

RELATIONSHIPS BETWEEN LEARNING INTERESTS, COURSE INTERACTIONS, AND PARENT'S ATTENTION WITH LEARNING RESULTS MATHEMATICS OF GRADE VIII

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ABSTRACT

Low student learning outcomes are related to various factors. Allegedly include interest in learning, peer interaction, and parents' attention are several factors related to learning outcomes. This study aims to determine the presence or absence of a positive and significant relationship between interest in learning, peer interaction, and parents' attention with mathematics learning outcomes of eighth-grade students of Islamic Junior High School (MTs) Miftahul Ulum Bulakan even semester academic year 2018/2019. MTs Miftahul' Ulum Bulakan 2018/2019 school year consists of 3 classes. The population in this study is class VIII A, VIII B, and VIII C. The sampling technique uses class random sampling techniques and class VIII B as a sample class. Data collection techniques using the questionnaire method and the question method. Data collection instruments using questionnaires and math items. Analysis prerequisite tests include normality tests, independence tests, and linearity tests. Data analysis for hypothesis testing uses product-moment correlation analysis and multiple linear regression analysis. The results showed t positive and significant relationship between interest in learning, peer interaction, and parents' attention to learning outcomes in mathematics. At a significant level of 5%, $v_1 = 3$, $v_2 = 26$, $F_{\text{count}} = 15.10592$ and $F_{\text{table}} = 2.97515$, so $F_{\text{count}} > F_{\text{table}}$ with a multiple correlation coefficient of 0.79714 and a multiple regression equation for three variables namely $\hat{Y} = -73,66897 + 0,84593 X_1 + 0,00774 X_2 + 0,51498 X_3$. The relative contribution of $X_1 = 62,75\%$, $X_2 = 0,36\%$, $X_3 = 36,89\%$ and the effective contribution $X_1 = 39,87\%$, $X_2 = 0,23\%$, $X_3 = 23,44\%$.

Keywords: learning interest, peer interaction, parent's attention, mathematics learning outcomes.

INTRODUCTION

Education is a conscious and planned effort to create an atmosphere of learning and learning for students to actively develop their potential and is very important in human survival. For a nation, education is one of the assets to achieve progress. Education is also an appropriate medium for preserving national cultural values and history and developing science and technology. Through education, it is hoped that the creation of a new generation that has more potential and can develop into quality human resources, because it is the new generation that will give a new color in the nation's development towards a better direction. According to the Constitution No. 12 of 2012 concerning Higher Education. Education is a conscious and planned effort to create an atmosphere of learning and the learning process. Students actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, and the skills needed by themselves, society, nation, and country. Education is indeed very important for students to develop all the potential that exists in each individual. Mathematics is one of the subjects whose material has abstract characteristics. This abstractness often makes mathematics a subject that is difficult for students to learn.

Factors that are thought to have a relationship with student mathematics learning outcomes come from within (internal factors) and outside the self (external factors). Learning interest is an internal factor that influences student learning outcomes. Students interested in a subject will learn it seriously because there is a unique attraction to learn it to become more concentrated. Students' attention is more focused on following the lessons that students enjoy.

Peer interaction can be an extrinsic factor that can affect student learning outcomes. In a school environment, students must have peers. Peers have the same function as parents and teachers. Friends

can provide calm when experiencing worries and also encourage one another. If students can choose friends well for encouraging learning, the possibility of student learning outcomes will increase. However, if students are less selective in choosing their peers, their learning outcomes are less than optimal.

Parents' attention can also be an extrinsic factor that can affect student learning outcomes. Parents are the first and foremost teachers for every child. This is because a child knows education from the family environment. All attitudes and behavior of parents greatly affect the child's development. However, many parents consider that the problem of children's education is entirely the school's responsibility. If the child has reached school age, parents no longer pay attention to their child's educational development. Parents assume that if they have met the school and facilities' needs, they have fulfilled their parents' responsibilities towards their children. So that parents ignore the development of their children both at school and at home.

This study's problems are: 1) Is there a positive and significant relationship between learning interest and mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik district of Pemalang district even semester 2018/2019? 2) Is there a positive and significant relationship between peer interaction with mathematics learning outcomes for students of class VIII MTs Miftahul 'Ulum Bulakan Belik district Pemalang district even semester 2018/2019? 3) Is there a positive and significant relationship between parents' attention and mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan Belik sub-district Pemalang district even semester 2018/2019? 4) Is there a positive and significant relationship between learning interest and peer interaction with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan Belik district of Pemalang district even semester 2018/2019? 5) Is there a positive and significant relationship between learning interest and parents' attention with the mathematics learning outcomes of eighth-grade students of MTs Miftahul 'Ulum Bulakan Belik sub-district Pemalang district even semester 2018/2019? 6) Is there a positive and significant relationship between peer interaction and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan Belik district of Pemalang district even semester 2018/2019? 7) Is there a positive and significant relationship between learning interest, peer interaction, and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan Belik district of Pemalang district even semester in the 2018/2019 school year?

The purpose of this study is 1) To find is whether or not there is a positive and significant relationship between learning interest and mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik sub-district of Pemalang district even semester 2018/2019. 2) To determine whether there is a positive and significant relationship between peer interaction with mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik district of Pemalang district even semester 2018/2019. 3) To determine whether or not there is a significant positive relationship between parents' attention and mathematics learning outcomes of eighth-grade students of MTs Miftahul' Ulum Bulakan, Belik sub-district, Pemalang district, even semester 2018/2019. 4) To find out whether or not there is a positive and significant relationship between learning interest and peer interaction with mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik district of Pemalang district even semester 2018 / 2019.5) To know the presence or absence of a positive and significant relationship between interest in learning and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik district Pemalang district even semester of the 2018/2019 school year. 6) To determine whether there is a positive and significant relationship between peer interaction and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul' Ulum Bulakan Belik district Pemalang district semester in the 2018/2019 school year. 7) To determine whether there is a positive and significant relationship between learning interest, peer interaction, and parents' attention with mathematics learning outcomes for students of class VIII MTs Miftahul' Ulum Bulakan Belik district Pemalang district even semester 2018/2019.

According to Slameto (2015: 180), interest is a feeling of preferability and a sense of attachment to a thing or activity, without anyone asking. Interest is the acceptance of a relationship between oneself and something outside of oneself. The stronger or closer the relationship, the greater the interest. Meanwhile, according to Baharuddin and Wahyuni, Esa Nur (2012: 24), interest means a tendency and high enthusiasm or a great desire for something. According to Desmita (2017: 230), harmonious peer relationships during adolescence are associated with positive mental health in middle age. Meanwhile, according to Dodge in Santrock, John W (2014: 190), students who are more accepted by their peers and have good social skills often do better in school and have positive academic achievement motivation. Conversely, students who are rejected, especially those who are very aggressive, are at risk for some achievement problems, including getting low grades and dropping out of school. As for the attention of parents, according to Slameto (2015: 105), attention is an activity carried out by someone about the selection of stimuli that come from their environment. and Slameto (2015: 61) Parents who lack/do not pay attention to their children's education, for example, they do not want to know how their children's learning progress, difficulties experienced in learning and others, can cause children not / less successful in learning.

METHODS

This research is classified as quantitative research with four variables divided into three independent variables and one dependent variable to determine whether there is a relationship between the independent and dependent variables. According to Sugiyono (2016: 80), participation is a generalization area that consists of objects/subjects with specific qualities and characteristics determined by researchers to be studied, and then conclusions are drawn. This study's population was all class VIII students at MTs Miftahul Ulum Bulakan Pemalang district, even semester 2018/2019 academic year consisting of 3 classes, namely classes VIII A, VIII B, VIII C. With the total number of students is 102 students. At the same time, the sample in this study was class VIII B with 31 students. The sampling technique used is a random sampling of the class. Data collection techniques used were questionnaire techniques with instruments in questionnaires and test techniques in objective questions in multiple-choice. Analysis prerequisite test with normality test with Chi-squared formula, Chi-squared formula independence test, and F-test formula linearity test. Research hypothesis testing uses simple correlation tests, multiple regression analysis tests, and multiple linear regression tests 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) interest in learning with student mathematics learning outcomes, 2) peer interaction with student mathematics learning outcomes, 3) parents' attention with learning outcomes student mathematics. 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) interest in learning and peer interaction with student mathematics learning outcomes, 2) interest in learning and parent's attention with student mathematics learning outcomes, 3) peer interaction and parents' attention 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 learning interests, peer interactions, and parents' attention 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	Information
X ₁	0,8276	5,9915	2	Normal
X ₂	1,1087	7,8147	3	Normal
X ₃	1,7995	5,9915	2	Normal
Y	2,7290	5,9915	2	Normal

From the normality test at a significant level of 5%, it can be seen that $\chi^2_{count} \leq \chi^2_{table}$ 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 Independence Test Results

Variable	χ^2_{count}	χ^2_{table}	Df
X ₁ and X ₂	23,5952	37,6525	25
X ₁ and X ₃	34,6667	37,6525	25
X ₂ and X ₃	34,2560	37,6525	25

From the independence test at a significant level of 5% ($\alpha = 0.05$) and degrees of freedom (df) = (k-1) (b-1), it appears that $\chi^2_{count} \leq \chi^2_{table}$, which 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}
X ₁ and Y	1,0062	2,7980
X ₂ and Y	0,3994	2,9477
X ₃ and Y	0,6988	2,6851

From the linearity test at a significant level of 5% ($\alpha = 0.05$) and degrees of freedom v₁ numerator k-2 and v₂ the denominator nk, it appears that the $F_{count} \leq F_{table} (1-\alpha)(k-2, N-k)$, which means that there is a linear correlation 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	Information
6,34523	1,70113	28	H ₀ is rejected, H ₁ is accepted

From the first hypothesis test at a significant level of 5% and df = 28, it can be seen that $t_{count} = 6.34523$ and $t_{table} = 1.70113$, so $t_{count} > t_{table}$, which means there is a positive and significant relationship between learning interest and mathematics learning outcomes of VIII grade students MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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	Information
2,49442	1,70113	28	H ₀ is rejected, H ₁ is accepted

From the second hypothesis test at a significant level of 5% and df = 28, it can be seen that $t_{count} = 2.49442$ and $t_{table} = 1.70113$, so $t_{count} > t_{table}$, which means there is a positive and significant relationship between peer interaction with mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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	Information
5,49522	1,70113	28	H ₀ is rejected, H ₁ is accepted

From the third hypothesis test at a significant level of 5% and df = 28, it can be seen that $t_{count} = 5.49522$ and $t_{table} = 1.70113$, so $t_{count} > t_{table}$, which means there is a positive and significant

relationship between parents' attention and mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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	Information
19,48602	3,35413	27	H_0 is rejected, H_1 is accepted.

From the fourth hypothesis test at a significant level of 5%, $df = 27$ so that it can be obtained $F_{count} = 19.48602$ and $F_{table} = 3.35413$ so that $F_{count} \geq F_{table}$ There is a positive and significant relationship between learning interest and peer interaction with mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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

Table 8. Summary of Fifth Hypothesis Test Results

F_{count}	F_{table}	Dk	Information
23,52845	3,35413	27	H_0 is rejected, H_1 is accepted.

From the fifth hypothesis test at a significant level of 5%, $df = 27$ so that it can be obtained $F_{count} = 23.52845$ and $F_{table} = 3.35413$ so $F_{count} \geq F_{table}$ There is a positive and significant relationship between learning interest and parents' attention with mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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

Table 9. Summary of Sixth Hypothesis Test Results

F_{count}	F_{table}	Df	Information
15,22968	3,35413	27	H_0 is rejected, H_1 is accepted.

From the sixth hypothesis test at a significant level of 5%, $df = 27$ so that it can be obtained $F_{count} = 15.22268$ and $F_{table} = 3.35413$ so that $F_{count} \geq F_{table}$ which means there is a positive and significant relationship between peer interaction and parents' attention with mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

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	Information
15,10610	2,97515	26	H_0 is rejected, H_1 is accepted.

From the seventh hypothesis test at a significant level of 5%, $df = 26$ so that it can be obtained $F_{count} = 15.10610$ and $F_{table} = 2.97515$ so that $F_{count} \geq F_{table}$ which means there is a positive and significant relationship between learning interest, peer interaction, and parents' attention with mathematics learning outcomes of class students VIII MTs Miftahul' Ulum Bulakan even semester 2018/2019.

CONCLUSION

Based on the analysis of experimental data and its discussion, the following conclusions can be drawn from this study:

1. There is a positive relationship between interest in learning with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester 2018/2019. This is indicated by the t-test that is $t_{count} > t_{table}$ or $6.34523 > 1.70113$. The simple correlation coefficient (r) between learning interest and mathematics learning outcomes of 0.76799 with a linear regression equation $\hat{Y} = -63.61113 + 1.25139 X_1$.
2. There is a positive relationship between peer interaction with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester 2018/2019. This is indicated by

- the t-test that is $t_{count} > t_{table}$ or $2.49442 > 1.70113$. Simple correlation coefficient (r) between peer interactions with mathematics learning outcomes of 0.42640 with linear regression equation $\hat{Y} = -4.13300 + 0.60666 X_2$.
3. There is a positive relationship between parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester 2018/2019. This is indicated by the t-test that is $t_{count} > t_{table}$ or $5.49522 > 1.70113$. Simple correlation coefficient (r) between the attention of parents with mathematics learning outcomes of 0.72033 with a linear regression equation $\hat{Y} = -52,36235 + 1,14003 X_3$.
 4. There is a positive relationship between learning interest and peer interaction with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester 2018/2019. This is indicated by the F-test that is $F_{count} > F_{table}$ or $19.48602 > 3.35413$. The multiple correlation coefficient (R) between learning interest and peer interaction with mathematics learning outcomes is 0.76859 and (R^2) is 0.59074 with a double linear regression equation $\hat{Y} = -65,35578 + 1.22117 X_1 + 0,05059 X_2$. The relative contribution of X_1 is 97.43%, and the relative contribution of X_2 is 2.57%. The amount of effective contribution X_1 is 57.56%, and the effective contribution of X_2 is 1.52%.
 5. There is a positive relationship between learning interest and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester 2018/2019. This is indicated by the F-test that is $F_{count} > F_{table}$ or $23.52845 > 3.35413$. The multiple correlation coefficient (R) between learning interest and parents' attention with mathematics learning outcomes is 0.79713 and (R^2) is 0.63542 with a double linear regression equation $\hat{Y} = -73.42979 + 0.8496 X_1 + 0,51622 X_3$. The relative contribution of X_1 is 63.02%, and the relative contribution of X_3 is 36.98%. The effective contribution of X_1 is 40.05%, and the effective contribution of X_3 is 23.50%.
 6. There is a positive relationship between peer interaction and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester of the 2018/2019 school year. This is indicated by the F-test that is $F_{count} > F_{table}$ or $15.222688 > 3.35413$. The multiple correlation coefficient (R) between peer interactions and parents' attention with mathematics learning outcomes is 0.72808 and (R^2) is 0.53010 with a double linear regression equation $\hat{Y} = -52.58956 + 0.1699 X_2 + 1.05281 X_3$. The relative contribution of X_2 is 9.61%, and the relative contribution of X_3 is 90.39%. The effective contribution of X_2 is 5.09%, and the effective contribution of X_3 is 47.92%.
 7. There is a positive relationship between learning interest, peer interaction, and parents' attention with mathematics learning outcomes of students of class VIII MTs Miftahul 'Ulum Bulakan even semester of the 2018/2019 school year. This is indicated by the F-test that is $F_{count} > F_{table}$ or $15.10610 > 2.97515$. The multiple correlation coefficient (R) between learning interest, peer interaction and parents' attention with mathematics learning outcomes is 0.79714 and (R^2) is 0.63543 with a double linear regression equation $\hat{Y} = -73.67374 + 0,84603 X_1 + 0.00783 X_2 + 0.51485 X_3$. The relative contribution of X_1 is 62.75%, the relative contribution of X_2 is 0.37%, and the relative contribution of X_3 is 36.88%. The effective contribution X_1 is 39.88%, X_2 is 0.23%, and the effective contribution X_3 is 23, 43%.

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