

RELATIONSHIP BETWEEN LEARNING INTEREST, INTERACTION OF CLASSMATES, AND LEARNING ENVIRONMENT AT HOME WITH MATHEMATICAL LEARNING OUTCOMES

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ABSTRACT

Several factors can cause the learning process to become less optimal: learning interest, the interaction of classmates, and home study environment. The purpose of this study is to determine whether or not a positive and significant relationship between interest in learning, the interaction of classmates, and home study environment with the results of learning mathematics class VIII students even semester Muhammadiyah Junior High School Pakem (SMP Muhammadiyah Pakem) Sleman academic year 2016/2017. The population of this study is all students of class VIII even semester SMP Muhammadiyah Pakem Sleman academic year 2016/2017 as many as four classes of 150 students. Samples were taken by random sampling technique and obtained class VIII D consisting of 37 students. The data retrieval technique was obtained by the questionnaire method to know the interest of learning, the interaction of classmates, and home study environment, and test method to know the result of student learning mathematics. Test the instrument using validity test, a test of different power, and reliability test. The prerequisite analysis test consists of a normality test, independent test, and linearity test—data analysis for hypothesis test using correlation analysis and linear regression analysis. The result showed a positive and significant relationship between the interest of learning, the interaction of classmates, and the home learning environment with the learning mathematics results obtained $F_{\text{count}} = 3.842212452$. At the same time, $F_{\text{table}} = 2.89$ with a double correlation coefficient of 0,508793279 and equation multiple linear regression of three variables that is $Y = -49,5539718 + 0,49018498X_1 + 0,2143675792X_2 + 0,5154075895X_3$. Relative contribution of X_1 is 40,68324615%, relative contribution X_2 equal to 15,77064916%, and X_3 equal to 43,5461047%, and effective contribution of X_1 equal to 10,53169637%, effective contribution of X_2 equal to 4,08255742%, and X_3 is 11,27280628%.

Keywords: Interest in Learning, Interaction of Classmates, Home Learning Environment, Mathematics Learning Outcomes

INTRODUCTION

One of the national development in education is to develop the intellectual life of the nation and improve the quality of Indonesian people through efforts to improve the quality of education. Education is a system to develop all the potential possessed by a person optimally. Through education, it is expected to broaden one's knowledge and experience to create high-quality human resources. Education in Indonesia is carried out through formal education, non-formal education, and informal education. Informal education in schools students must take several subjects, one of which is mathematics. Mathematics lessons are given to students to equip students with the ability to think logically, critically, creatively, and work together. This ability is given so that students can solve problems in daily life.

In learning mathematics, students must first understand the lower concepts before learning the higher concepts. Besides that, there are also many symbols and formulas in mathematics, so students assume that mathematics is difficult to understand. As a result, students are less interested in mathematics, which will affect the process and learning outcomes. In mathematics, the learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem are still low based on the Minimum Completeness Criteria (MCC). This can be seen from the completeness of the Midterm scores in the even semester of class VIII of SMP Muhammadiyah Pakem Sleman in the 2016/2017 school year in table 1 as follows:

Table 1. Completeness of Midterm Mathematics for Even Semester Students of Class VIII of SMP Muhammadiyah Pakem in 2016/2017 Academic Year

MCC	Criteria	Class				Percentage
		A	B	C	D	
75	Complete	0	0	0	0	0%
	Not complete	36	39	38	37	100%
Total students		36	39	38	37	150

(Source: SMP Muhammadiyah Pakem Kabupaten Sleman)

From the table above, it can be seen that the mathematics learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem Sleman Regency are still low. All students have not yet reached the Minimum Mastery Criteria. Thus from these results, it can be seen that all students' mathematics learning outcomes are low. Several factors influence the low student mathematics learning outcomes. One internal factor that affects student learning outcomes is interest. According to Slameto (in Djamarah, Syaiful Bahri, 2011: 191), interest is preferability and a sense of attachment to a thing or activity, without anyone asking. Each student's interest in a subject matter will be seen from his greater desire to learn. Besides interest, learning outcomes can also be influenced by classmates' interaction and learning environment at home.

From the description above, the authors consider the need for a study with the title "The relationship between interest in learning, the interaction of classmates and learning environment at home with mathematics learning outcomes of VIII grade students even semester of SMP Muhammadiyah Pakem Sleman Regency in 2016/2017. In carrying out this research, the writer has a goal to be achieved, namely knowing whether or not there is: 1) A positive and significant relationship between interest in learning with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency. 2) A positive and significant relationship between classmates' interaction with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency. 3) A positive and significant relationship between the learning environment at home with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency. 4) A positive and significant relationship between learning interests and classmates' interactions with mathematics learning outcomes for students of class VIII of SMP Muhammadiyah Pakem, Sleman Regency. 5) A positive and significant relationship between interest in learning and the learning environment at home with mathematics learning outcomes for students of class VIII even semester of SMP Muhammadiyah Pakem, Sleman Regency. 6) A positive and significant relationship between the interaction of classmates and the learning environment at home with the mathematics learning outcomes of VIII graders of the even semester of SMP Muhammadiyah Pakem, Sleman Regency. 7) A positive and significant relationship between learning interest, classmates' interaction, and learning environment at home with the mathematics learning outcomes of Grade VIII students of SMP Muhammadiyah Pakem, Sleman Regency.

METHODS

This type of research is quantitative research. This study aims to determine whether there is a relationship between classmates' interactions, parents' attention, and students' interest in learning with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. The design of the interrelationship between the independent variable and the dependent variable in this study is organized as follows:

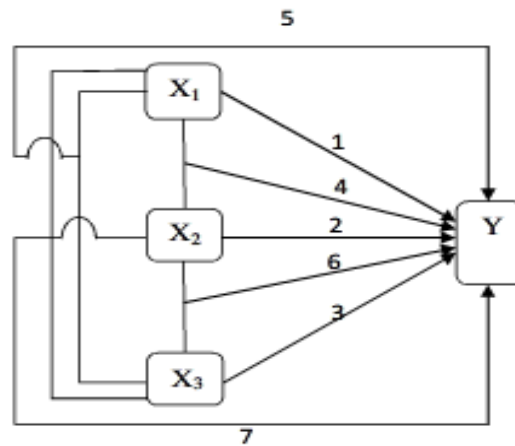


Figure I. Schema of Relationships Between Variables

Information :

X_1 : Interest in Learning

X_2 : Classmates Interaction

X_3 : Learning Environment at Home

Y : Mathematics Learning Outcomes

(Sugiyono, 2015:69)

The study was conducted at SMP Muhammadiyah Pakem in Sleman Regency, and the object of research was eighth-grade students of SMP Muhammadiyah Pakem in Sleman Regency. The research was conducted in the even semester of the 2016/2017 school year. The population in this study were all eighth-grade students of SMP Muhammadiyah Pakem, Sleman Regency in the even semester of the 2016/2017 school year consisting of 4 classes, namely classes VIII A, VIII B, VIII C, VIII D. The number of VIII students was 150 students. Sampling in this study using random sampling techniques to the class. The sampling technique is by taking one class at random. After random sampling, class VIII D consisted of 37 students. According to Sugiyono (2015: 61), the Research variable is an attribute or nature or value of people, objects, or activities that have individual variations determined by researchers to be studied and drawn conclusions.

This study has four variables consisting of three independent variables and one dependent variable. The independent variables are interesting in learning (X_1), classmates interaction (X_2), and the learning environment at home (X_3), and the dependent variable is a mathematics learning outcomes (Y). Data collection in research is intended to obtain material, information, facts, and reliable information. To obtain data in research, several techniques can be used. Data collection techniques in this study were using a questionnaire (questionnaire) and tests. According to Sugiyono (2015: 199), a questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer." The questionnaire used in this study was a closed questionnaire, which was a questionnaire arranged in such a way that respondents simply had to choose the answers provided. In this study, the questionnaire was used to obtain data on learning interest, classmates' interaction, and learning environment at the home of class VIII students of the even semester of SMP Muhammadiyah Pakem Sleman Regency 2016/2017 school year. According to Arikunto, Suharsimi (2012: 67), The test is a tool or procedure used to determine or measure something in an atmosphere by means and rules that have been determined. Tests are used to obtain data on learning outcomes in mathematics. Tests are given to students To obtain data about learning outcomes, the test used is multiple choice with four alternative answers, namely a, b, c, or d, and if the correct answer is one and false is 0. Before being used to uncover the actual data in the study, the test results of the learning outcomes were tested on the test class students, namely class VIII A, amounting to 36 students. The instrument trials were conducted to determine the validity, distinguishing features, and reliability of the instruments.

1. Descriptive Data Analysis
2. Test Prerequisite Analysis

Three prerequisite tests must be tested and fulfilled before testing a hypothesis, namely:

- a. Normality test
 - b. Linearity Test
 - c. Independent Test
3. Hypothesis Test

RESULTS AND DISCUSSION

Interest to learn. The students' interest in class VIII D in the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year, is included in the medium category because the highest frequency is located at intervals of $72.23763898 \leq X \leq 94.60019886$ namely 25 students or 67.56%. Classmate Interaction. The interaction of classmates of class VIII D of the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the academic year of 2016/2017, is included in the medium category because the highest frequency lies in the interval $70.90286441 \leq X \leq 91.82686531$, as many as 28 students or 75.68%. Learning Environment at Home. The learning environment at home of students of class VIII D even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year is included in the medium category because the highest frequency is located at intervals $72.62560989 \leq X \leq 93.10411983$ namely 25 students or 67.57%. Mathematical Learning Outcomes. Mathematics learning outcomes of class VIII D even semester of SMP Muhammadiyah Pakem Sleman Regency 2016/2017 academic year included in the incomplete category $X < 75$ that was 36 students or 97.30%.

Based on the normality test, it was found that the variables of interest in learning, variables of classmates interaction, variables of the learning environment at home, and variables of learning outcomes in mathematics were usually distributed. The normality test results for the four variables can be seen in table 2.

Table 2. Normality Test Results

Variable	χ^2_{count}	χ^2_{table}	Df	Info.
Interest to learn (X_1)	3,87703286	5,9915	2	Normal
Classmate interaction (X_2)	2,239231077	5,9915	2	Normal
The learning environment at home (X_3)	1,4922972	5,9915	2	Normal
Mathematical learning outcomes (Y)	2,338259415	5,9915	2	Normal

Based on the linearity test, it was found that the variables of interest in learning, the variables of classmates' interaction, the variables of the learning environment at home, and the variables of linear mathematics learning outcomes. The results of the linearity test can be seen in table 3.

Table 3. Linearity Test Results

Variable	F_{count}	F_{table}	Info.
X_1 with Y	1,7940084	2,89	Linear
X_2 with Y	1,198161012	2,44	Linear
X_3 with Y	0,686611584	2,73	Linear

Table 4. Independence Test Results

Variable	χ^2_{count}	χ^2_{table}	df	Conclusion
X_1 and X_2	24,333	37,6525	25	Independent
X_1 and X_3	19,775	37,6525	25	Independent
X_2 and X_3	36,872	37,6525	25	Independent

Hypothesis Test Results:

- a. Testing the first hypothesis. In testing the significance of the correlation coefficient using t-test obtained $t_{count} = 2,06773442$ while $t_{table} = 1,68957$ at a significant level of 5% and $v = n - 2 = 37 - 2 = 35$. So we get $t_{count} > t_{table}$, so $H_{0,1}$ was rejected, and $H_{1,1}$ was accepted, so there was a positive and significant relationship between learning interest and mathematics learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. It also obtained a simple regression equation Y for X_1 is $\hat{Y} = 8.850326984 + 0.5066746512 X_1$.
- b. Testing the second hypothesis. In testing the significance of the correlation coefficient by using t-test obtained $t_{count} = 1,872306819$ while $t_{table} = 1,68957$ at a significant level of 5% and $v = n - 2 = 37 - 2 = 35$. So we get $t_{count} > t_{table}$, so $H_{0,2}$ rejected and $H_{1,2}$ accepted, so there is a positive and significant relationship between classmates' interaction with mathematics learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. It also obtained a simple regression equation for Y over X_2 is $\hat{Y} = 12,05911225 + 0,4780328068 X_2$.
- c. Third hypothesis testing. In testing the significance of the correlation coefficient by using t-test obtained $t_{count} = 2.226039275$ while $t_{table} = 1.68957$ at a significant level of 5% and $v = n - 2 = 37 - 2 = 35$. So we get $t_{count} > t_{table}$, so $H_{0,3}$ is rejected, and $H_{1,3}$ is accepted, so there is a positive and significant relationship between the learning environment at home with the mathematics learning outcomes of eighth-grade students of the even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. It also obtained a simple regression equation Y for X_3 is $\hat{Y} = 4,428242211 + 0,5670358914X_3$
- d. Testing the fourth hypothesis. In testing the significance of the correlation coefficient by using the F-test obtained $F_{count} = 3.41793434$ while $F_{table} = 3.28$ at a significant level of 5% and $v_1 = 2$ dan $v_2 = 34$. So that obtained $F_{count} > F_{table}$, $H_{0,4}$ is rejected, and $H_{1,4}$ is accepted, so there is a positive and significant relationship between learning interest and classmates' interaction with mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. It also obtained the double linear regression equation X_1 and X_2 is $\hat{Y} = -16,8242315 + 0,432683584X_1 + 0,390849379X_2$.
- e. Testing the fifth hypothesis. In testing the significance of the correlation coefficient by using the F-test obtained $F_{count} = 5.431181$ while $F_{table} = 3.28$ at a significant level of 5% and $v_1 = 2$ dan $v_2 = 34$. That obtained $F_{count} > F_{table}$, so $H_{0,5}$ is rejected, and $H_{1,5}$ is accepted, so there is a positive and significant relationship between learning interest and learning environment at home with mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem Sleman Regency in 2016/2017 school year. It also obtained the double linear regression equation X_1 and X_3 is $\hat{Y} = -41,23293762 + 0,5281414373X_1 + 0,58822498X_3$.
- f. Testing the sixth hypothesis. In testing the significance of the correlation coefficient using the F-test obtained $F_{count} = 3.3098283$ while $F_{table} = 3.28$ at a significant level of 5% and $v_1 = 2$ dan $v_2 = 34$. So that obtained $F_{count} > F_{table}$, so that $H_{0,6}$ is rejected and $H_{1,6}$ is accepted, so there is a positive and significant relationship between the interaction of classmates and the learning environment at home with the mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. It also obtained the double linear regression equation X_2 and X_3 is $\hat{Y} = -13,48074623 + 0,3308829831X_2 + 0,4569905143X_3$.
- g. Seventh hypothesis test. In testing the significance of the correlation coefficient by using the F-test obtained $F_{count} = 3.842212452$ while $F_{table} = 2.89$ at a significant level of 5% and $v_1 = 3$ and $v_2 = 33$. So that $F_{count} > F_{table}$ is obtained, so $H_{0,7}$ is rejected, and $H_{1,7}$ accepted, so there is a positive and significant relationship between interest in learning, classmates' interaction, and the learning environment at home with mathematics learning outcomes for students of class VIII even semester of SMP Muhammadiyah Pakem 2016/2017 academic year. It also obtained the double linear

regression equation X_1 , X_2 and X_3 is $\hat{Y} = -49,5539718 + 0,49018498X_1 + 0,2143675792X_2 + 0,5154075895X_3$.

The results obtained were that there was a relationship between learning interest, classmates' interactions, and the learning environment at home with the mathematics learning outcomes of Grade VIII students of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. The following discussion about the results of the study:

1. The first hypothesis test result is that there is a positive and significant relationship between interest in learning with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman, 2016/2017 year. The higher the students' interest in learning, the higher their learning outcomes will be. There is a variation in mathematics learning outcomes (Y) explained by an interest in learning (X_1) through a linear line $\hat{Y} = 8,850326984 + 0,5066746512X_1$ a regression coefficient of 0.5066746512. This means that any increase in X_1 increases \hat{Y} .
2. The second hypothesis test result is that there is a positive and significant relationship between classmates' interaction with mathematics learning outcomes of eighth-grade students of the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. In other words, the better the interaction of classmates, the better the results of learning mathematics. The variation in mathematics learning outcomes (Y) explained by classmates interaction (X_2) through the linear line $\hat{Y} = 12,05911225 + 0,4780328068X_2$, with a regression coefficient of 0.4780328068. This means that any increase in X_2 increases \hat{Y} .
3. The third hypothesis test result is that there is a positive and significant relationship between the learning environment at home with the mathematics learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. In other words, the better the learning environment at home, the better the math learning outcomes. The variation in mathematics learning outcomes (Y) is explained by the interaction of classmates (X_3) through a linear line $\hat{Y} = 4,428242211 + 0,5670358914X_3$, with a regression direction coefficient of 0.5670358914. This means that any increase in X_3 increases \hat{Y} .
4. The fourth hypothesis test result is that there is a positive and significant relationship between learning interest and classmates' interaction with mathematics learning outcomes of eighth-grade students of the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. In other words, the higher the student's interest in learning, and the better the interaction of classmates, the higher the student's mathematics learning outcomes. There are variations in mathematics learning outcomes (Y) which can be explained by an interest in learning (X_1) and classmates interaction (X_2) through linear lines $\hat{Y} = -16,8242315 + 0,432683584X_1 + 0,390849379X_2$. The relative contribution of X_1 by 55.533729% and X_2 by 44.466271% and the effective contribution of X_1 by 9.2962704% and X_2 by 7.4435931%.
5. The fifth hypothesis test result is that there is a positive and significant relationship between learning interest and learning environment at home with mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. The higher the student's interest in learning, the better the learning environment at the student's home, the better the student's learning outcomes. There are variations in mathematics learning outcomes (Y), which can be explained by an interest in learning (X_1) and the learning environment at home (X_3) through linear lines $\hat{Y} = 41,23293762 + 0,5281414373X_1 + 0,58822498X_3$. The relative contribution of X_1 by 46.86476712% and X_3 by 53.13523288% and the effective contribution of X_1 by 11.33471964% and X_3 by 12.8654416%.
6. The sixth hypothesis test results are that there is a positive and significant relationship between classmates' interaction and learning environment at home with mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2017 school year. In other words, the better the interaction of classmates and the better the

learning environment at the student's home, the better mathematical learning outcomes. There are variations in mathematics learning outcomes (Y), which can be explained by the interaction of classmates (X_2) and the learning environment at home (X_3) through linear lines $\hat{Y} = -13,48074623 + 0,3308829831X_2 + 0,4569905143X_3$. While the relative contribution of X_2 is 38.66770664%, and X_3 is 61.3322934%, and the effective contribution X_2 is 6.30155354%, and X_3 is 9.9951294%.

7. The seventh hypothesis test results are that there is a positive and significant relationship between learning interest, classmates' interaction, and learning environment at home with mathematics learning outcomes for students of class VIII even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. In other words, the higher the learning interest of students, the higher the learning outcomes. Likewise, with the interaction of classmates and the learning environment at home, the better the interaction of classmates and the better the learning environment at home, the better the learning outcomes. The multiple correlation analysis obtained the value of the multiple correlation coefficient (R) of 0.5087932788. In this study also obtained a coefficient of determination (R^2) of 0.2588706006. There are variations in mathematics learning outcomes (Y) which can be explained by an interest in learning (X_1), classmates' interactions (X_2) and home learning environment (X_3) through linear lines $\hat{Y} = -49,5539718 + 0,49018498X_1 + 0,2143675792X_2 + 0,5154075895X_3$. As for the relative contribution of X_1 by 40.68324615%, the relative contribution of X_2 by 15.77064916%, and X_3 by 43.5461047%, and the effective contribution of X_1 by 10.53169637%, the effective contribution of X_2 by 4.08255742%, and X_3 by 11,27280628%. The relative contributions and effective contributions between independent variables can be seen in Figure 2, as follows:

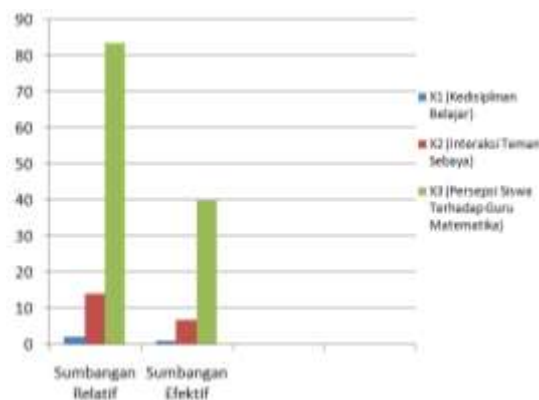


Figure 2. Relative Contributions and Effective Contributions between independent variables

This shows that the learning environment at home provides the most significant relationship to mathematics learning outcomes compared to classmates' interest in learning and interaction. After learning that interest in learning, classmates' interaction, and learning environment at home has a significant effect on student mathematics learning outcomes, and this means that the increase and decrease in student mathematics learning outcomes are related to high learning interest, functional classmate interactions, and a good learning environment conducive.

CONCLUSION

Based on the results of the study, several research conclusions can be drawn as follows:

1. There is a positive and significant relationship between interest in learning with mathematics learning outcomes for students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2017 school year. This is indicated by the t-test, namely $t_{count} \geq t_{table}$ or $2.06773442 > 1.68957$. Also, the linear regression equation $\hat{Y} = 8,850326984 + 0,5066746512X_1$ is obtained.

2. There is a positive and significant relationship between classmates' interaction with mathematics learning outcomes for VIII graders of the even semester of SMP Muhammadiyah Pakem, Sleman Regency, in the academic year of 2016/2107. This is indicated by the t-test that is $t_{count} \geq t_{table}$ or $1.872306819 > 1.68957$. Also, the linear regression equation $\hat{Y} = 12,05911225 + 0,4780328068X_2$ is obtained.
3. There is a positive and significant relationship between the learning environment at home with the mathematics learning outcomes of students of class VIII in the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2107 school year. This is indicated by the t-test that is $t_{count} \geq t_{table}$ or $2.226039275 > 1.68957$. Also, the linear regression equation $\hat{Y} = 4,428242211 + 0,5670358914X_3$ is obtained.
4. There is a positive and significant relationship between learning interest and classmates' interaction with mathematics learning outcomes for VIII grade students of the even semester of SMP Muhammadiyah Pakem, Sleman Regency in the 2016/2107 school year. This is indicated by the F-test that is $F_{count} > F_{table}$ or $3.41793434 > 3.28$. Also obtained by the linear line equation $\hat{Y} = -16,8242315 + 0,432683584X_1 + 0,390849379X_2$. The relative contribution of X_1 was 55.533729%, and X_2 was 44.466271%, and the effective contribution of X_1 was 9.2962704%, and X_2 was 7.4435931%.
5. There is a positive and significant relationship between learning interest and learning environment at home with the mathematics learning outcomes of students of class VIII even semester of SMP Muhammadiyah Pakem Sleman Regency in the academic year of 2016/2107. This is indicated by the F-test that is $F_{count} > F_{table}$ or $5.431181 > 3.28$. Also obtained by the linear line equation $\hat{Y} = -41,23293762 + 0,5281414373X_1 + 0,58822498X_3$. The relative contribution of X_1 is 46.86476712%, and X_3 is 12.8654416%, and the effective contribution X_1 is 11.33471964%, and X_3 is 12.8654416%.
6. There is a positive and significant relationship between classmates' interaction and the learning environment at home with the mathematics learning outcomes of eighth-grade students of the even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2107 school year. This is indicated by the F-test that is $F_{count} > F_{table}$ or $3.3098283 > 3.28$. Also obtained by the linear line equation $\hat{Y} = -13,48074623 + 0,3308829831X_2 + 0,4569905143X_3$. The relative contribution of X_2 amounted to 38.66770664%, and X_3 amounted to 61.3322934%, and the effective contribution of X_2 amounted to 6.30155354%, and X_3 amounted to 9.9951294%.
7. There is a positive and significant relationship between learning interest, classmates' interaction, and learning environment at home. The mathematics learning outcomes of VIII grade students in the even semester of SMP Muhammadiyah Pakem Sleman Regency in the 2016/2107 school year. This is indicated by the F-test that is $F_{count} > F_{table}$ or $3.842212452 > 2.89$. The multiple correlation coefficient (R) is 0.5087932788 and the coefficient of determination (R^2) is 0.2588706006 with the linear line equation $\hat{Y} = -49,5539718 + 0,49018498X_1 + 0,2143675792X_2 + 0,5154075895X_3$. The relative contribution of X_1 is 40.68324615%, the X_2 the relative contribution is 15.77064916%, and X_3 is 43.5461047%, and the effective contribution X_1 is 10.53169637%, the effective contribution X_2 is 4.08255742%, and X_3 is 11, 27280628%.

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