHODS

The research method used in this study is the experimental research method. The experimental research method is defined as a research method used to find the effect of a treatment carried out on something else under controlled conditions. This research uses a pre test post test control group design, where there is a control group that uses the sport education learning model and an experimental group that uses the STAD type cooperative learning model. The way to determine the group is with the original subject matching technique. The processing is after the author gets the pre-test data.

Table 3.1 Research Design Pre Test Post Test Group Design

Experimental Group	R	O1	X	O2
Control Group	R	O1		O3

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R = Students who take part in extracurricular football at secondry school

O1 = Pre Test

X = Treatment in the form of applying the student team achievement division type cooperative learning model

O2 = Post Test

O3 = Post Test

Population

The population in this study is secondry school which is located on seramban District, Malaysia. with a total of 1,062 students. The reason the author chose secondry school to be used as a population is because in secondry school there are still problems as the author explained in the previous chapter.

Sampling Technique

The sampling technique used by the author is purposive sampling technique. The purposive sampling technique is a technique that determines by making certain considerations. The author took a sample of students who participated in extracurricular football because the research to be carried out was related to football. Of the 30 students who take part in extracurricular football, 20 students were randomly selected to serve as research samples.

Research Instruments

In this study, the instrument used to obtain data on the attitude of responsibility was a questionnaire using a Likert scale and observation using the GPAI instrument to obtain data on students' playing skills.

To obtain data on the attitude of responsibility, the author used an instrument that had previously been used. However, it needs development to focus more on students who do physical education learning. Responsibility is the basis of a person's moral law to carry out a job or obligation in the family, at school, or at work wholeheartedly and give the best. Or more briefly, responsibility is a person's attitude and behaviour to carry out duties and obligations that should be done.

The instrument used in this study is a responsibility attitude instrument in the form of a questionnaire developed by researchers. Indicators of responsibility attitude used for the preparation of instrument grids in this study are as follows:

a. Understand the rights and obligations of self as a student.
b. Taking an active role in teaching and learning activities and other activities at madrasah or school.
c. Make a report of every activity carried out in oral and written form.
d. Accepting the risks of the actions taken.
e. Have the initiative to solve problems.
f. Performing tasks without being told to do so at home, school and the neighbourhood related to his/her obligations as a student.

As for observing students' playing performance, there is a standardised instrument created by Griffin, Mitchell, and Oslin. The instrument is called the Game Performance

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Assessment Instrument (GPAI) which consists of seven components. The following are the components of the GPAI instrument:

1. Return to home base
2. Adjust
3. Decision making
4. Carry out skills (skill execution)
5. Providing support
6. Covering a friend
7. Guarding or following the opponent's movement (guard or mark) 7.

The GPAI instrument is flexible, the physical education teacher can determine the components to be observed. Ideally, physical education teachers use the seven components above to see students' overall playing performance. However, Sucipto (2014) says that components such as decision making, skill execution, and support are sufficient to represent the other components in looking at students' playing performance.

In this study, the authors used five components that were adjusted as needed. The five components used by the author are adjusted to the variable under study, namely the attitude of responsibility. The components used are:

1. Return to home base
2. Making decisions (decision making)
3. Skill execution
4. Providing support
5. Guarding or following the opponent's movement (guard or mark) 3.

Research Procedure

Research procedures are step by step carried out in a study until the research results can be concluded. There are stages in a study, including (1) the initial stage; (2) the implementation stage; (3) the final stage.

1. Initial Stage

In the early stages, the author began observing schools to see the problems that occurred during the physical education learning process. In secondry school, it turns out that in physical education learning, teachers tend to only develop students' skills in performing a skill and their physical condition rather than directing students to the affective dimension, developing moral behaviour, developing social values such as discipline, responsibility, cooperation, and helping each other. In addition, teachers also often ignore how to maximise student participation in physical education learning, such as many students queuing and even not participating in learning activities. After the problem was found, the author tried to identify the problem and find out how to solve it. In addition, the author collects theories to strengthen the proposed hypothesis.

2. Implementation Stage

After the author found a solution to overcome the problems that occurred at secondry school, the author determined the sample to be used. After that, to divide the sample into two groups, a pretest was conducted at the first meeting as well as to collect initial data. After that, the treated group will carry out learning using the STAD type coopartive learning model and the control group will carry out learning using the sport

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education learning model. On the 14th meeting, both groups will conduct a post-test with the same instrument.

3. Final Stage

At this stage, the author has obtained research data and is ready to be analysed using statistical tests. After that, enter the conclusion stage.

Data Analysis

Data analysis technique is something that should not be forgotten when conducting a research. The results of the study will be seen when the author has completed data analysis or processed the data that has been obtained previously through instruments such as questionnaires and observations.

The author takes data at the beginning of the study (pre test) and takes data at the end of the study (post test) after students are given treatment. Both data obtained by the author will be processed using processing techniques that are in accordance with the research objectives. From the results of data collection conducted by researchers, a type of data called nominal data will be obtained.

In processing the data, the author uses Microsoft Excel to conduct descriptive analysis of the pre-test and post-test data on the variable attitude of responsibility and football playing skills. In addition, the authors conducted other tests with SPSS version 25 software as follows:

1. Normality Test (kolmogorov-smirnov), The author conducts a Kolmogorov-Smirnov normality test as a condition for conducting the next test, namely the hypothesis test using the paired sample t test.
2. Hypothesis Test (Paired Sample T Test) , This test aims to see the effect between variable X on variable Y, besides that it aims to see the difference in the average pre-test and post-test results of the experimental group and control group.
3. Homogeneity Test (levene), The homogeneity test using the levene test was carried out to prove that at the time of the pre-test the experimental group data and the control group were declared homogeneous. In addition, the author conducted a homogeneity test as a condition for conducting the next test, namely the independent sample t test.
4. Independent Sample T Test, The independent sample t test was conducted to see the average comparison of the post test results of experimental group students with the control group.
5. N-Gain Score Test, N-Gain Score test is conducted to determine the effectiveness of using a learning model. The purpose of the gain score is the difference between the pre-test and post-test results. In this study, the authors will conduct the n-gain score test using SPSS version 25 software to see the effectiveness of using the student team achievement division type cooperative learning model and the sport education learning model.

RESEARCH RESULTS

1. Responsibility Attitude Data

Judging from the author's findings after processing the data using the paired sample t test, it is stated that the experimental group has a significance value (2-tailed) of 0.013 <0.05. Then H0 is rejected and Ha is accepted. This means that the cooperative learning model of student team achievement division type is stated to have an effect on students' responsibility attitude.

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In addition, it is known that a significant change between the pre-test and post-test results is found in the experimental group using the cooperative learning model of student team achievement division type. The average of the pre-test results of 140.60 increased to 154.40.

2. Data on Learning Outcomes of Football Playing Skills

The learning outcomes of football playing skills in the experimental group have a significance value (2-tailed) of 0.000 <0.05. Then H0 is rejected and Ha is accepted. In addition, it is known that the use of the student team achievement division type cooperative learning model in the experimental group can improve the results of students' football playing skills from an average of 26.20 during the pre test to 38.70 during the post test.

3. N-Gain Score Test

Table 1. Interpretation Categories

Percentage %	Interpretation
< 40	Not Effective
40 - 55	Less Effective
56 - 75	Moderately Effective
> 76	Effective

From the results of the N-Gain Score test on the attitude of responsibility data, it can be seen that the average percentage is 44.68, which means that the use of the learning model in this study is still less effective in improving students' attitude of responsibility.

While in the data on learning outcomes of football playing skills, it is known that the average percentage of the experimental group's N-Gain Score value is 65.57. When reviewing the interpretation category table, the value of 65.57 is between 56-75, which means that the cooperative learning model of the student team achievement division type is quite effective in improving the learning outcomes of students' football playing skills.

DISCUSSION

Football aims to put the ball into the opponent's goal by passing the ball to each other with their teammates and maintaining their own goal so that the opponent cannot enter the ball. However, the goals previously described by Saputele are the goals of the game of football in general. The most important goal in the game of football is related to physical education learning. The game of football is a medium of learning in educating students to become smart, skilled, honest, and sportive children. In addition, through the game of football will grow and develop students' competitive spirit (competition), cooperation (cooperation), social interaction (social interaction), and moral education (moral education). Responsibility is the attitude and behaviour of a person in doing a task that is ordered seriously, and will accept all risks for what he has done. Serious behaviour carried out by students during the learning process will bear good fruit for the learning outcomes they will get.

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Responsibility is the basis of a person's moral law to carry out a job or obligation in the family, at school or work with all his heart and give his best'. Moral comes from the Latin word 'mos' (moris), which means customs, habits, rules / values or procedures for living in the environment. Meanwhile, morality is a person's willingness to accept and carry out the rules, values, norms, and habits that exist in their environment.

Basically, by giving the best in a given task, it means that there is absolutely no intention to do things that are not in accordance with the rules. With that, there will be no mistakes made as a result of decisions made in performing the assigned tasks. The result is to get the best achievement for himself and even others around him.

One of the characters that will prevent someone from a problem is responsibility. Responsibility means being brave, ready, and firm in accepting decisions and making decisions both intentionally and unintentionally (Apriani et al., 2015). However, basically the decisions taken by someone who is responsible are the decisions that should be taken and the most correct, so that a problem will be very minimal.

The cooperative learning model is a learning model that is applied so that students can solve a problem or carry out learning activities that are done together in a group with the hope of getting good results for the group and each individual. 'During cooperative learning, students share their knowledge and learn from others in an organised and structured way, while instruction focuses on stimulating, coordinating and encouraging interactions among students'. This means that during cooperative learning, students share their knowledge and learn from others in an organised and structured way, while instruction focuses on stimulating, coordinating and encouraging interactions among students.

The learning that is done does not only rely on the teacher as a lecturer and knowledge giver. The teacher only occasionally helps with the difficulties in each group, the rest is for each student in the group to help each other.

Each student in the group helps their peers in their group to get the expected results.

"Cooperative learning refers to an educational method where students work together in small groups to achieve common goals and take responsibility for their own learning and are responsible for others". This means that the cooperative learning model is a method that is carried out so that students work together in small groups to achieve common goals and are responsible for the learning process in their group and are responsible for their own learning process. The cooperative learning model is a compulsion or more subtly as a regulator so that the learning process is carried out in groups by taking group assessments as a learning outcome, so that each student together to improve the ability of each member to get a good group.

"The implementation of cooperative learning showed an increase in social skills and attitudes compared to the control group that was not given the cooperative learning model as follows, interpersonal behavior, personal behavior, behaviors related to academic success in peer acceptance, and communication skills". This means that the use of the cooperative learning model proves changes in social skills and social attitudes compared to the control group which did not produce changes in interpersonal behaviour, personal behaviour, behaviour related to academic achievement, and skills in communication. With the characteristics and treatment that teachers have to give to students through cooperative learning models, educational objectives in terms of students' social behaviour are proven to have changed.

Concluded that cooperative learning can develop efficient teamwork capabilities. concluded that cooperative learning can develop efficient teamwork capabilities.

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CONCLUSION

Based on the results of the research and data analysis, several important conclusions can be drawn. First, the application of the cooperative learning model of the Student Team Achievement Division (STAD) type has been proven to have a significant effect on improving students' attitudes of responsibility. This shows that through structured group collaboration, students are encouraged to take greater ownership of their roles, demonstrate accountability, and contribute meaningfully to the collective success of their teams. Second, the cooperative learning model of the STAD type also has a significant positive effect on the learning outcomes of students' football playing skills. The interactive and collaborative nature of this learning model enhances students' technical and tactical understanding of football, providing them with more opportunities to practice skills, receive peer feedback, and engage actively in the learning process. Third, the findings indicate a clear average difference in post-test results between the experimental group and the control group, with the experimental group—who were taught using the cooperative STAD model—showing higher performance. This highlights the effectiveness of cooperative learning not only in developing affective attributes like responsibility but also in boosting cognitive and psychomotor outcomes, particularly in practical skill acquisition such as football. Overall, the research supports the conclusion that cooperative learning models, particularly the STAD type, are highly effective for enhancing both social attitudes and physical skill competencies in physical education contexts. These findings suggest that educators should integrate cooperative approaches more systematically into their instructional strategies to promote more holistic student development, fostering both character and competence simultaneously.

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