

## THE RELATIONSHIP BETWEEN PARENTS ATTENTION, LEARNING ACTIVENESS AND LEARNING INDEPENDENCE WITH STUDENTS' MATHEMATICS LEARNING OUTCOMES OF CLASS VIII

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### ABSTRACT

Learning outcomes are influenced by many factors. Parent's attention, activeness learning, and independent learning are some of the factors that were related to the learning outcomes. This study aims to determine whether there is a positive and significant relationship between parent's attentions, activeness learning and independent learning with the learning outcomes of the eighth-grade students in the first semester of SMP Muhammadiyah 1 Yogyakarta academic year 2016/2017. The population in this study were all eighth-grade students of the first semester of SMP Muhammadiyah 1 Yogyakarta academic year 2016/2017 which consists of 7 classes with a number of 197 students. Random sampling techniques used to get class samples and collected VIII E as a sample that consists of 30 students. Techniques of data collection were conducted by questionnaire to parent's attention, learning activeness and learning independent. Being a test method for mathematics learning outcomes. Test instruments used validity and reliability. Prerequisite test analysis using normality test, independent, and linearity test. Hypothesis testing data analysis using simple linear regression analysis and multiple regression analysis and correlation. The results showed that there is a significant correlation among parents attention, learning activeness and learning independence with mathematics learning outcomes with  $F_{count} = 16,525$  and  $F_{table} = 2,98$  so  $F_{stat} > F_{tabel}$  multiple correlation coefficient is 0,8099 and the multiple determination coefficient ( $R^2$ ) is 0,6559 while the multiple regression equation is  $\hat{Y} = -16,74618 + 0,11173 X_1 + 0,78706 X_2 + 0,34912 X_3$ , relatively contribution  $X_1 = 4,3075\%$  the relatively contribution  $X_2 = 83,7543\%$  the relatively contribution  $X_3 = 11,9381\%$  and effective contribution  $X_1 = 2,8256\%$  the effective contribution  $X_2 = 54,9403\%$  the effective contribution  $X_3 = 7,8311\%$

**Keywords:** parents' attention, learning activeness, learning independence, mathematics learning outcomes

### INTRODUCTION

In the opinion of Siswoyo, Dwi et al (2008: 20), "education is a lifelong process and the realization of complete self-development in the sense of developing all the potential in the context of fulfilling all human commitments as individuals, as social beings and as creatures of God".

Mathematics is a basic science that must be mastered in developing science and technology. Mathematics also plays an important role in developing the ability to think logically, analytically, systematically and creatively. But mathematics is one of the lessons that is not liked by some students, because mathematics is often felt scary, boring, and felt difficult to learn. difficult and boring for students. This is the reason students learn mathematics differently from other lessons that can be learned only by memorization. Therefore we need the ability to count in solving mathematical problems. The assumption that mathematics, in general, is always associated with something difficult and abstract. As a result, mathematics has become one of the areas of study that is generally considered to have the most difficulty in learning mathematics and are reluctant to learn it.

The first education for the development of the personality and education of children in the family. This is because a child knows education from the family. All attitudes and behavior of parents greatly affect the child's development. Parents must be able to monitor the learning process of their children well. Motivation from parents must also be there because most of the time students are done more at home.

Based on information from eighth-grade students of Muhammadiyah 1 Junior High School in Yogyakarta, many parents consider that the problem of children's education is entirely the responsibility of the school. If the child is at school age, most parents pay less attention to their child's educational

development. Parents assume if they meet the needs of the school and facilities, then they are sufficient to fulfill their responsibilities as a parent to their children. Parents' attention is needed in an effort to improve mathematics learning outcomes, both in the form of support and encouragement in learning and the provision of facilities that can support students in learning.

Based on observations in one of the classes, it appears that some students are passive in mathematics learning activities. This can be seen when the mathematics group discussion activities some students tend to prefer playing with friends rather than being active in group discussions. Student learning activeness is also still low. This can be seen when the assignment has been completed and the teacher asks students to move forward to do the assignment, but some students do not scramble forward to work in front of only two to three other students must be appointed first.

Based on the results of observations of student learning independence is still low. This can be seen when given a task by the teacher the student chooses cheating his friend instead of doing it himself even though by cheating the student just copies without knowing how to solve it. Students also still feel afraid to ask the teacher about material that is not understood. this can happen due to a lack of awareness in students. Most students who are lazy in doing assignments prefer to be reminded by the teacher so they want to do it. Even teachers make agreements with students so students want to do assignments at school. These efforts are made to increase student self-awareness so that they can form independence in learning. Some students have low student learning independence. This can be seen when students are still told to issue mathematics textbooks by the teacher, this happens because there is still a lack of independence to be ready to learn mathematics. They assume that mathematics is a difficult subject, so when students already have such assumptions the motivation for learning is low.

According to Dimiyati and Mudjiono (2013: 3), that learning outcomes are the result of an interaction of learning and teaching. From the teacher's point of view, the act of teaching ends with a process of evaluating learning outcomes. From the student's side, the learning outcome is the end of the fragment and the top of the learning process. The low mathematics learning outcomes of Grade VII students of SMP Muhammadiyah 1 Yogyakarta can be seen from the average math scores at the end of the semester exam which is still low. The grade of mathematics in the seventh grade of SMP Muhammadiyah 1 Yogyakarta is more than 50% below the KKM standard. This proves that there are still many students who have difficulty in learning mathematics.

Based on the background and boundaries of the problem, it can be formulated that the problem to be investigated is a positive and significant relationship between the Relationship between Parents' Attention, Active Learning and Learning Independence, to the Mathematics Learning Outcomes of Class VIII Students in Odd Semester, Muhammadiyah 1 Yogyakarta Middle School, Academic Year 2016 / 2017 ?.

The aim of this research is to find out whether or not there is a positive and significant relationship between Parental Attention, Learning Activity and Learning Independence, to the Mathematics Learning Outcomes of Class VIII Students in the Odd Semester of Muhammadiyah 1 Yogyakarta Middle School, 2016/2017 Academic Year ?.

## **METHODS**

This research is classified as quantitative research. The place of research was carried out at Muhammadiyah 1 Junior High School in Yogyakarta. While the research was conducted in the odd semester of the 2016/2017 school year The population in this study were students of class VIII odd semester of Muhammadiyah 1 Junior High School in Yogyakarta consisting of 7 classes. Based on the average value of UAS so that the population in this study consisted of 7 classes.

In this study, samples were taken at random using a random sampling technique for class. It is said random because the sampling class is done randomly from the existing class because the ability of each class in the population is the same and the sample class taken is VIII E and the test class is VIII B

The research variables are two variables, they are the independent variable and the dependent variable. The independent variable (Independent) consists of parents' attention ( $X_1$ ), learning activeness ( $X_2$ ) and learning independence ( $X_3$ ), while the dependent variable (dependent)

is the result of learning mathematics ( $Y$ ). Data collection techniques used questionnaires, test and observation methods. In this study, the questionnaire method was used to obtain learning independence data. The test method is used to obtain data about verbal abilities and mathematics learning outcomes of students of class VIII at SMP Muhammadiyah 1 Yogyakarta. While observations are used to obtain data on students who are active in classroom learning activities

The questionnaire test uses the content validity test by the reviewers and the instrument reliability test with the alpha formula, while the test instrument questions use the instrument validity test with product-moment correlation techniques, different power tests and instrument reliability tests with the KR-20 formula (Suharsimi Arikunto. 2009: 100 ). After the data is collected, the analysis prerequisite tests that must be met include normality test, linearity test, and independence test. Data analysis uses product-moment correlation analysis and multiple linear regression analysis.

## RESULTS AND DISCUSSION

In this section further discussion of the results of research analyzed in correlation. This study found that the seventh hypothesis test result was a positive and significant relationship between learning independence, verbal ability and extracurricular participation in mathematics learning outcomes. In other words, the more parents pay attention to students, the better the learning outcomes. Likewise, with the activity of learning the higher, the learning outcomes will be even higher. In addition, the better the independence of student learning affects the learning outcomes.

In this study also uses analysis prerequisite tests which include:

### 1. Test for normality

This normality test is used to test the distribution of data obtained by each variable whether it is normally distributed or not. The summary of the normality test results from the four variables are:

**Table 1.** Summary of normality test results

No	Variable	$\chi^2_{count}$	$\chi^2_{table}$	df	Info
1	Attention Parents ( $X_1$ )	3,2683	7,81	3	Normal
2	Observing Active Learning ( $X_2$ )	1,5657	5,99	2	Normal
3	Learning Independence ( $X_3$ )	0,8810	5,99	2	Normal
4	Mathematics Learning Outcomes ( $Y$ )	2,32,3402	5,99	2	Normal

### 2. Independence test

Independence test is used to find out whether or not there is a relationship between independent variables. A summary of the results of the independent tests of the three independent variables is:

**Table 2.** Summary of independent test results

No	Variable	$\chi^2_{count}$	$\chi^2_{table}$	df	Info
1	$X_1$ to $X_2$	331,476	437,652	25	Independent
2	$X_1$ to $X_3$	332,310	437,652	25	Independent
3	$X_2$ to $X_3$	228,690	437,652	25	Independent

### 3. Linearity test

Linearity test is used to find out between independent variables and dependent variables whether they have a linear relationship or not. Summary of the linearity test results of the four variables are:

**Table 3.** Summary of the results of the linearity test

No	Variable	$F_{count}$	$F_{table}$	Info.
1	$X_1$ to $Y$	0,6847	2,68	Linear
2	$X_2$ to $Y$	0,1768	2,41	Linear
3	$X_3$ to $Y$	1,0929	2,68	Linear

#### 4. Hypothesis testing

From the multiple correlation analysis, it is obtained the value of the multiple correlation coefficient (R) of 0.809. In this study also obtained a coefficient of determination ( $R^2$ ) of 0.654, meaning that the variance of mathematics learning outcomes (Y) can be explained by parents' attention ( $X_1$ ), learning activeness ( $X_2$ ), and learning independence ( $X_3$ ) through linear lines  $\hat{Y} = -16,746 + 0,112 X_1 + 0,787 X_2 + 0,349 X_3$ . This means an increase in one unit ( $X_1$ ) causes a 0.112 increase in Y, an increase in one unit ( $X_2$ ) causes a 0.787 increase in Y and wears one unit ( $X_3$ ) results in 0,349 increase in Y. While for the relative contribution of  $X_1$  by 4,307%,  $X_2$  by 83.754% and  $X_3$  of 11,938% and effective contribution of  $X_1$  of 5,825%,  $X_2$  of 54,930% and  $X_3$  of 7,831%. This shows that learning activeness gives a more significant relationship to mathematics learning outcomes compared to parents' attention and learning independence.

## CONCLUSION

Based on the results of research and discussion as described above, it can be concluded that there is a positive and significant relationship between parents' attention, learning activeness and learning independence This is indicated by the F-test namely  $F_{count} > F_{table}$  or  $16,525 > 2,98$  with a multiple correlation coefficient (R) of 0.809 and a coefficient of determination ( $R^2$ ) of 0.654. Linear regression equation  $\hat{Y} = 16,746 + 0,112 X_1 + 0,787 X_2 + 0,349 X_3$ . The relative contribution of  $X_1$  was 4.307%,  $X_2$  was 83.754% and  $X_3$  was 11.938% and the effective contribution of  $X_1$  was 5.825%,  $X_2$  was 54.930% and  $X_3$  was 7.831%.

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