

**THE RELATIONSHIP BETWEEN STUDENTS LEARNING INTEREST,
PARENTAL SUPERVISION, AND STUDENTS PERCEPTION TO LEARNING
ENVIRONMENT AT SCHOOL WITH MATHEMATICS LEARNING
OUTCOMES IN CLASS OF X TKRSMK NEGERI 1 SEYEGAN SLEMAN
DISTRICT**

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ABSTRACT

Students' mathematics learning outcomes who low are associated with several factors. Students learning interest, parental supervision, and students' perception of the learning environment at school are several factors that probably related to learning outcomes. The purpose of this research is to know whether existing or not a positive relationship and significant between students learning interest, parental supervision, and students perception to learning environment at school with students mathematics learning outcomes in class X TKR (Teknik Kendaraan Ringan) SMK Negeri 1 Seyegan, Sleman District in odd semester in academic year of 2016/2017. The population in this research was a student of class X TKR SMK Negeri 1 Seyegan, Sleman District in the odd semester in the academic year of 2016/2017 who consisting of class X of TKR 1, X of TKR 2, and X of TKR 3 with total 96 students. Sample taken class X of TKR 3 as a research class sample with random sampling to the class. Technique to collect the data uses the chief to obtain students learning interest, parental supervision, and students' perception of learning environment data at school, and a method of test to obtain data of mathematics learning outcomes. Research instruments test: validity test, different power test, and reliability test. The prerequisite analysis test include normality test, linearity test, and independence test. The data analysis use product moment analysis and multiple linear regression analysis to analyze the data. The research results showed that there was a positive and significant relationship between students learning interest, parental supervision, and students perception to learning environment at school with students mathematics learning outcomes in class X TKR (Teknik Kendaraan Ringan) SMK Negeri 1 Seyegan, Sleman District in odd semester in the academic year of 2016/2017. This is shown by $F_{count} > F_{table}$ is $19,448 > 2,95$ with $R = 0,8220$ dan $R^2 = 0,6757$ with $\hat{Y} = -60,9746 + 1500 X_1 + 0,7745 X_2 + 0,4730 X_3$, with $SR X_1 = 6,6765 \%$, $SR X_2 = 72,9898 \%$ and $SR X_3 = 20,3337\%$, $SEX_1 = 4,5114 \%$, $SE X_2 = 49,3203 \%$ and $SE X_3 = 13,7398\%$.

Keywords: Learning Interest, Parental Supervision, Students Perception of the Environment, Mathematics Learning Outcomes.

INTRODUCTION

Education is a form of dynamic human culture and a condition for development. Changes or developments in education are things that should occur in line with changes in cultural life. Various attempts were made by someone to get an education. The meaning, the future of this nation is very dependent on the conditions of education.

A learning success is basically caused by several factors but can be classified into two groups, namely internal factors, and external factors. Internal factors are everything that comes from within the individual. While external factors are all things that come from outside the individual, which can directly or indirectly influence the individual in achieving learning achievement in school including family, community environment, the way the teacher teaches less precisely, curriculum, learning methods, facilities, and infrastructure, and learning environment. In relation to education that takes place in schools, in addition to teachers, students also play an important role in achievement, including students' interest in learning themselves. Student learning interest is one example of student internal factors that can influence success in learning. Students' interest in learning from one another is not the same. Students who have a high interest in learning will be more active in learning than students who have a low level of learning.

One external factor that also determines the success of student learning is the attention of parents. Parents' attention to students can be realized by providing students with learning tools, providing motivation, providing guidance, reminding children of their obligations, reminding children of their needs and so on. These things will lead to attitudes or self-confidence of children and in the end, will lead to the independence of learning in themselves as well. In addition to the attention of parents, the learning environment at school is one of the factors that determine the success of the education process. The condition of the learning environment at school influences student achievement. School is a place where formal education takes place. All activities that occur in schools are directed and planned so that they can produce quality outputs.

Student learning outcomes in class X TKR SMK 1 Seyegan Sleman Regency is still low. This is because students assume that mathematics is a difficult and even boring subject. The problems in this study are: 1) Is there a positive and significant relationship between interest in learning with mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 school year? 2) Is there a positive and significant relationship between parents' attention with the learning outcomes of students of class X TKR of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 school year ?, 3) Is there a positive and significant relationship between students' perceptions of the learning environment at school with mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency odd semester 2016/2017 academic year?, 4) Is there a positive and significant relationship between student learning interest and parents' attention with the mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency Odd semester 2016/2017 academic year ?, 5) Is there a positive and significant relationship between student interest in learning and students' perceptions of the learning environment in school with mathematics learning outcomes for class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 school year ?, 6) Is there a positive and significant relationship between parents' attention and students' perceptions of the learning environment at school with mathematics learning outcomes for class X students TKR SMK Negeri 1 Seyegan Sleman Regency in the odd semester of 2016/2017 school year ?, 7) Is there a positive and significant relationship between students' interest in learning, parents' attention, and students' perceptions of the learning environment at school with the mathematics learning outcomes of class X TKR SMK Negeri 1 Seyegan Sleman Regency in the odd semester of 2016/2017 school year?

The purpose of this study is to: 1) Determine whether there is a positive and significant relationship between learning interest and mathematics learning outcomes of class X students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 academic year., 2) Knowing whether there is a positive and significant relationship between the attention of parents with mathematics learning outcomes of class X students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 academic year. 3) Knowing whether there is a positive and significant relationship between students' perceptions of the learning environment at school with mathematics learning outcomes of class X students State Vocational School 1 Seyegan Sleman Regency in the odd semester of 2016/2017 academic year., 4) Knowing whether there is a positive and significant relationship between student learning interest and parents' attention with mathematics learning outcomes of class X students of State Vocational School 1 in Seyegan Sleman Regency in the academic year 2016 semester / 2017., 5) Knowing whether there is a positive and significant relationship between ra students' interest in learning and students' perceptions of the learning environment at school with mathematics learning outcomes for class X students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 academic year., 6) Knowing whether there is a positive and significant relationship between parents' attention and student perceptions on the learning environment in schools with the learning outcomes of students of class X SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 academic year., 7) Knowing whether there is a positive and significant relationship between student learning interests, parents' attention, and students' perceptions of the environment study in school with the results of learning

mathematics students of class X SMK 1 Seyegan Sleman regency odd semester of the 2016/2017 school year.

THEORY

According to Slameto (2010: 180) "Interest is a sense of preferability and a sense of interest in a thing or activity, without anyone asking." While according to Dalyono, M. (2007: 56) "A great interest in something is a big capital means to achieve/obtain the object or destination of interest. "

From the understanding of interest above it can be concluded that interest is a sense of preference for something and a sense of achieving/obtaining objects/goals of interest. The indicators of interest used in this study are: 1) feeling happy, 2) attention, 3) attraction, and 4) concentration.

According to Ahmadi, Abu (2007: 221) "families are the most important primary group in society. The family is a group formed by the relationship between men and women, a relationship which lasts a little longer to create and raise children ". According to Suryabrata, Sumadi (2006: 14) provides two definitions of parental attention, namely: 1) attention is the concentration of psychic energy directed at an object, and 2) attention is a lot of awareness that accompanies something that is done.

From the above understanding, it can be concluded that parents' attention is family-centered attention which is the first social group where children are members. Attention is also the concentration of psychic energy aimed at an object, and more or less awareness that accompanies something that is done. Indicators of interest used in this study, namely: 1) providing a good learning place, 2) providing learning facilities such as learning tools, 3) creating a conducive learning atmosphere, 4) paying attention to children's learning time, and 5) paying attention to the child's association.

Perception according to Walgito, Bimo (2004: 208) is the process of organizing and interpreting the stimulus received by individuals that take place in an integrated manner within the individual. Meanwhile, according to Slameto (2010: 102) Perception is a process that involves the entry of messages or information into the human brain. Through human perception, a continuous relationship with the environment. This relationship is done through the senses, namely the sense of sight, listener, touch, taste, and smell.

The learning environment is divided into 3 namely learning environments at home, learning environment at school, and the learning environment in the community. According to Slameto (2010: 60-64), student learning will receive influence from the family, namely: 1) the way parents educate, 2) relationships between family members, 3) the atmosphere of the house, 4) the economic situation of the family, 5) understanding of parents and 6) cultural background.

According to Dalyono, M. (2007: 131) school is one factor that also influences children's growth and development, especially for their intelligence. Children who have never attended school will be left behind in various ways. Schools are very instrumental in improving the mindset and personality of children. Children who enter teacher's schools have different personalities from children who enter STM. Likewise, those who graduate from high school will think differently from people who do not attend school.

Indicators of students' perceptions of the learning environment in schools used in this study are: 1) relations between students, 2) student relations with teachers at school, 3) school rules and discipline, 4) conditions of learning tools, 5) atmosphere of learning tools, and 6) classroom conditions.

According to Syah, Muhibbin (2016: 148) argues that "ideal learning outcomes include psychological domains that change as a result of student learning experiences and processes." According to Suprijono, Agus (2009: 5-7) learning outcomes are patterns of actions, values, understandings, attitudes, appreciation, and skills.

So, it can be stated that the results of learning mathematics are the results achieved by someone in an effort to learn mathematics expressed in the form of values in the form of numbers or letters as a result of evaluations in learning mathematics.

METHODS

This research is classified as quantitative research by taking place at SMK Negeri 1 Seyegan, Sleman Regency in the odd semester of the 2016/2017 school year. The population in this study were all students of class X TKR SMK 1 Seyegan Sleman regency consisting of 3 classes namely X TKR 1, X TKR 2, and X TKR 3 totaling 96 students. As a sample class 32 students took class X TKR 3 using random sampling techniques to the class. In this study, the data collection techniques used were questionnaires and tests. Questionnaire techniques to obtain data on student learning interest, parents' attention, and students' perceptions of the learning environment at school, while test techniques to obtain data about student mathematics learning outcomes.

The test used is an analysis prerequisite test with a normality test, linearity test, and independence test. In this study, the hypothesis test used was multiple linear regression analysis.

RESULTS AND DISCUSSION

1. Student Learning Interest

Table 1. Distribution of Number of Students Based on Student Learning Interest Score Categories

Category	Score	F	%
High	$X > 86,75$	5	15,625
Medium	$68,75 \leq X \leq 86,75$	23	71,875
Low	$X < 68,75$	4	12,5
Total		32	100

From the results of the categories, as shown in table 1, it can be seen the interest in learning of students of class X TKR SMK 1 Seyegan Sleman Regency odd semester 2016-2017 Academic Year included in the medium category.

2. Parental Attention

Table 2. Distribution of Number of Students by Parental Attention Score Category

Category	Score	F	%
High	$X > 100,03$	6	18,75
Medium	$72,03 \leq X \leq 100,03$	23	71,875
Low	$X < 72,03$	3	9,375
Total		32	100

From the results of the categories, as shown in Table 2, it can be seen the attention of parents of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year included in the medium category.

3. Learning environment at school

Table 3. Distribution of Number of Students by Categorical Score of Students' Perceptions of the Learning Environment in Schools

Category	Score	F	%
High	$X > 97,25$	4	12,5
Medium	$77,25 \leq X \leq 97,25$	23	71,875
Low	$X < 77,25$	8	15,625
Total		32	100

From the results of the categories, as shown in Table 3, it can be seen that students' perceptions of the learning environment at school in class X TKR students of SMK Negeri 1 Seyegan, Sleman Regency in the odd semester of the 2016/2017 Academic Year are included in the medium category.

4. Mathematics learning outcomes

Table 4. Distribution of Number of Students by Mathematical Learning Outcome Category

Category	Score	F	%
High	$X > 76,8228$	6	18,75
Medium	$40,2398 \leq X \leq 76,8228$	22	68,75
Low	$X < 40,2398$	4	12,5
Total		32	100

From the results of the categories, as seen in Table 4, it can be seen that the majority of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year have moderate learning outcomes in mathematics

Table 5. Summary of Normality Test Results

Category	χ^2_{count}	χ^2_{table}	df	Conclusion
Interest in student learning	1,9024	7,8147	3	Normal
Learning environment at school	2,3593	9,4877	4	Normal
Motivation to learn	0,1147	7,8147	3	Normal
Learning outcomes	1,0661	7,8147	3	Normal

Table 6. Summary of Linearity Test Results

Variable	F_{count}	F_{table}	Conclusion
X_1 to Y	0,0311	2,37	Linear
X_2 to Y	-0,2742	2,77	Linear
X_3 to Y	0,4094	2,77	Linear

Table 7. Summary of Independence Test Results

Variable	χ^2_{count}	χ^2_{table}	Conclusion
X1 and X2	30,578	37,652	independent
X1 and X3	35,623	37,652	independent
X2 and X3	26,944	37,652	independent

Table 8. Hypothesis testing

Hypothesis	t_{count}	t_{table}	df	Information
1	3,8399	1,6973	30	H_0 is rejected
2	6,9772	1,6973	30	H_0 is rejected
3	3,3496	1,6973	30	H_0 is rejected
4	23,5423	3,33	$V_1=2$ $V_2=29$	H_0 is rejected
5	15,4444	3,33	$V_1=2$ $V_2=29$	H_0 is rejected
6	29,8244	3,33	$V_1=2$ $V_2=29$	H_0 is rejected
7	19,448	2,95	$V_1=3$ $V_2=28$	H_0 is rejected

CONCLUSION

1. There is a positive and significant relationship between students' interest in learning towards mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This was expressed by the t-test, that is $t_{count} = 3,8399 \geq t_{table} = 1,6973$. Simple correlation coefficient (r) between student learning interest (X_1) to mathematics learning outcomes (Y) of 0.5740 with linear regression equations $\hat{Y} = -26,2313 + 1,0956 X_1$.
2. There is a positive and significant relationship between parents' attention to the mathematics learning outcomes of Grade X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This is expressed by the t-test, that is $t_{count} = 6,9772 \geq t_{table} = 1,6973$. Simple correlation coefficient (r) between student learning interest (X_1) to mathematics learning outcomes (Y) of 0.7866 with linear regression equations $\hat{Y} = -25,3537 + 0,9716 X_2$.
3. 3. There is a positive and significant relationship between students' perceptions of the learning environment at school on the mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This was expressed by the t-test, that is $t_{count} = 3,3132 \geq t_{table} = 1,6973$. Simple correlation coefficient (r) between student learning interest (X_1) to mathematics learning outcomes (Y) of 0.5217 with linear regression equations $\hat{Y} = -22,5683 + 0,9370 X_3$.
4. 4. There is a positive and significant relationship between student learning interest and parents' attention with mathematics learning outcomes of students of class X TKR SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This was expressed by the F test, that is $F_{count} = 24,4704 \geq F_{table} = 3,33$. Multiple correlation coefficient (R) multiple determination coefficient (R^2) 0.7867 and 0.6188, with linear regression equation $\hat{Y} = -26,5263 + 0,0315 X_1 + 0,9569 X_2$. The relative contribution of X_1 is 6.68% and X_2 is 72.99% and the effective contribution of X_1 is 4.51% and X_2 is 49.32%.
5. 5. There is a positive and significant relationship between students' interest in learning and students' perceptions of the learning environment at school with the mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This was expressed by the F test, that is $F_{count} = 15,4444 \geq F_{table} = 3,33$. The multiple correlation coefficient (R) and the double determination coefficient (R^2) are 0.7182 and 0.5158, with linear regression equations $\hat{Y} = -83,5925 + 0,9555X_1 + 0,7862X_2$. The relative contribution of X_1 is 6.68% and X_2 is 20.33% and the effective contribution of X_1 is 4.51% and X_2 is 13.74%.
6. 6. There is a positive and significant relationship between parents' attention and students' perceptions of the learning environment at school with the mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of the 2016/2017 Academic Year. This was expressed by the F test, that is $F_{count} = 29,7837 \geq F_{table} = 3,33$. The multiple correlation coefficient (R) and the double determination coefficient (R^2) are 0.8203 and 0.6729, with linear regression equations $\hat{Y} = -54,1916 + 0,8495 X_1 + 0,4541X_2$. The relative contribution of X_1 is 72.99% and X_2 is 20.33% and the effective contribution of X_1 is 49.32% and X_2 is 13.74%.
7. 7. There is a positive and significant relationship between students' interest in learning, parents' attention, and students' perceptions of the learning environment at school with the mathematics learning outcomes of class X TKR students of SMK Negeri 1 Seyegan Sleman Regency in the odd semester of 2016/2017 Academic Year. This was expressed by the F test, that is $F_{count} = 58,3152 \geq F_{table} = 2,95$. The multiple correlation coefficient (R) of 0.8220, with a linear regression equation $\hat{Y} = -60,9746 + 0,1500X_1 + 0,7745X_2 + 0,4730X_3$. The coefficient of determination of a double of 0.6757, this means that student mathematics learning outcomes are influenced by students' interest in learning, parents' attention, and students' perceptions of the learning environment at school by 67.57% while 32.43% is influenced by other factors not discussed in this research.

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