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SHOOTING: Journal of Sport, Health and Education

The Influence Of Stad And Inquiry Type Cooperative Learning Models On The Smash Volleyball Skills Of Students Of Takalar 1st High School

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Received: (manuscript submission date); Revised: (manuscript revision date); Accepted: (manuscript acceptance date)

Abstract*:* This research is experimental research. The aim of this research is to determine the influence of the Tsad Type Cooperative Learning Model on the Volleyball Smash Skills of Students at SMA Negeri 1 Takalar. This type of research is Quasi Experimental Design or Posttest-only control design. The population of this study were class data analysis, this research concludes that there is a significant influence of the STAD type cooperative learning model on volleyball smash skills with a t=count value of 18.531 > t=table 2.042 and the results are sig. (2-tailed) namely 0.000 < 0.05, there is a significant influence of the inquiry model on volleyball smash skills with a t=count value of 18.531 > t=table 2.042 and the results are sig. (2-tailed), namely 0.000 < 0.05, there is a significant difference in the influence of the STAD type cooperative learning model on volleyball smash skills with an average value of 16.03 and the inquiry model with an average value of 14.33, the value t= calculated is 2.502 > t=table 2.042 with a significant value of 0.015<0.05 for students of SMA Negeri 1 Takalar.
Keywords: Cooperative learning model, stad, inquiry

How to Cite: Author, F., & Author, S. (2023). SHOOTING Manuscript Writing Guidelines. *SHOOTING, X*(Y), 1-3. doi: https://doi.org/10.31960/shooting.vxix.x

INTRODUCTION

Physical education is one of the subjects taught in schools from primary to secondary education. Physical education focuses on activities that utilize physical activity, so that it can improve physical fitness and familiarize students with a healthy lifestyle at school which will have a good physical, mental and emotional impact. Kristiyandaru (2020) stated that Physical Education is an inseparable part of education in general which influences students' potential in cognitive, affective and psychomotor components through physical activity. Through physical activity, individuals will gain various kinds of experiences that are valuable for life such as intelligence, emotions, attention, cooperation and skills.

Basically, every student has skills that need to be trained and developed. As stated by Smith & Wrisberg (Fallo & Hendri, 2016) that to achieve proficiency in a skill, more training or practice is needed, so that the types of movements that result in achieving goals from the environment can be known and obtained. In physical education, students are not only required to be able to carry out various physical activities, but also have to have skills. Each sport in physical education requires a variety of skills. One of the materials in Physical Education, Sports and Health lessons is Volleyball. According to Listina (2012), "Volleyball is a team game where in one team the players must support each other and work together to form a compact team. "Therefore, individual mastery of the basic techniques of playing Volleyball is very necessary."

Based on this opinion, it can be said that proper skill and cooperation, technique and training are needed to be able to play Volleyball. Mastering good basic techniques will make it easier for students to play Volleyball so that they feel confident and optimistic. In the physical education, sports and health learning process, teachers are required to be able to equip students by introducing, guiding and training students so that the expected goals in learning Volleyball material can be achieved.

According to the opinion of Yunus in Ilham, (2016: 11), "in the game of Volleyball there are 5 basic techniques that must be mastered including, serve, pass, pass (set-up), smash (spike), dam (block). Smash is a combination of movements that cannot be separated. Collaboration between muscles, including arm muscles, abdominal muscles, leg muscles, hip muscles, shoulder muscles, and the flexibility of the togok greatly influences the success of doing a smash.

In implementing the Volleyball smash, students made many mistakes including: incorrect body position, hand contact with the ball, and arm swings when serving still contained errors. Teachers are less precise in applying teaching styles and limited resources are used to support the physical education teaching process as well as internal factors within students when carrying out basic techniques in volleyball smashes, including students' interest in learning. Lack of teacher attention and guidance will result in wrong movement patterns and smash techniques not being mastered properly. It is often found that teachers are reluctant to carry out learning using appropriate methods.

According to Syahruddin (Syaruddin, 2016) every student has the right to achieve his or her own potential, so teaching strategies must provide opportunities for students to gain the experience they desire. Students must progress at a pace appropriate to their rhythm, and teaching strategies must enhance their development of skill mastery. Educators must be able to use various models in learning Volleyball so that students' skills can improve. When teaching a particular subject or material, it is necessary to choose a learning model that best suits the objectives to be achieved. The learning model is the first step that must be planned in the overall teaching and learning process. One learning model is the cooperative learning model. The cooperative learning model is a learning model that places students as learning subjects (student oriented). With a democratic classroom atmosphere, mutual learning provides greater opportunities to empower students' potential to the maximum. According to Syahruddin (2020) cooperative learning is structured in an effort to increase student learning participation, facilitate students with experience of leadership attitudes and making decisions in groups, and provide opportunities for students to interact and learn together with students from different backgrounds.

So, in cooperative learning students play a dual role, namely as students or as teachers. In cooperative learning there are five student team learning methods. According to the opinion of Slavin (2005) in Nurlita, (2009:) "The five principles in the PTS method have been developed and researched extensively. Three of them are cooperative learning methods that can be adapted to most subjects and grade levels. Student Team-Achievement Division (STAD), TeamGames-Tournament (TGT) and Jigsaw. The other two are designed for use in specific subjects at specific grade levels, namely Cooperative Integrated-Reading and Composition (CIRC) and Team Accelerated Instruction (TAI)"

Of the five principles of the cooperative learning model, the author chose the STAD type because it is suitable for Volleyball material. In the STAD type cooperative learning model, students are divided into several teams consisting of several heterogeneous people so that this can provide different experiences for each individual. As stated by Slavin (2015), the Student Team Achievement Division (STAD) is a learning model to motivate students to support and help each other in mastering the skills taught by the teacher. Learning models that can foster students' curiosity also need to be considered. According to Syahruddin (Syahruddin, 2018) student activity is one of the main principles in the learning process. Learning is doing, therefore there is no learning without activity. Students will gain learning experiences as long as students actively interact with their environment.

The inquiry learning model is a learning model that is often used to teach students skills. According to Gulo (in Trianto, 2009: 166), inquiry strategy means a series of learning activities that maximally involve all students' abilities to search and investigate systematically, critically, logically, analytically, so that they can formulate their own findings with full confidence. The main aim of the inquiry strategy is to develop thinking skills, thus, this learning strategy is not only oriented towards learning outcomes but also oriented towards the learning process.

Learning Physical Education on Volleyball material using the stad and inquiry cooperative learning model will provide many benefits to students, including improving Volleyball smash skills, because it can provide more opportunities for students to learn to master the movement

tasks given by the teacher and students be directly involved in the learning process by working together to achieve learning goals.

Based on the results of initial observations at SMA Negeri 1 Takalar, the volleyball learning process still uses conventional methods. This can be seen from the learning models and methods used which tend to be teacher-centred so that students still lack participation and cooperation in the learning process. In the cooperative learning process, not only does the teacher motivate students to complete movement tasks well, but students are also emphasized to motivate each other and teach their group friends so that it is hoped that the results obtained can improve students' skills. Therefore, the author aims to carry out research entitled The Influence of Stad and Inquiry Type Cooperative Learning Models on the Volleyball Smash Skills of Students at SMA Negeri 1 Takalar.

METHODS

This type of research is quasi experimental design research, namely quasi-experiment. Quasi-experimental is to obtain information that is an approximation of the information that can be obtained by actual experimentation in circumstances where it is not possible to control or manipulate all relevant variables.

There are two experimental groups in the research group, namely the first group is the experimental group which is measured using the STAD type cooperative learning model and the second group is the experimental group using the inquiry learning model.

RESULT AND DISCUSSION

This research is considered experimental research. This research consisted of an initial test and a final test on the stad type cooperative model and inquiry model on volleyball smash skills in students at sma negeri 1 takalar. This research variable consists of the independent variable stad type cooperative model and the inquiry model, the dependent variable is volleyball smash skill. In this research, the research obtained data from the results of the pre test and post test conducted on students at sma negeri 1 takalar. The pre test means that no treatment has been given while the post test means that treatment has been given. These two tests function to measure the effectiveness of the program provided.

Collecting initial/pretest data, students at sma negeri 1 takalar will be instructed to perform volleyball smash skills before being given treatment. Then the treatment is given for 16 meetings after being given the treatment, then final data or post-test will be taken from the students of sma negeri 1 takalar. This was done to determine the final abilities of students at sma negeri 1 takalar after being given treatment. To provide a clearer picture of the data from this research.

4.1.1 descriptive analysis

Descriptive data analysis is intended to get a general overview of the research data. Descriptive analysis was carried out on pretest and posttest data on volleyball smash skills. Descriptive analysis includes men, standard deviation, range, minimum and maximum values.

Table 4.1 Results of descriptive analysis of the pretest and posttest for the stad type cooperative model group and the inquiry model

Variable	N	Mean	Std. deviation	Range	Min	Max
Pretest model kooperatif tipe STAD	30	10,67	2,454	12	3	15
Posttest model kooperatif tipe STAD	30	16,03	2,371	11	10	21
Pretest model inkuiri	30	9,00	3,118	14	3	17
Posttest model inkuiri	30	14,33	2,869	12	7	19

From the results of the descriptive analysis, it can be seen that the pretest of the stad type cooperative model has an n (sample) of 30, a mean (average) of 10.67, a std.deviation (standard deviation) of 2.454, a range of 12, min (lowest value).) of 3, max (highest value) of 15. The results of descriptive analysis can be seen that the posttest of the stad type cooperative model has an n (sample) of 30, a mean (average) of 16.03, std. Deviation (standard deviation) of 2.371 , range (range) is 11, min (lowest value) is 10, max (highest value) is 21. The results of the descriptive analysis can be seen that the pretest inquiry model has an n (sample) of 30, a mean (average) of 9.00 , std.deviation (standard deviation) is 3.118, range is 14, min (lowest value) is 3, max (highest value) is 17. The results of the descriptive analysis can be seen that the posttest inquiry model has an n (sample) of 30, mean (average) is 14.33, std. Deviation (standard deviation) is 2.869, range is 12, min (lowest value) is 7, max (highest value) is 19.

4.1.2 normality test

The normality test is carried out to test whether the variables are normally distributed or not. This normality test uses spss 23. To find out whether the data is normal or not, if sig > 0.05 then it is normal and if < 0.05 then it can be said to be abnormal. The calculation results obtained are in the following table:

Table 4.2 Results of the normality test of pretest and posttest data for the STAD type cooperative model group and the inquiry model

No	Variabel	*Shariro-Wilk*	Sig.	A	Ket
1	*Pretest* model kooperatif tipe STAD	0,945	0,121	0,05	Normal
2	*Posttest* model kooperatif tipe STAD	0,943	0,113	0,05	Normal
3	*Pretest* model inkuiri	0,955	0,227	0,05	Normal
4	*Posttest* model	0,954	0,221	0,05	Normal

Based on the results of the data normality test, it is known that the significant pretest value of the stad type cooperative model with a shapiro-wilk value of 0.945 and a significance level of 0.121 is greater than α 0.05, so it can be said that the pretest distribution of the stad type cooperative model follows a normal distribution or has a normal distribution. Meanwhile, the posttest of the stad type cooperative model with a shapiro-wilk value of 0.943 and a significance level of 0.113 is greater than α 0.05, so it can be said that the posttest distribution of the stad type cooperative model follows a normal distribution or normal distribution.

The inquiry model pretest with a shapiro-wilk value of 0.955 and a significance level of 0.227 is greater than α 0.05, so it can be said that the pretest distribution of the inquiry model follows a normal distribution or has a normal distribution. Meanwhile, the posttest of the inquiry model with a shapiro-wilk value of 0.954 and a significance level of 0.221 is greater than α 0.05, so it can be said that the distribution of the posttest model inquiry is to follow a normal distribution or normal distribution.

4.1.3 homogeneity test

The homogeneity test is carried out to determine the similarity of variances or to test that the data obtained comes from a homogeneous population. Decision making criteria are accepted if the significant value is greater than 0.05.

Table 4.3 posttest data homogeneity test results for volleyball smash skills

Lavene Statistic	df1	df2	Sig.	Ket
1,542	1	58	0,219	Homogen

Based on the results of the posttest homogeneity test with a levane test of 1.542 with a significant value of 0.219, it is known that the significant value is 0.05, so the hypothesis which states that the data was obtained from a homogeneous sample is accepted. The conclusion that can be drawn is that the posttest data from the stad type cooperative model group and the inquiry model group have a homogeneous population.

4.1.4 hypothesis testing

The t test in this study uses a parallel sample t test to determine the effect of the stad type cooperative model on volleyball smash skills. The results of the t test sample pared test can be seen as follows:

Table 4.4 paired t test paired sample t test group cooperative model stad type and inquiry model

Variabel	N	T-Hitung	T-Tabel	Sig.(2-tailed)
Pretest model kooperatif tipe STAD *Posttest* model kooperatif tipe STAD	30	18,531	2,042	0,000
Pretest model inkuiri *Posttest* model inkuiri	30	14,820	2,042	0,000

Judging from the table above, it can be concluded that the t = calculated value of 18.531 is greater than t = table 2.042 or t = calculated 18.531 > t = table 2.042 and the result is sig. (2-tailed) namely 0.000 < 0.05. The t = calculated value of 18.531 is greater than t = table 2.042 or t = calculated 14.820 > t = table 2.042 and the result is sig. (2-tailed) namely 0.000 < 0.05. This means that there is a significant influence of the stad type cooperative model and the inquiry model on volleyball smash skills.

Table 4.5 unpaired t test for groups of stad type cooperative models and inquiry models

Variabel	N	T-Hitung	Sig.(2-tailed)
Posttest model kooperatif tipe STAD	30	16,03	0,015
Posttest model inkuiri	30	14,33	

Judging from the table above, it can be concluded that the stad type cooperative model has increased with an average value of 16.03 and the inquiry model with an average value of 14.33 with a significant value of 0.015<0.05. The conclusion is that the stad type cooperative model is very effective in improving the volleyball smash skills of students at sma negeri 1 takalar.

DISCUSSION

From the research that has been carried out, there are three hypotheses that are in accordance with the research results, namely as follows:

1. The Influence of the Stad Type Cooperative Learning Model on Smash Skills Volleyball for Students of SMA Negeri 1 Takalar

From the calculation results, it is concluded that Ho is rejected, which means that the cooperative model has a big influence on volleyball smash skills. In implementing the cooperative learning model, students can exchange information with their friends for discussion, so that there is no gap between one student and another (Abdullah, 2017). Students who do not understand the learning material will understand and understand because of discussions in a group that has been created previously. Discussions in groups can change the learning atmosphere to be more enjoyable, because you can work together with fellow friends who don't hesitate to ask questions about learning material that you don't understand, dividing into small groups makes most students more active because they can interact with each other without being distracted. awkward feeling.

This is based on the fact that students' mastery of skills in learning using the STAD cooperative learning model can be improved, because the STAD type cooperative learning model gives responsibility to students who study in groups to complete the teaching assignments given by the teacher together and all students must contribute to the learning outcomes. (Faozi et.al., 2019) students who have low ability in the learning process will be motivated to complete the tasks given by the teacher to get better results and without realizing it their mastery of smash skills will increase.

2. The influence of the inquiry model on the volleyball smash skills of students at SMA Negeri 1 Takalar.

From the calculation results, it can be concluded that Ho is rejected, which means that the inquiry model has a big influence on volleyball smash skills. Students' skills increase due to the influence of using the inquiry learning model. The inquiry learning model changes passive students into active ones, because they are given the opportunity to make movements and be directly involved in the learning process (Pratiwi et al., 2017). Learning becomes more interesting because you are not just a passive listener of the material presented by the teacher. The active role of students is very much needed in the learning process, if only the teacher always dominates teaching and learning activities without the active role of students, then the material provided will not be well received by students. Therefore, the use of learning models is very necessary, one of which is the inquiry learning model which emphasizes students to think critically, not just listen to explanations of the material given.

The results of this research are also supported by (Aswar, 2018) that the use of the inquiry learning learning model can improve volleyball smash skills. This learning model makes students more active, close to the teacher, and able to think critically in finding problems faced by students. In this way, with the inquiry learning model, students can understand the material more deeply when the teacher provides learning material and improve students' communication skills with the teacher. Intense communication between students and teachers can have a big influence on student learning behavior. The more teachers improve their communication with students, the more student behavior will improve.

3. Differences in the influence of the STAD type cooperative model and the inquiry model on the volleyball smash skills of students at SMA Negeri 1 Takalar

From the calculation results, it can be concluded that Ho is rejected, which means that the STAD type cooperative learning model and the inquiry learning model have a big difference in influence on volleyball smash skills. From the results of the data obtained, it states that the data is in accordance with the hypothesis that has been made. There is an increase in smash skills in students because of the cooperative learning model, namely "students are given time to discuss during the learning process", according to theory (Rosyidah, 2016) cooperative learning is forming several groups that give students the opportunity to discuss. While the inquiry model requires students to think critically in solving the problems they face independently so as to create

intelligent and insightful students, according to the following definition, the inquiry learning model is "a teaching system that requires students to think critically with the aim of creating intelligent students and insightful" (Ginanjar, 2015).

Based on the results of previous research conducted in research (Oktadinata, 2015), it was explained that the cooperative learning model was more effective on volleyball learning outcomes. This can happen because the learning process encourages students to interact with each other and help each other if one of the students still does not understand the learning material being studied. So it can be concluded that the cooperative learning model is better than the inquiry learning model, because from the results of data analysis the value of the cooperative learning model is higher than the inquiry learning model.

From the results of the research above, it can be concluded that the STAD type cooperative learning model and the inquiry learning model are in accordance with the volleyball smash skill material, it can be said to be suitable because in the implementation of learning most students can understand the learning material being taught, the learning process is more enjoyable because of the implementation of both This learning model is new and has never been applied before, most of the students' volleyball smash skills improved. However, between the two learning models, the cooperative learning model is more effective on volleyball smash skills

CONCLUSSION

Based on the research that has been carried out, it can be concluded that the data above shows the following research results:

1. There is a significant influence of the STAD type cooperative learning model on the volleyball smash skills of students at SMA Negeri 1 Takalar with a t=count value of 18.531 > t=table 2.042 and the results are sig. (2-tailed) namely 0.000 < 0.05.
2. There is a significant influence of the inquiry model on the volleyball smash skills of students at SMA Negeri 1 Takalar with a t=count value of 18.531 > t=table 2.042 and the results are sig. (2-tailed) namely 0.000 < 0.05.
3. There is a significant difference in the influence of the STAD type cooperative learning model on the volleyball smash skills of students at SMA Negeri 1 Takalar with an average value of 16.03 and the inquiry model with an average value of 14.33, t = calculated value of 2.502 > t=table 2.042 with a significant value of 0.015<0.05.

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