# THE RELATIONSHIP AMONG TIME LEARNING MANAGEMENT, STUDENTS INTERACTION WITH TEACHER AND THE USE OF RESOURCES WITH MATHEMATICS LEARNING OUTCOMES IN STUDENTS CLASS VIII MTs MUHAMMADIYAH GEDONGTENGEN YOGYAKARTA 

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#### Abstract

Less effective time learning management, less effective students' interaction with the teacher, and less effective of the use of learning resources were expected to have a relationship to mathematics learning outcomes of the students. This study was aimed to determine the presence or absence of a positive and significant relationship among time learning management, student's interaction with teachers and the use of learning resources with mathematics learning outcomes in students class VIII MTs Muhammadiyah Gedongtengen Yogyakarta odd semester in academic year 2016/2017. The population in this study was all students of class VIII odd semester at MTs Muhammadiyah Gedongtengen Yogyakarta in the academic year of 2016/2017 consisted of 3 classes. While the sample being picked was class VIII C using random sampling technique. The techniques of data collection ware test and nontest. The data collection instruments were collected using questionnaires and test methods. Test research instruments used were validity tests, different power tests, and reliability tests. The prerequisite test used was a normality test, linearity test, and independent test. Analysis of data used product-moment correlation analysis and multiple linear regression analysis. The result showed that there was a positive and significant correlation among time learning management, students interaction with teacher and the use of resources with mathematics learning outcomes, multiple correlation coefficient $(\mathrm{R})=0,6195$ with a regression equation $\hat{Y}=12,1863+0,4408 \mathrm{X}_{1}+0,0590 \mathrm{X}_{2}+$ $0,3016 \mathrm{X}_{3}$ at the $5 \%$ significance level, obtained $F_{\text {hitung }}$ at 3,5300 and $F_{\text {tabel }}$ at 3,20 means $F_{\text {hitung }} \geq$ $F_{\text {tabel }}$. The results of relative contribution were $\mathrm{SR} \mathrm{X}_{1}=61,5686 \%, \mathrm{SR} \mathrm{X}_{2}=5,6148 \%$ and $\mathrm{SR} \mathrm{X}_{3}=$ $32,8166 \%$ and the results of effective contribution were $\mathrm{SE} \mathrm{X}_{1}=23,6322 \%, \mathrm{SE} \mathrm{X}_{2}=2,1552 \%$ and SE $X_{3}=12,5962 \%$.


Keywords: Time Learning Management, Students Interaction with Teacher, Use of Learning Resources, Learning Outcomes.

## INTRODUCTION

The term education is something that is familiar to everyone. Moreover, in the era of globalization, known as the age of advances in science and technology (science and technology) as it is today. The rapid development of science and technology has led to competition in various fields of life in Indonesia, one of which is the field of education. Education is also an important tool for the creation of a country. Every human being certainly needs education in his life because the competition for life is getting tougher with the difficulty of finding employment as capital to obtain a better standard of living. Education is expected to be able to form students who think logically, critically, creatively and systematically, so that they can solve problems by developing the potential for this way of thinking to be developed through mathematics lessons. Mathematics is able to be one of the means to improve the ability to face life's challenges in solving problems. Education is not stagnant but has a sustainable system and also has consistent goals. Then to face the problem of education, the government stressed the existence of 9-year compulsory education starting from Elementary Schools (SD) / Madrasah Tsanawiyah (MI) and continued by Middle Schools (SMP) / Madrasah Tsanawiyah (MTs).

Basically, student learning success in terms of learning outcomes is influenced by two factors, namely factors from within (internal) and factors from outside (external). Of the many factors that affect
student learning outcomes including internal factors, namely learning time management. Keep in mind that the success or failure of students in achieving achievement is closely related to how to manage learning time. Future time can be managed effectively only by planning from the start and how we use our time is a personal choice. So many benefits if we can manage time well, and surely a lot of results we will get. In addition to internal factors, there are also external factors related to student learning outcomes including student and teacher interaction. Because the main core of education is student interaction with the teacher where this interaction will encourage students who will foster learning activities in themselves (individuals). But not all students can interact well with the teacher. A teacher must be good at dealing with students who certainly have individual differences as seen from different student behavior, ie the teacher must treat students according to differences so that expectations of student interaction with the teacher can be fulfilled. There are also other external factors related to learning outcomes, namely the use of learning resources because learning resources can support student learning outcomes in mathematics. A student can utilize everything that will facilitate the learning process to achieve optimal learning outcomes. For example books, magazines, newspapers, or people around to help in solving mathematical problems so that learning objectives are achieved.

Learning outcomes, in essence, are a reflection of learning efforts, in general, the more often students learn mathematics, the more understanding or understanding of what is meant in mathematical concepts or theories, so the more optimal the results obtained. In learning mathematics, children who manage their learning time well, interact with teachers well, and are able to utilize learning resources effectively are thought to influence understanding in learning so that learning outcomes will improve.

Based on observations and interviews with several students and mathematics teachers at MTs Muhammadiyah Gedongtengen Yogyakarta on April 6, 2016, students thought mathematics was difficult in understanding some of the problems contained therein. This can be seen from the mathematics midterm grades of eighth-grade students of the Odd Semester MTs Muhammadiyah Gedongtengen Yogyakarta which can be seen in the following table.
Table 1. Mathematics midterm grades for grade VIII odd semester MTs Muhammadiyah Gedongtengen

| No |  | Class | KKM | The <br> number of <br> students | Percentage <br> completeness |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Complete <br> $(\%)$ | Not <br> complete <br> $(\%)$ |  |  |  |
| 1 | A | 75 | 17 | $0 \%$ | $100 \%$ |
| 2 | B | 75 | 19 | $15,79 \%$ | $84,21 \%$ |
| 3 | C | 75 | 21 | $4,76 \%$ | $95,24 \%$ |

(Source :MTs Muhammadiyah Gedongtengen Yogyakarta)

Based on observations on April 6, 2016, at MTs Muhammadiyah Gedongtengen Yogyakarta, there were some students who did not manage their time properly, for example, they went to the library to lie down during class hours, some also went to the canteen, when they finished sports subjects, usually students did not directly change their uniforms but after changing their hours they change their uniforms so their activities to change this uniform take up the time of other subjects. In addition to observations, interviews were also conducted with MTs Muhammadiyah Gedongtengen students in Yogyakarta, it was found that there were some students who did not manage their time properly, for example, they watched TV while studying, slept late, made groups (gangs) who had no goals. Thus it can be said that they have wasted their time, students also often forget the task of making homework and helping parents at home. Therefore, in a learning process students must have the ability to manage learning time in order to achieve the objectives to be pursued effectively and efficiently.

Based on observations about student interactions with teachers obtained information that all students can interact well with the teacher. When students are facing their learning assignments accompanied by the teacher in the class, there are some students who make a fuss even students rush out of the classroom when the bell after the lesson rings, even though the teacher has not ended the teaching and learning activities. A teacher must be good at dealing with students who certainly have individual differences as seen from different student behavior, ie the teacher must treat students according to differences so that expectations of student interaction with the teacher can be fulfilled.

Based on observations about the use of learning resources, students are not optimal in utilizing learning resources. Students have been facilitated by the school with a mathematics textbook but only learned during the lesson students tend not to want to read and study it again. Students do not take the initiative to find other learning resources to solve problems in learning mathematics.

The purpose of this study is as follows:

1. To find out whether there is a positive and significant relationship between learning time management and mathematics learning outcomes of eighth grade students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
2. To find out whether there is a positive and significant relationship between the interaction of students and teachers with mathematics learning outcomes of eighth-grade students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
3. To find out whether there is a positive and significant relationship between the use of learning resources with mathematics learning outcomes for students of class VIII at Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
4. To find out whether there is a positive and significant relationship between learning time management and student-teacher interaction with mathematics learning outcomes of eighth grade students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
5. To find out whether there is a positive and significant relationship between learning time management and the use of learning resources with mathematics learning outcomes of students of class VIII of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
6. To find out whether there is a positive and significant relationship between student and teacher interaction and the use of learning resources with mathematics learning outcomes of Grade VIII students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year.
7. To find out whether there is a positive and significant relationship between learning time management, student interaction with teachers and the use of learning resources with mathematics learning outcomes for students of class VIII Muhammadiyah Gedongtengen MTs Yogyakarta odd semester 2016/2017 academic year.

## METHODS

This research is classified as quantitative research. This research was conducted at MTs Muhammadiyah Gedongtengen Yogyakarta. Research time in November, the odd semester of the 2016/2017 school year. According to Sugiyono (2008: 117) "Population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions." The population in this study were all students of class VIII.

According to Sugiyono (2008: 118) "The sample is part of the number and characteristics possessed by the population. what is learned from the sample, the conclusion can be applied to the population. For this reason, samples taken from the population must be truly representative (representative). "In this study, samples were taken 1 class randomly, using a random sampling technique for classes without regard to strata in the population. Sampling was done by lottery class, obtained class VIII C as a research sample class with a total of 21 students.

This study consists of 4 variables, namely 3 independent variables and 1 dependent variable, including the independent variable, namely learning time management $\left(\mathrm{X}_{1}\right)$, student interaction with the teacher $\left(\mathrm{X}_{2}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$. While the dependent variable is the learning outcomes of mathematics (Y). This study uses two data collection techniques in data collection, namely test and questionnaire techniques. According to Arikunto, Suharsimi (2012: 46) "Tests are a series of questions or exercises or other tools used to measure skills, intelligence knowledge, abilities or talents possessed by individuals or groups." Tests are used to collect data about the dependent variable, namely learning outcomes grade VIII mathematics. According to Arikunto, Suharsimi (2012: 42) "Questionnaire or questionnaire is a list of questions that must be filled in by the person to be measured (respondent). With this questionnaire, people can be known about the state/data themselves, experiences, knowledge of attitudes or opinions, and others. "The questionnaire method in this study is used to obtain data on learning time management, student interaction with teachers and the use of learning resources. The data analysis technique in this research is descriptive data analysis. For the prerequisite test analysis using the hypothesis test with the requirements to meet the normality test, linearity test and independent test. Furthermore, the hypothesis test uses regression analysis. Regression analysis is a mathematical instrument that states the functional relationship between the independent variable and the dependent variable.

## RESULTS AND DISCUSSION

The first hypothesis test results with t-test analysis obtained a simple correlation coefficient (r) between learning time management with mathematics learning outcomes of 0.5651 , which means that the relationship between variables X 1 and Y included in the moderate category and has a positive relationship. Then the correlation test is performed and obtained $t_{\text {stat }}$ of 3,6183 while $t_{\text {table }}$ at a significant level of $5 \%$ and $v=19$ of 1.7291 so obtained $t_{\text {stat }}>t_{\text {table }}$ thus the first hypothesis has been tested with $\mathrm{H}_{0.1}$ rejected and $\mathrm{H}_{1.1}$ accepted, then there is a positive and significant relationship between learning time management and mathematics learning outcomes. This can be seen from the relationship between learning time management (X1) with Y mathematics learning outcomes in the form of a simple linear regression that is $\hat{Y}=27,0967+0,5956 \mathrm{X}_{1}$, with a regression direction coefficient of 0.5956 . This means that each increase in one unit $\left(\mathrm{X}_{1}\right)$ results in a 0.5956 increase in Y. In this study also obtained a determinant coefficient $\left(r^{2}\right)$ of 0.3193 means that the variation in the value of $Y$ that can be explained by the regression line equation obtained is $31.93 \%$. The rest, the variation of variable Y is influenced by other variables that are outside the equation. From the results of this calculation, it can be seen that the higher the level of learning time management, the higher mathematics learning outcomes obtained will be.

The second hypothesis test results with t-test analysis obtained a simple correlation coefficient (r) between the interaction of students with teachers with mathematics learning outcomes of 0.382918932 , which means that the relationship between variables $X_{2}$ and $Y$ is included in the weak category and has a positive relationship. Then the correlation test is performed and obtained $t_{\text {stat }}$ of 1,9559 while $t_{\text {table }}$ at a significant level of $5 \%$ and $\mathrm{v}=19$ of 1.7291 so obtained $t_{\text {stat }}>t_{\text {table }}$ thus the first hypothesis has been tested with $\mathrm{H}_{(0,2)}$ rejected and $\mathrm{H}_{(1,2)}$ is accepted, then there is a positive and significant relationship between student and teacher interaction with mathematics learning outcomes. This can be seen from the relationship between student and teacher interaction $\left(\mathrm{X}_{2}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of simple linear regression that is $\hat{Y}=40.7931+0,4017 \mathrm{X}_{2}$, with a regression direction coefficient of 0.4017 . This means that each increase in one unit $\left(\mathrm{X}_{2}\right)$ results in 0.4017 increase in Y. In this study also obtained a determinant coefficient ( $\mathrm{r}^{2}$ ) of 0.1466 means that the variation in the value of $Y$ that can be explained by the regression line equation obtained is $14.66 \%$. The rest, the variation of variable Y is influenced by other variables that are outside the equation. From the results of this calculation, it can be seen that the higher the level of student interaction with the teacher, the mathematics learning outcomes obtained will be higher as well.

The third hypothesis test results with t-test analysis obtained a simple correlation coefficient (r) between the use of learning resources with mathematics learning outcomes of 0.4549 , which means that the relationship between variables $\mathrm{X}_{3}$ and Y is included in the weak category and has a positive relationship. Then a correlation test is performed and a $t_{\text {stat }}$ of 2,5002 is obtained while $t_{\text {table }}$ at a significant level of $5 \%$ and $\mathrm{v}=19$ of 1.7291 so that a $t_{\text {stat }}>t_{\text {table }}$ is obtained so that the first hypothesis has been tested with $\mathrm{H}_{(0.3)}$ rejected and $\mathrm{H}_{(1,3)}$ accepted, then there is a positive and significant relationship between the use of learning resources with learning outcomes in mathematics. This can be seen from the relationship between the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes (Y) in the form of simple linear regression that is $\hat{Y}=33,8569+0,4954 \mathrm{X}_{3}$, with a regression direction coefficient of 0.4954 . This means that each increase in one unit $\left(\mathrm{X}_{3}\right)$ results in a 0.4954 increase in Y. In this study also obtained a determinant coefficient ( $\mathrm{r}^{2}$ ) of 0.2069 means that the variation in the value of Y that can be explained by the regression line equation obtained is $20.693 \%$. The rest, the variation of variable Y is influenced by other variables that are outside the equation. From the results of this calculation, it can be seen that the higher the level of utilization of learning resources, the higher the mathematics learning outcomes obtained will be.

The fourth hypothesis test results with the analysis of the F-test obtained a simple correlation coefficient $(\mathrm{R})$ between learning time management $\left(\mathrm{X}_{1}\right)$ and the interaction of students and teachers $\left(\mathrm{X}_{2}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ of 0.5655 , which means that the relationship between variables $\mathrm{X}_{1}$ and $\mathrm{X}_{2}$ with Y included in the moderate category and has a positive relationship. Then the correlation test is performed and obtained $F_{\text {stat }}$ of 4,2309 while $F_{\text {table }}$ at a significant level of $5 \%$ and $\mathrm{v}_{1}$ the numerator $=2$ and $\mathrm{v}_{2}$ the denominator $=18$ is 3.55 so that it is obtained $F_{\text {stat }}>F_{\text {table }}$ at a significant level of $5 \%$ and $v_{1}$ numerator $=2$ and $v_{2}$ the denominator $=18$ is 3.55 so that the first hypothesis has been tested with $\mathrm{H}_{(0.4)}$ rejected and $\mathrm{H}_{(1.4)}$ accepted, then there is a positive and significant relationship between learning time management and student-teacher interaction with mathematics learning outcomes. This can be seen from the relationship between learning time management $\left(\mathrm{X}_{1}\right)$ and student and teacher interaction $\left(\mathrm{X}_{2}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of multiple linear regression two predictors obtained by $\hat{Y}=26,3321+0,5758 \mathrm{X}_{1}+$ $0,0304 \mathrm{X}_{2}$. This means that each increase in one unit $\left(\mathrm{X}_{1}\right)$ results in a 0.5758 increase in Y and every increase in one unit $\left(\mathrm{X}_{2}\right)$ results in a 0.0304 increase in Y. In this study also obtained a determinant coefficient ( $\mathrm{R}^{2}$ ) of 0.3198 , this shows the amount of contribution variables $\mathrm{X}_{1}$ and $\mathrm{X}_{2}$ to Y . while for SR X 1 that is equal to $96.5295 \%$ and $\operatorname{SR} \mathrm{X}_{2}$ that is equal to $3.4705 \%$ and $\operatorname{SE} X_{1}$ that is equal to $30.8674 \%$ and SE $\mathrm{X}_{2}$ which is equal to $1.1098 \%$ meaning that learning outcomes of mathematics are influenced by learning time management is $30.8674 \%$ and student and teacher interaction is $1.1098 \%$ while the rest is influenced by other factors not discussed in this study. From the results of this calculation, it is known that the higher the learning time management and the higher the interaction of students with the teacher, the mathematics learning outcomes obtained will be higher as well.

The fifth hypothesis test results With the analysis of the F-test obtained a simple correlation coefficient (R) between learning time management $\left(\mathrm{X}_{1}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes (Y) of 0.5939 , which means the relationship between variables $X_{1}$ and $\mathrm{X}_{3}$ with Y is included in the moderate category and has a positive relationship. Then the correlation test is performed and $F_{\text {stat }}$ is obtained 4.9056 while $F_{\text {table }}$ at $5 \%$ significance level and $\mathrm{v}_{1}$ numerator $=2$ and $\mathrm{v}_{2}$ denominator $=18$ is 3.55 so $F_{\text {count }}>F_{\text {table }}$ thus the first hypothesis has been tested with $\mathrm{H}_{(0.5)}$ rejected and $\mathrm{H}_{(1.5)}$ accepted, then there is a positive and significant relationship between learning time management and the use of learning resources with learning outcomes in mathematics. This can be seen from the relationship between learning time management $\left(\mathrm{X}_{1}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of multiple linear regression two predictors namely this means that each increase in one unit $\left(\mathrm{X}_{1}\right)$ results in 0.5758 increase in Y and every increase in one unit $\left(\mathrm{X}_{2}\right)$ results in 0.0304 increase in Y . In this study also obtained a determinant coefficient $\left(\mathrm{R}^{2}\right)$ of 0.3198 , this shows the amount of contribution variables $X_{1}$ and $X_{2}$ to $Y$. while for $S R X_{1}$ that is equal to $96.5295 \%$ and SR $X_{2}$ that is equal to $3.4705 \%$ and $\operatorname{SE} X_{1}$ that is equal to $30.8674 \%$ and $\operatorname{SE} X_{2}$ which is
equal to $1.1098 \%$ meaning that learning outcomes of mathematics are influenced by learning time management is $30.8674 \%$ and student and teacher interaction is $1.1098 \%$ while the rest is influenced by other factors not discussed in this study. From the results of this calculation, it is known that the higher the learning time management and the higher the interaction of students with the teacher, the mathematics learning outcomes obtained will be higher as well.

The fifth hypothesis test results With the analysis of the F-test obtained a simple correlation coefficient ( R ) between learning time management $\left(\mathrm{X}_{1}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes $(Y)$ of 0.5939 , which means the relationship between variables $X_{1}$ and $\mathrm{X}_{3}$ with Y is included in the moderate category and has a positive relationship. Then the correlation test is performed and $F_{\text {stat }}$ is obtained 4.9056 while $F_{\text {table }}$ at $5 \%$ significance level and $\mathrm{v}_{1}$ numerator $=2$ and $\mathrm{v}_{2}$ denominator $=18$ is 3.55 so $F_{\text {count }}>F_{\text {table }}$ thus the first hypothesis has been tested with $\mathrm{H}_{(0.5)}$ rejected and $\mathrm{H}_{(1.5)}$ accepted, then there is a positive and significant relationship between learning time management and the use of learning resources with learning outcomes in mathematics. This can be seen from the relationship between learning time management ( $\mathrm{X}_{1}$ ) and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of multiple linear regression two predictors namely $\hat{Y}=18,7678+0,4749 \mathrm{X}_{1}+0,2351 \mathrm{X}_{3}$. This means that each increase in one unit $\left(\mathrm{X}_{1}\right)$ resulted in a 0.4749 increase in Y and every increase in one unit $\left(\mathrm{X}_{3}\right)$ resulted in a 0.2351 increase in Y. In this study also obtained a determinant coefficient $\left(\mathrm{R}^{2}\right)$ of 0.3528 , this shows the amount of contribution variables $X_{1}$ and $X_{3}$ against $Y$. while for $\operatorname{SR} X_{1}$ that is $72,1603 \%$ and $\operatorname{SR} X_{3}$ which is $27.8397 \%$ and $\operatorname{SE} X_{1}$ that is $25.4568 \%$ and $\mathrm{SE} \mathrm{X}_{3}$ which is $9.8213 \%$ meaning that the results of mathematics learning are influenced by learning time management is $25.4568 \%$ and the use of learning resources is $9.88213 \%$ while the rest is influenced by other factors not discussed in this study. From the results of this calculation, it is known that the higher the learning time management and the higher the use of learning resources, the higher the mathematics learning outcomes obtained will be.

The sixth hypothesis test results with the analysis of the F-test obtained a simple correlation coefficient ( R ) between the interaction of students with teachers $\left(\mathrm{X}_{2}\right)$ and the utilization of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes (Y) of 0.5436, which means the relationship between variables $\mathrm{X}_{2}$ and $\mathrm{X}_{3}$ with Y included in the moderate category and has a positive relationship. Then a correlation test is performed and $F_{\text {count }}$ is obtained at 3.7744 while $F_{\text {table }}$ at a significant level of $5 \%$ and $\mathrm{v}_{1}$ numerator $=2$ and $\mathrm{v}_{2}$ denominator $=18$ is 3.55 so $F_{\text {count }}>F_{\text {table }}$ thus the first hypothesis has been tested with $\mathrm{H}_{(0.6)}$ rejected and $\mathrm{H}_{(1.6)}$ accepted, then there is a positive and significant relationship between student and teacher interaction and the use of learning resources with mathematics learning outcomes. This can be seen from the relationship between student and teacher interaction $\left(\mathrm{X}_{2}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of multiple linear regression two predictors, namely $\hat{Y}=15,8525+0,3187 \mathrm{X}_{2}+0,4289 \mathrm{X}_{3}$. This means that each increase in one unit $\left(\mathrm{X}_{2}\right)$ results in a 0.3187 increase in Y and every increase in one unit $\left(\mathrm{X}_{3}\right)$ results in a 0.4289 increase in $Y$. In this study also obtained a determinant coefficient $\left(\mathrm{R}^{2}\right)$ of 0.3774 , this shows the amount of contribution variables $X_{2}$ and $X_{3}$ to $Y$. while for $S R X_{2}$ is $39,3657 \%$ and SR $\mathrm{X}_{3}$ is $60.6343 \%$ and $\mathrm{SE} \mathrm{X}_{2}$ is $11.6313 \%$ and $\mathrm{SE} \mathrm{X}_{3}$ is $17.9155 \%$ meaning that learning outcomes are influenced by mathematics student interactions with teachers by $11.6313 \%$ and the use of learning resources by $17.9155 \%$ while the rest is influenced by other factors not discussed in this study. From the results of this calculation, it is known that the higher the interaction of students with teachers and the higher the use of learning resources, the results of learning mathematics obtained will be higher as well.

The seventh hypothesis test results With the F-test analysis obtained a simple correlation coefficient $(R)$ between learning time management $\left(\mathrm{X}_{1}\right)$, student interaction with the teacher $\left(\mathrm{X}_{2}\right)$ and the use of learning resources $\left(X_{3}\right)$ with mathematics learning outcomes $(Y)$ of 0.6195 which means that the variable relations $X_{1}, X_{2}$, and $X_{3}$ with $Y$ are included in the strong category and have a positive relationship. Then a correlation test is performed and a $F_{\text {count }}$ of 3.5300 is obtained while $F_{\text {table }}$ at a significant level of $5 \%$ and $\mathrm{v}_{1}$ of numerator $=3$ and $\mathrm{v}_{2}$ of the denominator $=17$ of 3.20 so that a $F_{\text {count }}>F_{\text {table }}$ is obtained so the first hypothesis has been tested with $\mathrm{H}_{(0.7)}$ rejected and $\mathrm{H}_{(1.7)}$
accepted, then there is a positive and significant relationship between learning time management, student interaction with teachers and the use of learning resources with mathematics learning outcomes. This can be seen from the relationship between learning time management ( $\mathrm{X}_{1}$ ), interaction between students and teachers $\left(\mathrm{X}_{2}\right)$ and the use of learning resources $\left(\mathrm{X}_{3}\right)$ with mathematics learning outcomes $(\mathrm{Y})$ in the form of multiple linear regression three predictors, namely $\hat{Y}=12,1863+0,4408 \mathrm{X}_{1}+$ $0,05904 X_{2}+0,3016 X_{3}$. This means that each increase in one unit $\left(X_{1}\right)$ results in a 0.44083 increase in Y, every increase in one unit $\left(\mathrm{X}_{2}\right)$ results in 0.05904 increase in Y and every increase in one unit $\left(\mathrm{X}_{3}\right)$ results in 0.3016 increase in Y. In this study also obtained the determinant coefficient $\left(\mathrm{R}^{2}\right)$ of 0.3838 , this shows the magnitude of the contribution of variables $X_{1}, X_{2}$, and $X_{3}$ to $Y$. while for $\operatorname{SR} X_{1}$ that is $61.5686 \%$, $\mathrm{SR} \mathrm{X}_{2}$ is $5.6148 \%$ and $\mathrm{SR} \mathrm{X}_{3}$ is $32.8166 \%$ and $\operatorname{SE} \mathrm{X}_{1}$ amounted to $23.6322 \%$, SE $\mathrm{X}_{2}$ amounted to $2.1552 \%$ and $\mathrm{SE} \mathrm{X}_{3}$ amounted to $12.5962 \%$ meaning that mathematics learning outcomes were influenced by management time of learning amounted to $23.6322 \%$, interaction between students and teachers amounted to $2,1552 \%$ and the utilization of learning resources by $12.5962 \%$ while the rest is influenced by other factors not discussed in this study.

## CONCLUSION

Based on the results of research and discussion as described, several research conclusions can be drawn as follows:

1. There is a positive and significant relationship between learning time management and mathematics learning outcomes for students of class VIII at MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is evidenced by the results of calculations that show that large $t_{\text {count }}>t_{\text {table }}$ that is $3,6183>1,7291$ with a correlation coefficient (r) of 0.5651 and a regression equation $\hat{Y}=27,0967+0,5956 \mathrm{X}_{1}$ with a coefficient of determination ( $\mathrm{r}^{2}$ ) of 0.3193 .
2. There is a positive and significant relationship between the interaction of students and teachers with mathematics learning outcomes of eighth-grade students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is evidenced by the results of calculations that show that large $t_{\text {count }}>t_{\text {table }}$ that is $1,9559>1,7291$ with a correlation coefficient (r) of 0.3829 and a regression equation $\hat{Y}=40.7931+0,4017 \mathrm{X}_{2}$ with a coefficient of determination ( $\mathrm{r}^{2}$ ) of 0.1466 .
3. There is a positive and significant relationship between the use of learning resources and mathematics learning outcomes for students of class VIII of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is evidenced by the results of calculations that show that large $t_{\text {count }}>t_{\text {table }}$ that is $2,5002>1,7291$ with a correlation coefficient (r) of 0.4549 and a regression equation $\hat{Y}=33,8569+0,4954 \mathrm{X}_{3}$ with a coefficient of determination $\left(\mathrm{r}^{2}\right)$ of 0.2069 .
4. There is a positive and significant relationship between learning time management and the interaction of students and teachers with mathematics learning outcomes of eighth grade students of MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is indicated by the results of calculations that show that the magnitude of $F_{\text {count }}>$ $F_{\text {table }}$ is $4.2309>3.55$ with a correlation coefficient $(\mathrm{R})$ of 0.5655 and the regression equation $\hat{Y}=26,3321+0,5758 \mathrm{X}_{1}+0,0304 \mathrm{X}_{2}$ with a coefficient of determination ( $\mathrm{R}^{2}$ ) of 0.3198 . Also obtained $\operatorname{SR} X_{1}=96.5295 \%$ and $\operatorname{SR} X_{2}=3.4705 \%$ and $\operatorname{SE} X_{1}=30.8674 \%$ and $\operatorname{SE} X_{2}=1.1098 \%$.
5. There is a positive and significant relationship between learning time management and the use of learning resources with mathematics learning outcomes for students of class VIII at MTs Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is indicated by the results of calculations that show that the magnitude of $F_{\text {count }}>F_{\text {table }}$ is 4.9056 $>3.55$ with a correlation coefficient $(\mathrm{R})$ of 0.5939 and a regression equation $\hat{Y}=18,7678+$ $0,4749 X_{1}+0,2351 X_{3}$ with a coefficient of determination $\left(R^{2}\right)$ of 0.3528 . Also obtained SR $X_{1}$ $=72,1603 \%$ and $\operatorname{SR} X_{3}=27.8397 \%$ and $\operatorname{SE} X_{1}=25.8397 \%$ and $\mathrm{SE}_{3}=9.88213 \%$.
6. There is a positive and significant relationship between the interaction of students with teachers and the use of learning resources with mathematics learning outcomes of students of class VIII at Muhammadiyah Gedongtengen Yogyakarta in the odd semester of the 2016/2017 school year. This is indicated by the results of calculations that show that the magnitude of $F_{\text {count }}>F_{\text {table }}$ is 3.7744 $>3.55$ with a correlation coefficient $(\mathrm{R})$ of 0.5436 and the regression equation $\hat{Y}=15,8525+$ $0,3187 X_{2}+0,4289 X_{3}$ with a coefficient of determination $\left(R^{2}\right)$ of 0.2955 . Also obtained SR X ${ }_{2}$ $=39,3657 \%$ and $\operatorname{SR} \mathrm{X}_{3}=60.6343 \%$ and $\mathrm{SE} \mathrm{X}_{2}=11.6313 \%$ and $\mathrm{SE} \mathrm{X}_{3}=17.9155 \%$.
7. There is a positive and significant relationship between learning time management, student interaction with teachers and the use of learning resources with mathematics learning outcomes of students of class VIII MTs Muhammadiyah Gedongtengen Yogyakarta odd semester of the 2016/2017 school year. This is indicated by the results of calculations that show that the magnitude of $F_{\text {stat }}>F_{\text {table }}$ is $3.5300>3.20$ with a correlation coefficient $(\mathrm{R})$ of 0.6195 and the regression equation $\hat{Y}=12,1863+0,4408 \mathrm{X}_{1}+0,0590 \mathrm{X}_{2}+0,3016 \mathrm{X}_{3}$ with a coefficient of determination ( $\mathrm{R}^{2}$ ) of 0.3838. Also obtained $\mathrm{SR} \mathrm{X}_{1}=61.5686 \%, \mathrm{SR} \mathrm{X}_{2}=5.6148 \%$ and $\mathrm{SR} \mathrm{X}_{3}=$ $32.8166 \%$ and $\mathrm{SE} \mathrm{X}_{1}=23.6322 \%, \mathrm{SE} \mathrm{X}_{2}=2.1552 \%$, and $\mathrm{SE} \mathrm{X}_{3}=12.5962 \%$. That is, student mathematics learning outcomes are influenced by the management of learning time, student interaction with the teacher, and the use of learning resources by $38.3836 \%$ and the rest are influenced by other factors not discussed in this study. So it can be seen that the learning time management provides a greater contribution than the interaction of students with teachers and the use of learning resources with student mathematics learning outcomes.

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