THE RELATIONSHIP BETWEEN SELF-CONFIDENCE, SOCIAL INTERACTION, AND LEARNING ACTIVENESS TOWARD MATHEMATICS LEARNING OUTCOMES

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ABSTRACT

Poor student learning outcomes are associated with many factors. The relationship between self-confidence, social interaction, and learning activeness is possibly related to learning outcomes. This research aims to determine the presence or absence of a positive and significant relationship between self-confidence, social interaction, and learning activeness. Mathematics Learning Outcomes in Students Class VII of State Junior High School (SMP Negeri) 9 Yogyakarta in Even Semester in Academic Year of 2016/2017. The population in this research was the students of VII of SMP Negeri 9 Yogyakarta in the academic year of2016/2017, consisted of class VIIA, VIIB, VIIC, VIID, VIIE, VIIF, totaling 203 students. Samples were taken from VII C as the research sample class and with the random sampling technique. The writer uses the questionnaire method to collect self-confidence, social interaction, and learning activeness and test method to get the resulting math results. The research instrument: validity test, different power test, and reliability test. Test requirement analysis includes normality, the test of linearity, and the test of independence. The writer uses product-moment correlation analysis and multiple linear regression analysis to analyze the data. The results showed a positive and significant relationship between self-confidence, social interaction, and learning activeness with mathematics learning outcomes in students class VII of SMP Negeri 9 Yogyakarta in Even Semester in Academic Year of 2016/2017. It is showed by $F_{count} > F_{table}$ is $3,4088 > 2,9340$ with $R = 0,5106$ and $R^2 = 0,2607$ with $\hat{Y} = -6,7828 + 0,2607X_1 + 0,2069X_2 + 0,3309X_3$, with $RC\, X_1 = 32,2657\%$, $RC\, X_2 = 19,1361\%$ and $RC\, X_3 = 48,5982\%$, $EC\, X_1 = 8,4117\%$, $EC\, X_2 = 4,9888\%$ dan $EC\, X_3 = 12,6696\%$.

Keywords: Self-Confidence, Social Interaction, Learning Activeness, Mathematics Learning Outcomes.

INTRODUCTION

Education has an important role in developing a country and is demanded to increasingly play an active role in increasing and developing human resources, especially with the rapid advancement of technology. The young generation must be prepared for various conditions. In today's modernization, mathematics is very important because much information is delivered in a mathematical language such as tables, graphs, and diagrams. So that understanding and mastery of mathematics are needed.

Mathematics is a field of study that has an important role in education, especially in schools. By learning mathematics, children are expected to think logically, critically, and rationally to form an independent, creative personality, and have the ability and courage to deal with problems in everyday life. Therefore mathematics is taught from the elementary school level, high school to the tertiary level, even since kindergarten (kindergarten) has been introduced to mathematics matters. Until now, mathematics in schools is still an obstacle for some students. Mathematics is considered to be a difficult, less interesting, and boring subject. So that mathematics is less favored, which results in low mathematics learning outcomes. Many students have not yet reached the standard of mathematics competence which is determined.

This can be seen from the Middle Semester Grade VII students of mathematics subjects in the even semester of SMP N 9 Yogyakarta 2016/17 school year. Many students still score below the Minimum Completeness Criteria (MCC) of 75. Several factors can influence learning outcomes. According to Slameto (2010: 54), the factors that influence learning are many types but can be classified into two groups, namely internal factors, and external factors. Internal factors are factors that originate

from within individual students. At the same time, external factors are factors that come from outside students.

One internal factor that might influence student achievement is self-confidence. Everyone has the potential for success as long as they have confidence in themselves. Confidence plays a role in generating positive energy in ourselves. If we instill confidence that we can from the beginning, then it will easily proceed as we expect. However, if we doubt our ability itself from the beginning, failure is what we will get. Self-confidence can be formed from family, religion, education, social environment, teacher, media, etc. According to Napoleon Hill in Samadani, Fair (2013: 7), the confidence to change will affect the changes. From this opinion, it can be concluded that however, much change we will make without being based on strong confidence will be in vain.

For this reason, the belief that exists in an individual has a massive influence on achieving success. With one's self-confidence can think positively about yourself. Positive thinking is a mental process involving the entry of thoughts, words, and images that build one's mind. Positive thoughts bring happiness, joy, health, and success in one's situations and actions.

Not all individuals have the highest self-confidence. The lack of self-confidence, which is also a typical symptom that afflicts many students belonging to the adolescent category, especially in adolescent emotions, is still unstable. Social interaction is one example of external factors. Good student social interaction is likely to motivate learning. According to H. Bonner in Samadani, Fair (2013: 124), Social interaction is the relationship between two or more human individuals and individual behavior that affects changes and improves other individuals' behavior or vice versa. Social interaction occurs due to a mutual understanding of each party's intentions and objectives in a social relationship.

In the process of interaction, a person influences the behavior of others through contact. This contact takes place through chat, hearing, making movements in some parts of the body, seeing others again or indirectly through writing. With contact between individuals, communication will be established. Communication is the delivery of a message so that the desired goal is conveyed. By contact and communication, social interaction can occur. Student social interactions at school include student interactions with teachers and student interactions with students. Good student social interactions will create harmonious relationships. The existence can see forms of acceptable social interaction of cooperation, mutual respect, and mutual respect. Good social interaction between students can also create mutual respect and create a comfortable atmosphere in learning. It will encourage students to excel in the school environment.

Another factor that might influence student learning outcomes is learning activeness. According to Sardiman, A.M (2001: 98), active learning is an activity that is both physical and mental, that is, doing and thinking as a series that can not be separated. The purpose of students' teaching and learning process contains an element of activeness, but the students are not the same. Therefore, students must actively participate physically and mentally in teaching and learning activities. The activeness of students in the learning process is the effort of students in gaining learning experiences.

This study's problems are: 1) Is there a positive and significant relationship between trust and mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year? 2) Is there a positive and significant relationship between social interaction with mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year? 3) Is there a positive and significant relationship between learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year? 4) Is there a positive and significant relationship between self-confidence and social interaction with the mathematics learning outcomes of seventh-grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year? 5) Is there a positive and significant relationship between self-confidence and learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year? 6) Is there a positive and significant relationship between social interaction and learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year?

7) Is there a positive and significant relationship between self-confidence, social interaction, and learning activeness with mathematics learning outcomes for Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year?

The purpose of this study is to find out: 1) The presence or absence of a positive and significant relationship between trust and mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year, 2) The presence or absence of a positive and significant relationship between social interactions with the results learning mathematics for eighth-grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year. A positive and significant relationship between self-confidence and social interaction with the mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year.5) The presence or absence of a positive and significant relationship between self-confidence and active learning with student mathematics learning outcomes class VII SMP Negeri 9 Yogyakarta even semester A year academic 2016/2017, 6) The presence or absence of a positive and significant relationship between social interaction and learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year, 7) The presence or absence of a positive and significant relationship between taste self-confidence, social interaction and learning activeness with mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 Academic Year.

METHODS

This research is classified as quantitative research. The study's place was carried out at SMP Negeri 9 Yogyakarta with research in the seventh semester of the 2016/2017 school year. This study's population was Class VII students of SMP Negeri 9 Yogyakarta in the 2016/2017 school year, with 203 students divided into six classes. Simultaneously, the sample in this study was a randomly determined class sample, namely by lottery class. The class taken as a sample class is VIIC with some students, 33 students. The variables used in this study include the independent variables and the dependent variable. The independent variable (independent) consists of self-confidence (X_1), social interaction (X_2), and learning activeness (X_3). In contrast, the dependent variable (dependent) is the result of learning mathematics (Y).

In this study, the data collection techniques used were questionnaires and tests. The questionnaire technique was used to obtain data on self-confidence, social interaction, and learning activeness. The test technique was to obtain data about student mathematics learning outcomes. The questionnaire test uses the reviewers' content validity test and the instrument reliability test with the alpha formula. In contrast, the test instrument questions use the content validity test by the reviewers and the product-moment correlation technique, the difference power test, and the reliability test with the KR-20 formula.

Analysis prerequisite test with normality test with Chi-squared formula, F-linearity test formula, and Chi-squared formula independent test. Hypothesis test research uses a simple correlation test, multiple regression analysis tests, and multiple linear regression test with three independent variables. Research hypothesis testing using a simple correlation test is performed to determine the presence or absence of positive and significant relationships between 1) self-confidence with students 'mathematics learning outcomes, 2) social interactions with students' mathematics learning outcomes, 3) active learning with learning outcomes in mathematics student. Furthermore, the research hypothesis test uses multiple regression analysis tests carried out to determine the presence or absence of a positive and significant relationship between 1) self-confidence and social interaction with student mathematics learning outcomes, 2) self-confidence and learning activeness with student mathematics learning outcomes, 3) social interaction and learning activeness with student mathematics learning outcomes. Whereas the multiple linear regression test with three independent variables was carried out to determine the presence or absence of a positive and significant relationship between self-confidence, social interaction and active learning with student mathematics learning outcomes.

RESULTS AND DISCUSSION

The summary of normality test results can be seen in Table 1.

Table 1. Summary of Normality Test Results

Variable	χ^2_{count}	χ^2_{table}	df	Ket
X_1	0,8814	7,8147	3	Normal
X_2	4,0839	7,8147	3	Normal
X_3	3,4076	7,8147	3	Normal
Y	5,1778	5,9915	2	Normal

From the normality test at a significant level of 5%, it is seen $\chi^2_{count} \leq \chi^2_{table}$. This means that the distribution of data obtained on each variable is normally distributed.

The summary of independence test results can be seen in Table 2.

Table 2. Summary of Linearity Test Results

Variable	F_{count}	F_{table}	Ket.
X_1 and Y	0,59	2,92	Linear
X_2 and Y	1,90	2,65	Linear
X_3 and Y	1,90	2,92	Linear

From the linearity test at a significant level of 5% ($\alpha = 0.05$) and the degree of freedom of the numerator $(v_1) = k - 2$ and the denominator $(v_2) = n - k$ can be seen $F_{count} \leq F_{table} (1 - \alpha)(k - 2, n - k)$, this means that there is a linear relationship between the independent variable (X) and the dependent variable (Y).

The summary of independent test results can be seen in Table 3.

Table 3. Summary of Independent Test Results

Variable	χ^2_{count}	χ^2_{table}	df	Ket
X_1 and X_2	35,3325	37,6525	25	Independent
X_1 and X_3	28,5042	37,6525	25	Independent
X_2 and X_2	26,6158	37,6525	25	Independent

From the independence test at a significant level of 5% ($\alpha = 0.05$) and the degree of freedom $(df) = (k - 1)(b - 1)$, it is seen that $\chi^2_{count} \leq \chi^2_{table}$, this means that the distribution of data obtained at each - each variable is independent.

The summary of the first hypothesis test can be seen in table 4.

Table 4. Summary of First Hypothesis Test Results

t_{count}	t_{table}	df	Info
2,6822	2,0395	31	H_0 rejected, H_1 accepted

From the first hypothesis test at a significant level of 5% and df = 31, it can be seen that $t_{count} = 2,6822$ and $t_{table} = 2,0395$ so that $t_{count} > t_{table}$ There is a positive and significant relationship between self-confidence and mathematics learning outcomes of class VII students SMP Negeri 9 Yogyakarta even semester 2016/2017 academic year.

The summary of the results of the second hypothesis test can be seen in Table 5.

Table 5. Summary of Second Hypothesis Test Results

t_{count}	t_{table}	df	Info
2,2188	2,0395	31	H_0 rejected, H_1 accepted

From the second hypothesis test at a significant level of 5% and dk = 31, it can be seen that $t_{count} = 2.2188$ and $t_{table} = 2.0395$ so $t_{count} > t_{table}$ There is a positive and significant relationship between

social interaction with mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 school year.

The summary of the results of the third hypothesis test can be seen in Table 6.

Table 6. Summary of Third Hypothesis Test Results

t_{count}	t_{table}	df	Info
2,7481	2,0395	31	H_0 rejected, H_1 accepted

From the third hypothesis test at a significant level of 5% and dk = 31, it can be seen that $t_{count} = 2{,}7481$ and $t_{table} = 2{,}0395$ so $t_{count} > t_{table}$ There is a positive and significant relationship between learning activeness and mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 school year.

The summary of the results of the fourth hypothesis test can be seen in Table 7.

Table 7. Summary of Fourth Hypothesis Test Results

F_{count}	F_{table}	df	Info
4,4452	3,3158	$v_1 = 2$ $v_2 = 30$	H_0 rejected, H_1 accepted

From the fourth hypothesis test at a significant level of 5%, v_1=2 and v_2=30 so that it can be obtained $F_{count} = 4{,}4452$ and $F_{table} = 3{,}3158$ so that $F_{count} \geq F_{table}$ which means there is a positive and significant relationship between trust and the social interaction with mathematics learning outcomes Grade VII students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year.

The summary of the results of the fifth hypothesis test can be seen in Table 8.

Table 8. Summary of the Fifth Hypothesis Test Results

F_{count}	F_{table}	df	Info
4,8544	3,3158	$v_1 = 2$ $v_2 = 30$	H_0 rejected, H_1 accepted

From the fifth hypothesis test at a significant level of 5%, v_1=2 and v_2=30 so that it can be obtained $F_{count} = 4{,}8544$ and $F_{table} = 3{,}3158$ so that $F_{count} \geq F_{table}$ There is a positive and significant relationship between self-confidence and learning activeness with the results studying mathematics VII grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 academic year.

The summary of the results of the sixth hypothesis test can be seen in Table 9.

Table 9. Summary of the Results of the Sixth Hypothesis Test

F_{count}	F_{table}	df	Info
4,1546	3,3158	$v_1 = 2$ $v_2 = 30$	H_0 rejected, H_1 accepted

From the sixth hypothesis test at a significant level of 5%, v_1= 2 and v_2=30 so that it can be obtained $F_{count} = 4{,}1546$ and $F_{table} = 3{,}3158$ so that $F_{count} \geq F_{table}$ There is a positive and significant relationship between social interaction and learning activeness with learning outcomes mathematics VII grade students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year.

The summary of the results of the seventh hypothesis test can be seen in Table 10.

Table 10. Summary of Seventh Hypothesis Test Results

F_{count}	F_{table}	df	Info
3,4088	2,9340	$v_1 = 3$ $v_2 = 29$	H_0 rejected, H_1 accepted

From the seventh hypothesis test at a significant level of 5%, $v_1 = 3$ and $v_2 = 29$ so that it can be obtained $F_{count} = 3{,}4088$ and $F_{table} = 2{,}9340$ so that $F_{count} \geq F_{table}$ which means there is a positive and

significant relationship between self-confidence, social interaction and learning activeness with mathematics learning outcomes of seventh-grade students of SMP Negeri 9 Yogyakarta even semester 2016/2017 academic year.

CONCLUSION

Based on the analysis of the experimental data and its discussion, this activity concludes the following:

1. There is a positive and significant relationship between self-confidence and mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year. The results of $t_{count} = 2,6822$ indicate this and $t_{table} = 2,0395$ at the level of 5% seen $t_{count} > t_{table}$. Simple correlation coefficient value between self-confidence with mathematics learning outcomes of 0.4340. And the simple regression equation Y for X_1 is $\widehat{Y} = 11,6081 + 0,5837\,X_1$.

2. There is a positive and significant relationship between social interaction with mathematics learning outcomes of VII grade students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year. The results of $t_{count} = 2.2188$ and $t_{table} = 2.0395$ indicate this at 5% level seen $t_{count} > t_{table}$. The simple correlation coefficient between social interaction with mathematics learning outcomes of 0.3702. Also, a simple regression equation for Y over X_2 is $\widehat{Y} = 12,3909 + 0,5684\,X_2$.

3. There is a positive and significant relationship between learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year. The results of $t_{count} = 2,7481$ indicate this and $t_{table} = 2,0395$ at the level of 5% seen $t_{count} > t_{table}$. The simple correlation coefficient between learning activeness with mathematics learning outcomes of 0.4426. Also, a simple regression equation of Y for X_3 is $\widehat{Y} = 19,2226 + 0,5116\,X_3$.

4. There is a positive and significant relationship between self-confidence and social interaction with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year. This is indicated by the results of $F_{count} = 4.4452$ and $F_{table} = 3.3158$ at the level of 5% seen $F_{count} \geq F_{table}$. The multiple correlation coefficient between self-confidence and social interaction with mathematics learning outcomes is 0.4781. The coefficient of determination is 0.2286 with a linear line equation $\widehat{Y} = -7,4019 + 0,4525\,X_1 + 0,3424\,X_2$. The relative contribution of X_1 is 63.8786%, and X_2 is 36.1214%, and the effective contribution of X_1 is 14.6026%, and X_2 is 8.2574%.

5. There is a positive and significant relationship between self-confidence and learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta in the even semester of the 2016/2017 school year. The results of $F_{count} = 4,8544$ and $F_{table} = 3,3158$ indicate this at the level of 5% seen $F_{count} \geq F_{table}$. The multiple correlation coefficient between self-confidence and learning activeness with mathematics learning outcomes is 0.4945. The coefficient of determination is 0.2445 with a linear line equation $\widehat{Y} = 2,5452 + 0,3558X_1 + 0,3339X_3$. The relative contribution of X_1 is 47.7087%, and X_3 is 52.2913%, and the effective contribution of X_1 is 11.6648%, and X_3 is 12.7852%.

6. There is a positive and significant relationship between social interaction and learning activeness with mathematics learning outcomes of Grade VII students of SMP Negeri 9 Yogyakarta even semester 2016/2017 academic year. This is indicated by the results $F_{count} = 4,1546$ and $F_{table} = 3,3158$ at the level of 5% seen $F_{count} \geq F_{table}$. The multiple correlation coefficient between social interaction and learning activeness with mathematics learning outcomes is 0.4657. The coefficient of determination is 0.2169 with a linear line equation $\widehat{Y} = 4,9901 + 0,2700\,X_2 + 0,3964X_3$. The relative contribution of X_2 was 30.0183%, and X_3 was 69.9818%, and the effective contribution of X_2 was 6.5110%, and X_3 was 15.1791%.

7. There is a positive and significant relationship between self-confidence, social interaction, and learning activeness with mathematics learning outcomes of VII SMP Negeri 9 Yogyakarta students in the even semester of the 2016/2017 school year. This is indicated by the results $F_{count} = 3.4088$ and $F_{table} = 2,9340$ at a level of 5% seen $F_{count} \geq F_{table}$. The multiple correlation coefficient between self-confidence, social interaction, and learning activeness with mathematics learning outcomes is 0.5106. The coefficient of determination is 0.2607 with the linear line equation $\widehat{Y} = -6,7828 + 0,2607\,X_1 + 0,2069\,X_2 + 0,3309\,X_3$. The relative contribution of X_1 is 32.2657%, X_2 is 19.1361%, and X_3 is 48.5982%, and the effective contribution is X_1 is 8.4117%, X_2 is 4.9888%, and X_3 at 12.66696%.

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