The Influence of Learning Motivation on Student Learning Achievement: Comparative study Between Cooperative Learning and Peer Tutoring Model

Faisal Arif[1,] Marwan[2]

[1, 2]*Universitas Negeri Padang, Padang, Indonesia*
Email : *ichalayip@gmail.com*

ABSTRACT

The purpose of this study was to analyze whether there is a difference (1) student learning achievement among high and low motivation students, (2) student learning achievement, among students who use the peer tutoring type of cooperative learning methods and conventional methods, and (3) interactions between motivations (high low) with learning methods (cooperative methods and Peer Tutor type conventional). This type of research is Quasi Experiment. The study population was students of class X SMA N 2 Batusangkar, with a sample of class XI IS4 as an experiment and class X IS5 as a control. The sampling technique is purposive sampling. Types of data are primary and secondary data, while data analysis techniques are descriptive and inductive analysis. The results of the study are (1) there is a different learning achievement between students with high motivation and students with low motivation, (2) there are differences in learning achievement between students who use the peer tutoring type of cooperative learning methods and conventional methods, and (3) there is no interaction between motivation (high low) with learning methods (cooperative and conventional Tutor type methods).

Keywords: *learning motivation, learning achievement, cooperative type peer tutors, conventional methods*

1. INTRODUCTION

In an educational institution, the success of the learning process can be seen from the learning achievement achieved by students. The higher the learning achievement, the higher the level of learning success. Passive learning will inhibit the creativity of students' mindset in understanding a concept. Therefore in the learning process students are required to be really active, so that students' understanding of what they have learned will be better. A concept will be more easily understood and remembered by students if the concept is presented through an appropriate, clear and interesting learning process.

There are respective roles in the learning process applied out between the teacher and students when interacting. The role of the teacher is to teach students to form intelligent, skilled, and virtuous humans. While the role of students is to actively participate in learning activities so that subject matter can be understood properly. Therefore, teachers must be able to choose the right strategy to help students learn (Williams & James. 2014).

The reality in the field as long as the writer conducts observation activities at SMA N 2 Batusangkar, in delivering subject matter the teacher tends to use less varied methods. Changes to the curriculum with the method renewal not all teachers can apply it. The conventional method used by teachers as the easiest method used in the delivery of material, whereas the use of varied learning methods can make students more interested in the teaching and learning process, so students can develop their potential and knowledge. Learning conventional methods has not been able to develop abilities reasoning, attitude, and skills.

Thus students only tend to memorize the concepts of understanding the principles of the administration of office learning without understanding them correctly. Teachers as information providers often dominate learning activities in the classroom, as a result there is not a good interaction between teachers and students, which has an impact on the quality of economic learning, in delivering subject matter teachers often use less varied teaching methods. Changes to the curriculum with the method renewal not all teachers can apply it. Conventional methods and discussions are used by the teacher as the easiest method to use in the delivery of material, whereas the use of varied learning methods can make students more interested in the teaching and learning process, so students can develop their potential and knowledge. Learning conventional methods has

not been able to develop abilities reasoning, attitude, and skills. Therefore students only memorize concepts in economic learning, without understanding them correctly. The teacher, as the provider of information, often dominates classroom learning activities, so that there is no reverse interaction between teachers and students which has an impact on the quality of economic learning.

Preliminary observations conducted at Batusangkar 2 Public High School showed that the semester test scores for economics still did not reach the KKM set of 75. The following are the results of economic learning achievement for class X IS 2 Middle School students at 2018/2019 as seen in the table below:

Table 1. Learning Achievement of students in SMA Negeri 2 Batusangkar

Class	Total Student	grade point average	Complete		Not Complete	
			Student	%	Student	%
XI IPS 1	31	70,30	21	67,74	10	32,26
XI IPS 2	30	70,40	19	63,33	11	36,67
XI IPS 3	32	70,80	21	65,62	11	34,38
XI IPS4	30	71,40	22	73,33	8	26,67
XI IPS5	28	71,20	20	71,43	8	28,57

Source: Teacher of productive subjects at SMA N 2 Batusangkar

The table above shows the average value of learning achievement for the second semester of economic class X subjects have not shown maximum results, in accordance with the minimum completeness criteria (KKM) of 75, which many students have not yet managed to achieve. Of the total number of students (151 students), those who succeeded in obtaining grades above 75 were 68.21% or as many as 103 students and 48 students or 31.79% received grades below the KKM. It can be concluded that the learning achievement of Grade X students of SMA Negeri 2 Batusangkar are still low.

Based on direct observations to the field it was found that students in SMA Negeri 2 Batusangkar tended to be more passive and participate less in learning Economics. In addition students tend to just sit, be quiet and listen. Students in the learning process act as learning objects, lack of questioning and opinion activities make learning monotonous. Sometimes students prefer to do other activities, such as self-discussion with other friends and exchanging objects and not related to the learning process. The passive and non-conducive condition of students forces the teacher to apply the lecture

method to be more effective in conveying subject matter.

As according to Karaman, Smith (2019) that motivation is a driving force that encourages someone to carry out learning activities ". When students are motivated to learn, then they will carry out learning activities within a certain time. It is suspected that motivation is one of the determining factors in learning. If students are not motivated in learning, the results will not be satisfactory.

One learning model that can be used in the learning process is cooperative learning. Cooperative learning can actively involve students both in groups and individually. In cooperative learning, students learn in small groups so that students are expected to help each other in achieving the maximum learning process. There are several alternative cooperative learning that can be used in learning in school. One of them is cooperative learning type peer tutors. According to Kılıçoğlu (2018) "Peer tutors are cooperative learning, where upper group students will be tutors for lower group students". In peer tutoring learning student's work in heterogeneous groups, one tutor guides several weak friends. Tutors are smart students who will pass on their abilities to these weak students. The advantage of cooperative learning in this type of peer tutoring is that the academic ability of the tutor and the ability of a group of friends increases. The tutor's ability increases because the tutor restarts what is on his mind and the ability of a group of friends also increases because he gets special help from his tutor. Besides that, it can increase the motivation of learning, cooperation and communication as well as students' social life.

The purpose of this study is to analyze whether there are (1) there is a different learning achievement between students with high motivation and students with low motivation, (2) there are differences in learning achievement between students who use the peer tutoring type of cooperative learning methods and conventional methods, and (3) interactions between motivation (high low) with learning methods (cooperative and conventional tutor type methods).

2. METHODS

This type of research is a quasi-experimental draft, Randomized Control Pretest and posttest draft. This study was conducted in class X students at Batusangkar 2 N High School, starting from October 13 to November 6 2019. The population in this study were all students of class X IS Batusangkar N 2 High Schools registered in the 2019/2020 school year. Sample was selected using the Purposive Sampling technique. The independent research variable was the treatment in learning with the peer tutoring type cooperative method, while the dependent variable was the learning motivation and student learning achievement. Research data are primary data and secondary data. The primary data in this study are the results of the distribution of learning motivation questionnaires and the learning achievement of the cognitive domain of the education and training eye understanding the principles of organizing student offices. Secondary data is the number of students and the average value of the second semester of class X IS IS SMA N 2 Batusangkar.

In this study was use a questionnaire or questionnaire regarding learning motivation and tests or questions for the learning achievement of class X students at SMA N 2 Batusangkar. The questionnaire trial analysis consisted of validity and reliability tests. As for the analysis of the test consists of a test of validity, reliability testing, distinguishing problems, and the level of difficulty of the questions. Data analysis techniques are descriptive analysis and inductive analysis. Inductive analysis consists of three, namely: (a) normality test using the Kolmogorov-Smirnov test, (b) homogeneity test is done by Harley test, and (c) hypothesis testing conducted in this study using Analysis of Variance (ANOVA) two lines with the help of SPSS 16.0.

3. RESULTS AND DISCUSSION

3.1 Result

3.1.1 Normality test

Normally distributed data can be known from the results of data processed by SPPS by looking at Kolmogrov-Smirnov with a significance level> 0.05. In this study the data is normally allocation, this can be seen from the table below. Based on the table above it is known that the level of learning motivation is significant both in the experimental class and in the control class> 0.05.

This means that each variable in the data has normally distributed data. Normally distributed data can be known from the results of data processed by SPPS by looking at Kolmogrov-Smirnov with a significance level> 0.05. In this study the data is normally distributed, this can be seen from:

The table above shows that the significant level of student learning achievement both in the experimental class and in the control class> 0.05. This means that each variable in the data has normally distributed data.

Table 2. Normality Test

Class		Kolmogorov-Smirnov[a]		
		Statistic	df	Sig.
Motivation	Pretes experiment class (TS)	0.093	30	.200[*]
	Pretes control classs (Conventional)	0.132	28	.200[*]

Source: 2020 Primary Processed Data

Table 3. Normality Test

Class		Kolmogorov-Smirnov[a]		
		Statistic	df	Sig.
Student Learning Achievement	Pretes Experiment (TS)	0.141	30	0.131
	Post Test Experiment (TS)	0.154	30	0.066
	Pretes Control (Conventional)	0.150	28	0.109
	Post Test Kontrol (Conventional)	0.152	28	0.098

Source: 2020 Primary Processed Data

3.1.2 Homogeneity Test

Homogeneity test is done to find out whether there are similarities or diversity of variance of each variable in each class. Data that has similar variance can be seen from the significance level> 0.05. In this study homogeneous data derived from the same variance, this can be seen from:

Table 4. Homogeneity Test

Keterangan	Levene Statistic	df1	df2	Sig.
Motivation to Learn	3.775	1	56	0.057
Learning Achievement	0.289	1	56	0.593

Source: 2020 Primary Processed Data

The table above shows it is known that the level of significance of the learning achievement variable is 0.593 and learning motivation is 0.057. A significant level of learning motivation and student learning achievement in both the experimental class and the control class> 0.05. This means that the data obtained in this study are homogeneous from the same group. The data in this study are normally distributed and come from the same group, so this research can be continued in the next test, namely the hypothesis test.

3.2 Discussion

1. There is a different learning achievement between students with high motivation and students with low motivation.

Based on the hypothesis test conducted, it was concluded different learning achievement between students with high motivation and students with low motivation. That is, students with high motivation will have good learning achievement compared to students with low motivation. This research are in line with Józsa, Noémi, Karen. (2018) which states that students who have high learning motivation have significantly higher learning achievement compared to students who are motivated to learn low. Besides & Trevor (2015) found the results that learning motivation affects student learning achievement.

Motivation is an impulse that moves a person to behave in certain ways. With the motivation, enthusiasm and excitement in the learning process to rise. As revealed by Cockerill, Craig, Allen (2018) "In the motivation contained the desire to activate, move, direct the attitudes and behavior of learning individuals". However, in the case of students who have low motivation the opposite occurs. They have no real desire to learn. When given a task they will easily give up with various reasons such as, given too many tasks, too difficult tasks. Students with low motivation do not feel challenged and enthusiasm for learning is also low. For students with low motivation, learning becomes boring and prefers to divert learning activities to play and fuss. The desire and drive to be active in learning is very low, so even the treatment using various methods will not show different results.

This research proves that students who have high motivation in terms of learning will get maximum results. Students who have keutekutan in doing the assignment will get maximum results also on the task being done. Likewise, students who are tenacious, show interest in learning, and students who are happy to find and solve problems problems will be more likely to get good learning achievement compared to students who are lazy and do all the work carelessly or copy another friend's assignment. Based on this, it can be concluded that there are differences in student learning achievement between students who have high motivation and low motivation.

2. There is a different in student learning achievement between students using cooperative learning methods of the type of peer tutors and conventional methods.

Based on the hypothesis testing conducted, it was concluded that there were differences in learning achievement between students who used the peer tutoring type of cooperative

learning methods and conventional methods. That is, students who were treated using the Cooperative Tutor learning method will have better learning achievement compared to students who were treated with conventional methods.

Based on descriptive analysis, in general it can be seen that the learning achievement of experimental class students who are applied to the peer tutoring cooperative learning method are higher than the control classes that are applied to conventional methods. This can be seen from the comparison of the average of the two classes at the time of the pre-test and post-test.

At the time of the pretest the experimental class was higher than the control class with a difference of 3 but this difference was not significant. It means that before different treatments are carried out, the two sample classes have almost the same ability. Whereas at the posttest, the average experimental class was 4 times higher than the control class. This means that the class treated with the cooperative learning method of the Peer Tutor type has better learning achievement compared to the class treated with the conventional method.

Based on the observations of researchers, the high learning achievement of the experimental class using cooperative learning methods of the Peer Tutor type than in the control class using conventional methods is because in the experimental class students are directly involved in the learning process. Learning in groups with peers makes student learning activities more comfortable and open. Students who have previously been less active in class participation, in groups have more opportunities to discuss and exchange opinions with friends. Students who lack understanding and are embarrassed to ask questions in class can be more confident asking questions in their groups. This is in line with the opinions expressed by Chu, Chen, Tsai (2017) "Learning with the cooperative method can be applied to motivate students to express their opinions, respect the opinions of friends, and give each other

3. There is no interaction between motivation (high and low) with learning methods (cooperative and peer tutoring types).

Based on the hypothesis testing conducted, it was concluded that there was no interaction between motivation (high and low) with learning methods (cooperative methods of Peer Tutor and conventional types). That is, between learning motivation and learning methods are not interdependent with each other in influencing student learning achievement.

In students with high motivation, even though it is applied with the conventional peer type tutor method, the learning achievement will still be better than students with low motivation. And vice versa, in students with low motivation, although cooperative methods of Peer Tutor and conventional methods are applied, the learning achievement are still below those of students with high motivation.

Student learning achievement that have high motivation are higher than learning achievement of students who have low motivation. This can happen because in the opinion of Cheng (2018) students with high motivation have several characters or characteristics including being diligent in facing the given task, being resilient in facing difficulties, showing interest in the problem, not getting bored quickly about routine tasks and being able to hold opinions. With these characteristics and characteristics, the application of the peer tutor type cooperative method should contribute positively to highly motivated students. This is because each of the stages and learning processes that exist in this Peer Tutor cooperative method can support the student's character.

However, based on the results of this study conclusions that are not in line with the opinions above. Where, after further analysis, it was found that students with high motivation negatively influence their learning achievement by using cooperative methods of the peer tutor type. To uncover the cause of this, the researcher re-evaluated the implementation of the study. This

may occur due to several limitations and several factors that influence the learning process activities. As the opinion of Bruno, et. al., (2015) which states that there are several factors that can influence the learning process activities, including teacher factors, student factors, facilities and infrastructure, tools and media available, and environmental factors.

First, viewed from the teacher aspect, the researcher who acts as a teacher while conducting research is a student who is still in the learning process. Researchers realize they still have flaws, especially in terms of experience. As revealed by Abdelkarim, Alrajhi, Said (2015) that there are a number of aspects that can affect the quality of the learning process viewed from the teacher factor, namely teacher formative experience (including gender and all life experiences of the teacher), teacher training experience (including experiences related to with the activities and educational background of the teacher) and teacher behavior (anything related to teacher habits). Maybe it would be better if this research was made as CAR and carried out by more experienced teachers so that it produced better findings.

Second, viewed from the aspect of students, the students studied have different characters. From the researcher's observations, not all students who have high motivation have characters such as persevering in facing the given task, resilient in the face of adversity, shows interest in problems, does not get bored quickly from routine tasks and is able to defend opinions. There are students who are usually ignorant, indifferent to the subject, and quiet, but from the results of the distribution of the questionnaire instead they belong to students with high motivation. So, not all students express their learning motivation in the same way.

Then, judging from the limitations during the course of the study, the researcher encountered obstacles in the matter of time. As a result, researchers have difficulty managing time. And impact on the non-optimal implementation of each stage in the peer tutoring cooperative method. In addition, researchers also need a long time to condition students to be able to sit in their respective groups. So at this stage it is quite time consuming and reduces time for the next stage.

Based on the opinions stated above, it can be concluded that learning motivation and learning methods are not interdependent with each other in influencing student learning achievement. This is thought to be caused by several constraints and limitations that researchers encountered during carrying out the study.

4. CONCLUSION

Based on the research results and discussion can be concluded (1) Student learning achievement taught by the Peer Tutor model are significantly higher compared learning achievement of students taught with conventional models in class XI SMA N 2 Batusangkar. This means that the application of the Peer Tutor model helps students in understanding subject matter so that this model is proven to be able to improve student learning achievement. (2) Accounting learning achievement of students who have high motivation to learn significantly have higher learning achievement than students who have low motivation to learn in class XI SMA N 2 Batusangkar. This means that students who have high learning motivation will get higher learning achievement compared to students who have low learning motivation. (3) There is no interaction between the learning model and learning motivation in influencing the learning achievement of class XI students of Batusangkar 2 High School. This means that the Peer Tutor model is good to be applied during the learning process because this learning model even applies to students who have low learning motivation will get good learning achievement in economic subjects.

Based on the conclusions that have been described previously, the authors can provide suggestions for the future: (1) The teacher is expected to create a learning atmosphere that can increase student motivation and use more diverse learning methods, one of them with cooperative learning methods Peer tutors,

especially on economics. (2) All students are expected to be able to increase their motivation to learn higher than before and students who have high motivation can invite and inspire students who have low motivation, by seeing friends who have been successful in learning, so other students are also inspired therefore.

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