

THE RELATIONSHIP BETWEEN LEARNING INTERESTS AND LEARNING HABITS AND THE RESULTS OF LEARNING MATHEMATICS IN GRADE VIII

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ABSTRACT

Poor student learning outcomes are associated with many factors. The relationship between interest to learn and learning habits students is possibly related to learning outcomes. This research aims to determine the presence or absence of a positive and significant relationship between interest to learn and learning habits student to Mathematics Learning Outcomes in Students Class VIII of State Junior High School (SMP Negeri) 13 Yogyakarta in Odd Semester in Academic Year of 2017/2018. The population in this research was the students of VIII of SMP Negeri 13 Yogyakarta in the academic year of 2017/2018, consisted of class VIII A, VIII B, VIII C, VIII D, totaling 130 students. Samples were taken from VIII D as the research sample class and with the random sampling technique. The writer uses the questionnaire method to collect the data of interest to learn and learn habits and test methods to get the resulting math results. The research instrument: validity test, different power test, and reliability test. Test requirement analysis includes a test of normality, a test of linearity, and 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 interest to learn and learning habits student's with mathematics learning outcomes in students class VIII of SMP Negeri 13 Yogyakarta in Odd Semester in Academic Year of 2017/2018. It is showed by $F_{count} > F_{table}$ is $62,4114 > 3,35$ with $R = 0,90678$ and $R^2 = 0,8222$ with $\hat{Y} = 2,3350 + 0,2531X_1 + 0,5041X_2$, with $RC X_1 = 26,9108\%$ and $RC = 73,0892\%$, $EC X_1 = 22,1251\%$ and $EC X_2 = 60,0911\%$.

Keywords: Interest to Learn, Learning Habits, Mathematics Learning Outcomes.

INTRODUCTION

Education is one form of the embodiment of a human culture that is dynamic and full of development. Changes or developments in education are things that should occur in line with changes in cultural life. Changes in the sense of improving education at all levels need to be continuously made to anticipate future interests. The development and change in the life of society, nation, and state in Indonesia cannot be separated from the influence of education. In supporting the success of development in the field of education, mastery of mathematics is very important. That is because mastery of mathematics for students, both in primary and secondary education, will be a powerful tool for learning other subjects, both at the same level of education and higher education. Therefore, in learning mathematics, students are expected to have a high interest in getting a satisfying result. As one of the internal factors, interest has a role in the learning process of students.

According to Slameto (2013: 180) interest is a feeling of preference and a sense of interest in something or activity, without anyone asking. In addition, interest can also be interpreted as a constant tendency to pay attention to and remember an activity. The notion of learning is a process carried out by a person to obtain new changes in overall behavior, as a result of his own experience in interacting with his environment. Based on the above opinion, it can be concluded that interest in learning is a constant tendency to pay attention to and remember an activity voluntarily without asking. Interest or pleasure in a lesson can lead to changes in student behavior that are relatively fixed by paying more attention and remembering continuously followed by a sense of pleasure to gain satisfaction in achieving learning objectives. When students have an interest in learning, students will always participate actively in learning. Apart from interest, another factor that is thought to affect student learning outcomes is learning habits. Learning habits are behaviors that are formed because they are done repeatedly.

Examples of students who have good study habits are students who make a learning schedule then carry out it regularly according to schedule, always do assignments, and always record the material presented. Djaali (2015: 128) argues, habits are a way of acting that is obtained through repeated learning, which in turn becomes permanent and automatic. Habit can also be defined as a tendency or trait that is continuously seen in a person's behavior to act in a certain way. According to Mulyadi (2010: 110), habits are formed from various experiences that are often repeated, which cause a person to have certain types of behavior in existing situations.

In general, study habits can be defined as a person's behavior in learning that results from certain exercises, so that he tends to always repeat the material he is learning to better understand and understand the subject matter. This study habit is an automatic behavior or habit that has a very positive effect in learning a subject matter. According to Slameto (2010: 2) the notion of learning is a process carried out by a person to obtain new changes in overall behavior, as a result of his own experience in interacting with his environment. Based on that opinion, it can be concluded that learning habits are behaviors that are formed because they occur repeatedly throughout an individual's life and usually follow certain ways or patterns so that learning habits are formed. So what is meant by learning habits here are the ways of learning that are most often done by students. Learning habits can be formed from learning activities, whether intentional or unintentional. Based on information from the VIII grade mathematics teacher at SMP Negeri 13 Yogyakarta on September 7 2017, student learning outcomes are still not optimal. There are still many students who have low learning outcomes.

The formulation of the research problems are: 1) Is there a positive and significant relationship between interest in learning and mathematics learning outcomes of class VIII students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 school year? 2) Is there a positive and significant relationship between study habits and mathematics learning outcomes of class VIII students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 school year? 3) Is there a positive and significant relationship between interest in learning and study habits with the mathematics learning outcomes of grade VIII students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 school year?

The purpose of this study was to determine: 1) Whether there is a positive and significant relationship between interest in learning and mathematics learning outcomes of class VIII students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 school year, 2) There is or is not a positive and significant relationship between study habits with the mathematics learning outcomes of class VIII students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 academic year, 3) Whether or not there is a positive and significant relationship between learning interest and learning habits with the mathematics learning outcomes of grade VIII Yogyakarta students in semester 13 of SMP Negeri 13 Yogyakarta Academic Year 2017/2018.

METHODS

This research is classified as quantitative research. The place of research was carried out at SMP Negeri 13 Yogyakarta with research subjects in class VIII odd semester of the academic year 2017/2018. This study's population was Class VIII students of SMP Negeri 13 Yogyakarta in 2017/2018, with 130 students divided into four classes. Simultaneously, the sample in this study was a randomly determined class sample, namely by lottery class. Classes taken as a sample class are VIII D, with a total of 30 students. The variables used in this study include the independent variables and the dependent variable. The independent variable (independent) consists of learning interest (X_1) and study habits (X_2). In contrast, the dependent variable 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 learning interest and study habits. 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, linearity test of the F-test formula, and independent test of Chi-squared formula. The research hypothesis test uses a simple correlation test and multiple regression analysis tests. Research hypothesis testing using a simple correlation test is performed to determine the presence or absence of positive and significant relationships between 1) learning interest with student mathematics learning outcomes, 2) learning habits with student mathematics learning outcomes. Furthermore, the research hypothesis test uses multiple regression analysis tests to determine the presence or absence of a positive and significant relationship between learning interest and study habits 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	Info.
X ₁	2,0899	7,8147	3	Normal
X ₂	6,9259	9,4877	4	Normal
Y	1,0357	7,8147	3	Normal

From the normality test at a significant level of 5%, it is seen $\chi^2_{\text{count}} \leq \chi^2_{\text{table}}$. 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 Independent Test Results

Variable	χ^2_{count}	χ^2_{table}	df	Info.
X ₁ and X ₂	33,004	37,6525	25	Independent

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

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

Table 3. Summary of Linearity Test Results

Variable	F _{count}	F _{table}	Info.
X ₁ and Y	1,4193	2,69	Linear
X ₂ and Y	2,3988	2,95	Linear

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. $F_{\text{count}} < F_{\text{table}} (1 - \alpha) (k - 2, nk)$, this means that there is a linear relationship between the independent variable (X) and the dependent variable (Y).

The summary of the results 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.
5,8351	1,7011	28	H ₀ rejected, H ₁ accepted

From the first hypothesis test at a significant level of 5% and dk = 28, it can be seen that t_{count} = 5,8351 and t_{table} = 1,7011 so t_{count} > t_{table} which means there is a positive and significant relationship between learning interest and mathematics learning outcomes of class VIII SMP Negeri 13 Yogyakarta odd semester of 2017/2018 school year.

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

Table 5. Summary of the Second Hypothesis Test Results

t_{count}	t_{table}	df	Info.
9,6857	1,7011	28	H_0 rejected, H_1 accepted

From the second hypothesis test at a significant level of 5% and $dk = 28$, it can be seen that $t_{\text{count}} = 9,6857$ and $t_{\text{table}} = 1,7011$ so $t_{\text{count}} > t_{\text{table}}$ which means there is a positive and significant relationship between learning habits with mathematics learning outcomes of VIII grade students SMP Negeri 13 Yogyakarta odd semester of 2017/2018 school year.

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

Table 6. Summary of the Third Hypothesis Test Results

F_{count}	F_{table}	Df (v_1, v_2)	Info.
62,4114	3,35	(2,27)	H_0 rejected, H_1 accepted

From the third hypothesis test at a significant level of 5%, $v_1 = \text{numerator} = 2$ and $v_2 = \text{denominator} = 27$ so that it can be obtained $F_{\text{count}} = 62,4114$ and $F_{\text{table}} = 3,35$ so that $F_{\text{count}} > F_{\text{table}}$ which means there is a positive and significant relationship between learning interest and study habits with mathematics learning outcomes of eighth-grade students of SMP Negeri 13 Yogyakarta in the odd semester of the 2017/2018 school year.

CONCLUSION

Based on the experimental data analysis and its discussion, this activity concludes several things as follows:

1. There is a positive and significant relationship between interest in learning with mathematics learning outcomes of students of class VIII SMP Negeri 13 Yogyakarta in the odd semester of 2017/2018. This is indicated by the t-test that is $t_{\text{count}} > t_{\text{table}}$ or $5.8351 > 1.7011$. The simple correlation coefficient (r) between learning interest and mathematics learning outcomes is 0.7408. And the simple regression equation Y for X_1 is $\hat{Y} = 12,4555 + 0,6276X_1$.
2. There is a positive and significant relationship between study habits with mathematics learning outcomes for students of class VIII SMP Negeri 13 Yogyakarta in the odd semester of 2017/2018. This is indicated by the t-test that is $t_{\text{count}} > t_{\text{table}}$ or $9.66857 > 1.7011$. The simple correlation coefficient (r) between learning habits with mathematics learning outcomes of 0.8776. A simple regression equation for Y over X_2 is also obtained. $\hat{Y} = 13,2391 + 0,6460X_2$.
3. There is a positive and significant relationship between learning interest and study habits with mathematics learning outcomes for students of class VIII of SMP Negeri 13 Yogyakarta in the odd semester of 2017/2018. This is indicated by the F test that is $F_{\text{count}} > F_{\text{table}}$ or $62.4114 > 3.35$. The multiple correlation coefficient (R) between learning interest and learning habits with mathematics learning outcomes is 0.9067. The coefficient of determination (R^2) is 0.8222 with a linear line equation $\hat{Y} = 2,3350 + 0,2531X_1 + 0,5041X_2$. The relative contribution of X_1 is 26.9108%, and X_2 is 73.0892%, and the effective contribution of X_1 is 22.1251%, and X_2 is 60.0911%.

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