THE INTERACTION BETWEEN COOPERATIVE MODEL AND ACHIEVEMENT MOTIVATION TOWARDS THE STUDENTS' OUTCOME *AT SENIOR HIGH SCHOOL*

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ABSTRACT

This study aimed to see the interaction of the learning model and achievement motivations on the eleventh-grade students' outcomes in learning Civic Education at two public senior high schools in Gresik. The research method used was factorial design. Participants in this study consisted of 224 senior high school students which were divided into two groups, experimental (112) and control (112). The results showed that there was an interaction between the STAD cooperative model and achievement motivation on the students' outcomes in learning Pancasila and Civic Education (PPKn). STAD cooperative model was influenced by achievement motivation, while students'learning outcomes were influenced by learning model and achievement motivation.

Keywords: STAD, Cooperative, Achievement Motivation, Learning Outcome

INTRODUCTION

The implementation of education in schools that involves teachers as educators and students as learners creating teaching and learning interaction or the learning process. In this learning process, the teacher consciously plans to learn activities systematically and is guided by a set of rules and plans for education called a curriculum. Gradually, the curriculum has been refined which aims to improve the quality of education that is oriented on the progress of the national education system.

The refinement of the curriculum, however, is not balanced with the implementation of the curriculum in schools that is related to the learning process. Based on the real field observation, the conventional classroom learning process usually uses the lecture method where the teacher becomes the center of information and the existence of the students is less involved. Students tend to be passive and not creative because there is no opportunity for asking questions and having good discussions with other students, especially with the teacher.

Some teachers still maintain the implementation of the conventional learning model in the public senior high schools in Gresik, so that the students become less motivated to increase the acquisition of their learning outcomes which results in their low learning potential. This is proved by the data on the number of students who get low scores, including on the Civic Education subject. Based on the observation, teachers generally teach by implementing a conventional learning model that does not provide opportunities for students to be creative and it becomes teacher-centered learning or dominated by the teacher. To increase the maximum student learning acquisition, it is required a creative teacher who can make the learning process more interesting and liked by students.

According to (Petersen & Lewis, 2004), a learning process will work well if it includes students to choose, set, and follow the objectives in the learning situation. By involving

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students in their learning process, they will be responsible for carrying out the plans they have compiled. The cooperative learning model is very important in supporting the interaction between students and teachers. This condition is very expected to make the interaction runs well for the learning fluency.

According to Riyanto (2009), there are some models of cooperative learning, including (a) Student Teams Achievement Division (STAD) learning model type; (b) the Team Game Tournament (TGT) learning model type; (c) JIGSAW learning model type; (d) Investigation Group (KI) learning model type, etc. Based on the description above and the problems occurred, the researcher conducted this research by developing the Student Teams Achievement Division (STAD) type of cooperative learning to overcome the learning problems of the students from different background.

The STAD learning model is a cooperative learning model that can further improve student learning outcomes, namely by forming heterogeneous groups of 4 students, and after the teacher assigns assignments to the group, each group member will try to learn it and those who can understand the material help the other members. The STAD model of cooperative learning emphasizes activities and interaction among students to motivate each other and help each other in mastering the subject to achieve maximum achievement.

McClelland, Atkinson, Clark, & Lowell (1953) explained that achievement motivation is a characteristic of people who have high expectations.. Students who want to have good performance will assess whether the activities they carry out are in accordance with the predetermined criteria. Gellerman (1953)states that people who have high achievement motivation will be very happy to succeed in winning a competition. They also will dare to bear any risk as a consequence of their efforts to achieve their goals. McClelland D. C. (1987) defines achievement motivation as a means to excel. Achievement is related to a set of standards and striving to get success. Thus, it can be said that individuals who have achievement motivation are individuals who are oriented to the task, like to work with challenging tasks where six individual values on that task can be evaluated by speaking and can be compared with the performance of others or by certain standards.

In implementing STAD cooperative learning model, the students can work together in a heterogeneous learning group, therefore, each group is responsible for understanding the concepts of its group members, then, students will be given a questionnaire individually to measure understanding of the concept. STAD emphasizes that students in one group can be more motivated to help each other in understanding the material that is not yet understood and work together to achieve material completeness. Through the STAD cooperative learning model, it is hoped that students will be more motivated to be active in learning activities in the classroom, be easier to understand the material of learning, and be able to work together with group members to achieve maximum learning outcomes.

METHOD

This study used a 2x2 factorial design which aimed to determine the interaction of the STAD cooperative model and students' motivation on their learning outcomes using the two-way variant analysis technique. The experimental design used the Pretest-Posttest Control Group Design with the participants consisted of 224 school students divided into 112 experimental classes and 112 control classes.

The research procedure which was carried out before the experiment, namely the researcher searched for data about students' achievement motivation through a questionnaire, and the results were classified into high and low achievement motivation.

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RESULT AND DISCUSSION

Based on Table 1, Tests of Between-Subjects Effects, the interaction between the learning model and achievement motivation on eleventh-grade students' outcomes in learning Civic Education at public senior high schools in Gresik showed a significant count (0.00) <0.05, which could be concluded that there was an interaction, where shows the correlation between the learning outcomes of the students who received treatment from STAD and conventional learning models with achievement motivation (high and low) (graph 1). The average score among the independent variables can be seen in table 2.

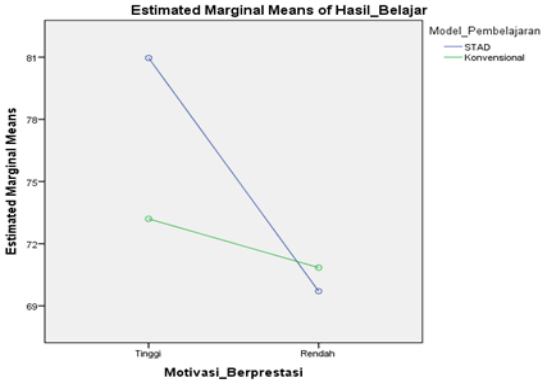
Table 1. Tests of between-subject effects

Dependent Variable: Learning Outcomes					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Corrected Model	5892,581[a]	3	1964,194	22,695	,000
Intercept	1229419,828	1	1229419,828	14204,887	,000
Learning model	622,032	1	622,032	7,187	,008
Achievement Motivation	2619,667	1	2619,667	30,268	,000
Learning Model * Achievement Motivation	1121,280	1	1121,280	12,955	,000
Error	24839,584	287	86,549		
Total	1681135,000	291			
Corrected Total	30732,165	290			

a. R Squared = ,192 (Adjusted R Squared = ,183)

Tabel 2. The interaction between the learning model with the achievement motivation

Dependent Variable: Learning Outcomes					
Learning Model	**Achievement Motivation**	**Mean**	**Std. Error**	**95% Confidence Interval**	
				Lower Bound	**Upper Bound**
STAD	High	80,963	,895	79,201	82,725
	Low	69,711	1,509	66,740	72,681
Conventional	High	73,198	,904	71,420	74,977
	Low	70,846	1,490	67,914	73,778



Graph. 1. The interaction between learning model and achievement motivation on learning outcomes

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The interaction between learning model and achievement motivation on learning outcomes in this study was confirmed by calculation using linear regression. Based on the correlation value (table 3) on Pearson correlation, it can be considered that:

a. Learning outcomes were not correlated with the learning model (-0.266> 0.05), and achievement motivation (0.293> 0.05)

b. The learning model was not correlated with learning outcomes (0.266> 0.05), and there was a correlation between the learning model and achievement motivation (0.010 <0.05)

c. Achievement motivation was not correlated with learning outcomes (0.293> 0.05), and achievement motivation was correlated with the learning model (0.010 <0.05).

In terms of significance, it showed the same result, namely the learning model was correlated with achievement motivation, and did not correlate with learning outcomes.

The results of the Model Summary (table 4.4) show that the coefficient of Adjusted R Square is 0.149, which meant that 14.9% of students' learning outcomes in learning Civic Education were influenced by the learning model and achievement motivation. And 85.1% of learning outcomes were influenced by other factors

The combination effect between learning model and achievement motivation on learning outcomes, based on the Tests of Between-Subjects Effects (table 3,), from Type III Sum of Squares was as follows:

$$\frac{1121{,}280}{1681135} \times 100\% = 0{,}67\%$$

The effect of Achievement Motivation on students' outcomes in learning Pancasila and Civic Education *(PPKn)* was about 0,67%, however, the percentage of undefined variable component by the model was about

$$\frac{24839{,}584}{1681135} \times 100\% = 0{,}015\%$$

It means that there was 99,985% variant of the learning outcomes because it was influenced by the learning model and achievement motivation, while the 0.015% was influenced by other factors.

This study showed the result of the interaction of learning model and achievement motivations on the eleventh-grade students' outcomes in learning Civic Education at the public senior high schools in Gresik. The STAD method showed an increase in motivations and learning outcomes (Wyk, 2012). Research from Norman (2005) showed that the STAD learning model had a significant positive effect on students' achievement and student attitudes in learning and had a more significant effect on students' achievement rather than on students' attitudes. Wyk (2012) revealed that the STAD learning model compared to direct instruction promotes positive attitudes, shows better achievement, and motivates students to learn.

Learning outcomes for students who had high achievement motivations in the two learning models used (STAD and conventional models) are better than students with low achievement motivations. Slavin (1984) explains that in cooperative learning, each member of the group tries to make the group successful and encourages each other to excel and socially strengthens effort that helps the group achieves its goals. Students who learn by using STAD learning method have better performance rather than students who use individual learning through computers (Gambrari, Yusuf, & Thomas, 2015). The role of individuals in group interaction has an important effect on learning (Webb, 1982).

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Keramati (2014) finds that STAD cooperative learning helps students to develop some of their educational and psychological skills, because cooperative activities encourage students to interact freely and communicatively, therefore, can increase their academic achievement. STAD learning model is a way to organize the class, with the main objective is to accelerate the achievement of all students (Norman, 2005). Cooperative learning in regular and specific education can help students in knowing how to socialize appropriately and can provide opportunities for them to practice and provide tools to transfer learned skills into real-life situations (Keramati, 2014).

Slavin (2014) explains that a cooperative incentive structure creates a situation in which the only way for the group members to achieve their personal goal is the group has to be successful. Thus, each member of the group has to help his friend in doing anything that allows the group to succeed, and more importantly, encourages other members of the group to succeed by giving the maximum effort. In cooperative learning, students who defend best are those who give and receive detailed explanations (not only given answers or ignored by their partners in the group) (Slavin, 1987)

Liao (2006) explains that the structure of the STAD cooperative learning method is in which students can define success as something that can be achieved with effort rather than something that can go beyond reach because of the inherent abilities. By using the STAD learning method, students with lower achievement became self-motivated because they were allowed to succeed in their ways rather than having to constantly be compared to those with higher achievement. Meanwhile, students who were higher achievers might feel more in control of their learning because their goal was being superior. The STAD learning model created a condition where students at various levels of performance did not have to worry about competing with others; they just required making an effort so that they could be better than how they were before. In general, cooperative students feel a stronger relationship between their study assignments and their current and future goals, as they will do tasks better and experience a lot of fun doing their assignments.

CONCLUSION

There is an interaction between the learning model and achievement motivation on students' outcomes in learning Civic Education. The results showed that students' outcomes in learning Civic Education were influenced by the learning model and achievement motivation. STAD cooperative model was influenced by achievement motivation. Students with low motivation in learning by using STAD model got lower mean scores compared to students who used conventional learning. Some further researches are needed to find out the cause.

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