THE RELATIONSHIP AMONG THE LEARNING PREPARATION AND ATTENTION OF PARENTS WITH LEARNING MATHEMATICS OUTCOMES OF STUDENTS CLASS VII

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ABSTRACT

This study is based on students' mathematics and low readiness study's poor learning outcome, and parents' lack of attention. Inadequate learning readiness involving students still depends on the teacher's instruction. Students feel embarrassed and afraid to ask when the learning and the parents still assume that education and attention to the child are the school's responsibility. This study aims to determine whether or not a positive and significant relationship between the readiness of learning and parents' attention with the results of learning mathematics students VII State Junior High School (SMP Negeri) 3 Wates Kulon Progo District Year 2017/2018. This study's population is the students of grade VII of SMP Negeri 3 Wates Kulon Progo Regency for the academic year 2017/2018, which consists of VIIA, VIIB, VIIC, and VIID grades totaling 138 students. Obtained class VIIB as a class of research samples with random sampling technique. Data collection techniques used questionnaire method to obtain data readiness study and parents' attention and test methods to obtain data learning mathematics. Test of research instrument done is a test of validity, a test of different power, and reliability test. The prerequisite analysis test includes the normality test, linearity test, and independence test. Data analysis using product moment analysis and multiple linear regression analysis. The results showed a positive and significant relationship between the readiness of learning and parents' attention with learning mathematics students VII SMP 3 Wates Kulon Progo District Year 2017/2018. It is shown by $F_{Count}>$ F_{Table} that is 4,139> 3,310 with R = 0,459 and R2 = 0,211 with Y = 24,865 + 0,357X$_1$ + 0,252X$_2$, with RC X$_1$ = 64,023% and RC X$_2$= 35,977%, EC X$_1$= 13,492% and EC X$_2$ = 7,582%.
Keywords: Readiness Learning, Parents Attention, Mathematics Learning Outcomes

INTRODUCTION

Education is an important thing in human life. Moreover, education is instrumental in daily human life. Education can develop and improve the intelligence of the nation as stated in Law Number 20 of 2003 concerning National Education System article 3, namely national education functions to develop capabilities and shape the character and civilization of a dignified nation to educate the nation's life, aiming at developing the potential of learners in order to become human beings who have faith and are devoted to God Almighty, have good character, are healthy, knowledgeable, capable, creative, independent, and become citizens who are democratic and responsible.

Students can receive education through formal, non-formal, and informal education. One of formal education can be received by students in schools. Mathematics is a subject taught in school. Mathematics subjects at school are taught from elementary schools, junior high schools, and vocational high schools. Students have introduced even mathematics from an early age, such as the introduction of numbers and counting. However, if students do not understand mathematics, it causes difficulties in learning, affecting student learning outcomes.

Various attempts have been made to increase students' success in learning mathematics. However, in reality, the learning outcomes are still low. Based on grade VII mathematics teachers' information at SMP Negeri 3 Wates, Kulon Progo Regency, most student learning outcomes are still low. They are still below the minimum completeness criteria (MCC). Learning activities can be influenced by internal factors and external factors that affect student success in learning. One internal factor that is thought to influence mathematics learning outcomes is learning readiness. Slameto (2015:

113) states that readiness is the overall condition of a person who makes ready to respond or respond to a situation in a certain way. Suppose students' readiness for learning will disrupt the learning process and affect mathematics learning outcomes. Learning readiness will influence learning outcomes, such as Asmara (2014) and Sugandi (2014) research.

Based on the interviews with 20 seventh grade students of SMP Negeri 3 Wates, Kulon Progo Regency regarding learning readiness, information was obtained that students felt ashamed to ask questions when they did not understand, students expressed fear when learning began. Based on interviews with Mrs. Etty Sulistyorini S.Pd as a grade VII mathematics teacher, information was obtained that students' learning outcomes were low under the MCC because of lack of study readiness. Students rarely studied at home. Not done on time. When the learning process, many students are not paying attention. Students are busy talking to themselves. The indicators used in preparing the learning readiness questionnaire in this study are proposed by Slameto (2015: 113), namely physical conditions (temporary), mental conditions, emotional conditions, motives and goals, and knowledge.

One external factor that is thought to influence student mathematics learning outcomes is parental attention. Parents' attention is the first and foremost in providing motivation or stimulation to their child's development. Good parents' attention will produce learning outcomes that are different from parents who lack attention. Suryabrata (2012: 14) provides a definition of attention that is attention is the concentration of psychic energy focused on an object. Attention is much awareness that accompanies the activities carried out. Parents' attention will influence learning outcomes, such as the research results by Wendari (2014) and Marfuah (2017).

Based on the results of interviews with 20 eighth grade students of SMP Negeri 3 Wates, Kulon Progo Regency regarding the attention of parents, it was found that students revealed that their parents had not been guiding properly while studying, parents were still asking to learn, but parents were still doing other activities that made them not concentration when studying, there are even parents who let their children learn or not. Meanwhile, based on interviews with Mr. Sukirno S.Pd as a counseling teacher, it was obtained that parents' attention would be better if their children were given reasonable assistance in learning and stimulation or learning motivation to their parents did not submit to the whole school. The indicators used in the preparation of the questionnaire instrument parental attention in this study are by those put forward by Uno and Muhammad (2015: 281) and Hasbullah (2015: 88), namely: attention to children's learning activities, provision of children's learning facilities, provision of motivation towards children's learning, parental involvement in assisting children's learning and attention to children's learning outcomes. The parent in question is the parent who lives in either the foster parent; the child follows the foster child.

In this study, the following problems were formulated: Is there a positive and significant relationship between learning readiness and parents' attention with mathematics learning outcomes for Grade VII students of SMP Negeri 3 Wates, Kulon Progo Regency semester the academic year 2017/2018?

From the main problems that have been formulated above, the purpose of this study is to find out whether or not there is a positive and significant relationship between learning readiness and parents' attention with mathematics learning outcomes of Grade VII students of SMP Negeri 3 Wates, Kulon Progo Regency, even semester of the 2017 school year. / 2018.

METHODS

This research was conducted in class VII SMP Negeri 3 Wates Kulon Progo Regency even semester of 2017/2018. The test class is class VII C, and the sample class is VII B, where class VII C and class VII B, each consists of 34 students. In this study, three variables are consisting of two independent variables, namely readiness to learn (X_1), parents' attention (X_2), and one dependent variable, namely mathematics learning outcomes (Y). Based on the research variables above, this study's research design is as follows in Figure 1.
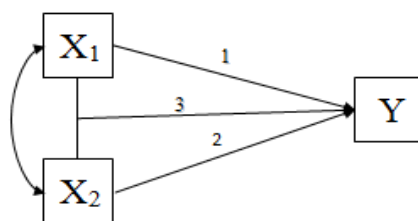
Figure 1. Relationship between Independent Variables and Bound Variables

Information:

X_I: Learning Readiness

X_2: Attention Parents

Y: Mathematics Learning Outcomes

(Sugiyono, 2016: 68)

Data collection techniques using a questionnaire method to obtain data on the readiness of learning and the attention of parents and test methods to obtain data on mathematics learning outcomes. The research instrument tests conducted were validity, different power tests, and reliability tests. Analysis prerequisite tests include normality test, linearity test, and independence test. Data analysis uses product moment analysis and multiple linear regression analysis.

RESULTS AND DISCUSSION

The readiness score of learning was obtained from a questionnaire given in class VII B, which amounted to 20 items, obtained the highest score of 94 and the lowest score of 56 and obtained an average value of 77,324 and a standard deviation 9,902. Spread for learning readiness with an average of 77,324. From these criteria, the grouping scores of parents' attention are obtained as follows:

Table 1. Distribution of Number of Students by Learning Readiness Score Category

Category	Score	f	%
High	$X > 87,225$	10	29,412
Medium	$67,422 \leq X \leq 87,225$	18	52,941
Low	$X < 67,442$	6	17,647
Total		34	100

From Table 1, it can be seen that most of class VII B of SMP Negeri 3 Wates, Kulon Progo Regency, Academic Year 2017/2018, have a high frequency of learning readiness, which can be seen with the category located at intervals of $67,422 \leq X \leq 87,225$ with medium categories, namely as many as 18 students or 52,941% and the high category is located at intervals X> 87,225 with as many as ten students or 29,412% and a small portion of learning readiness is still low as many as six students or 17,647%. Identification of learning readiness with indicators of physical conditions (temporary), mental conditions, emotional conditions, motives, and goals and knowledge can be seen in Table 2.

Table 2. Acquisition of each indicator

Indicator	Score	%
Physical Conditions (Temporary)	528	19,970
Mental Condition	550	20,802
Emotional Conditions	544	20,575
Motives and Objectives	511	19,327
Knowledge	511	19,327
Amount	2644	100

From Table 2 above the acquisition score of each indicator of the learning, readiness variable obtained a strong indicator in this study is the first indicator that is mental condition includes praying first before learning mathematics, so that confidence in working on math problems first, anxiety before learning

mathematics because they do not understand mathematics and are afraid of learning mathematics because it is challenging to learn. While the weak indicators on the third indicator are motives and goals and knowledge, including learning mathematics before being discussed by the teacher, learning mathematics so that mathematics is useful, not concerned with mathematics because it is not useful in daily life, and playing in the classroom because mathematics is not important for the future

Parental attention scores were obtained from a questionnaire of 20 items, obtained the highest score of 93 and the lowest score of 52, and obtained an average value of 80,941 and a standard deviation of 10,126. From these criteria, the grouping scores of parents' attention are obtained as follows:

Table 3. Distribution of Number of Students by Parent Attention Score Category

Category	Score	f	%
High	$X > 91,067$	1	2,941
Medium	$70,815 \leq X \leq 91,067$	27	79,412
Low	$X < 70,815$	6	17,647
Total		34	100

Table 3 shows that most Class VII B of SMP Negeri 3 Wates, Kulon Progo Regency for Academic Year 2017/2018 have a low-frequency level. It can be seen that there are still many low categories of 6 students or 17,647%. In contrast, the high category is only one student or 2,941, and most of the medium category included 27 students or 79.412%.

Identification of parents' attention with indicators of attention to learning activities, the provision of children's learning facilities, motivating children's learning, parents accompanying children, and attention to children's learning outcomes can be seen in Table 4.

Table 4. Acquisition of each indicator

Indicator	Score	%
Attention to learning activities	536	19,605
Provision of children's learning facilities	608	22.238
Provision of motivation towards learning children	547	20,007
Parental involvement accompanies children	470	17,191
Attention to children's learning outcomes	573	20,958
Amount	2644	100

From Table 4 above, the acquisition scores of each indicator of the variable parents' attention obtained strong indicators in this study are the first indicators namely the provision of children's learning facilities include providing a comfortable learning desk, buy and equip stationery, do not buy books according to teacher's advice, does not provide enough lighting. While the weak indicator on the third indicator is the involvement of parents accompanying children includes parents accompanying when learning mathematics, parents help in learning mathematics. Parents prefer watching TV, and parents are still carrying out other activities.

The value of mathematics learning outcomes obtained from the learning outcomes test totaled 19 questions with the highest value of 89.474 and the lowest value of 47.368 and obtained an average value of 72.073 and a standard deviation of 10.808. From these criteria, the grouping of mathematics learning outcomes is obtained as follows:

Table 5. Distribution of Number of Students by Category Score learning outcomes mathematics

Category	Score	f	%
High	$X > 82,882$	6	17,647
Medium	$61,265 \leq X \leq 82,882$	21	61,765
Low	$X < 61,265$	7	20,588
Total		34	100

From the above table 5, it can be seen that most of class VII B, SMP Negeri 3 Wates, Kulon Progo Regency, Academic Year 2017/2018, the result of learning is still low, it can be seen that there are still many low categories of 7 students or 20.588%, while the high category is only six students or 17,647 and most of the medium category included 21 students or 61,765%.

The analysis prerequisite tests are carried out to provide an overview of how the data's planned technical analysis can meet the prerequisites' assumptions. This study's prerequisite test analysis is the normality test, independent test, and linearity test.

A normality test is used to test the distribution of data obtained on each variable normally distributed or not. The normality test in this study uses the chi-square formula (χ^2). The decision making criteria is the distribution of data obtained on each variable with normal distribution if $\chi^2_{count} \leq \chi^2_{table}$ with a significant level of 5% and the degree of freedom k-1. Where k is the number of interval classes. The results of the normality test are presented in the following table 6.

Table 6. Summary of Normality Test Results

No	Variable	χ^2_{count}	χ^2_{table}	df	Info.
1.	Learning Readiness (X_1)	2,100	7,815	3	Normal
2.	Parents attention (X_2)	3,692	5,991	2	Normal
3.	Mathematical Learning Outcomes (Y)	0,858	5,991	2	Normal

After the normality test linearity test is performed, the linearity test is used to determine whether the independent and dependent variables have a linear relationship or not by using the linear regression formula (F test). The decision-making criteria are the relationship between variables X and Y linear if $F_{count} \leq F_{count}$ is at a significant level of 5%. The numerator $df = k - 2$ and the denominator $db = n - k$. In this study for X_1 with Y db the numerator = 20, the denominator db = 12, for X_2 with Y, the numerator $db = 16$, the denominator $db = 16$. The summary of the linearity test results of the independent variable and the dependent variable can be seen in the following:

Table 7. Summary of Linearity Test Results

No.	Variable	F_{count}	F_{table}	Info.
1	X_1 with Y	1,629	2,544	Linear
2	X_2 with Y	0,587	2,333	Linear

The next prerequisite test is independent. The independent test is used to determine the presence or absence of a relationship between the independent variables, namely the readiness of learning variables (X_1) and parents' attention variables (X_2), using the chi-square formula. The decision making criteria are variable X1 and variable X_2 are independent if $\chi^2_{count} \leq \chi^2_{table}$, at 5% and degrees of freedom $dk = (B - 1)(K - 1)$. Where B is the number of rows, and K is the number of columns. The independent test results are presented in the following table 8.

Table 8. Summary of Independent Test Results

Variable	χ^2_{count}	χ^2_{table}	df	Conclusion
X_1 with X_2	25,038	37,6525	25	Independent

The purpose of the discussion of the results of this study was to determine the relationship between learning readiness (X_1) and parents' attention (X_2) with mathematics learning outcomes (Y) for VII grade students of SMP Negeri 3 Wates, Kulon Progo Regency, Academic Year 2017/2018. In this section, further discussion of the results of the research analyzed in correlation.

In the first hypothesis, the results of the study were obtained $t_{count} = 2.461$ and $t_{table} = 1.695$ at a significant level of 5% with a simple correlation coefficient (r) = 0.399 with dk = 32, which is equal to 1.695 then obtained $t_{count} > t_{table}$ or 2.461 > 1.695, the results of the study showed a relationship which is significant between learning readiness and mathematics learning outcomes. The results of the study also obtained a linear relationship $\hat{Y} = 40,157 + 0,421X_1$. The results of the study

showed a positive relationship between learning readiness and mathematics learning outcomes. The linear equation $\widehat{Y} = 40,157 + 0,421X_1$ means that every increase of one unit X_1 results in a 0.421 increase in Y. In other words, high learning readiness can improve student mathematics learning outcomes. According to the calculation of parents' attention at SMP Negeri 3 Wates, Kulon Progo Regency is in a low category. If seen from the results of the coefficient of determination (r^2) of 0.159, 15.9% of mathematics learning outcomes are related to readiness. At the same time, the rest is related to other factors.

In the second hypothesis, the results of this study were obtained $t_{count} = 1.927$ and $t_{table} = 1.695$ at a significant level of 5% with a simple correlation coefficient (r) = 0.323 with $dk = 32$ that is equal to 1.695 then obtained $t_{count} > t_{table}$ or 1.927 > 1.695, the results of the study showed a significant relationship between parents' attention and mathematics learning outcomes. The results of the study also obtained a linear relationship with $\widehat{Y} = 45,086 + 0,346$. The results showed there was a positive relationship between parents' attention and mathematics learning outcomes. The linear equation $\widehat{Y} = 45,086 + 0,346$ means that every increase in one unit of X_2 results in a 0.346 increase in Y. In other words, high parental attention can improve mathematics learning outcomes. According to the calculation results of study readiness at SMP Negeri 3 Wates, Kulon Progo Regency is in a low category. Suppose seen from the results of the coefficient of determination (r^2) of 0.104, which means that 10.4% of mathematics learning outcomes are related to parents' attention. At the same time, the rest are related to other factors.

In the third hypothesis, the study results show a positive and significant relationship between learning readiness and parents' attention to mathematics learning outcomes. The results of this study were obtained $F_{count} = 4,139$ and $F_{table} = 3,33$ at a significant level of 5% with a degree of freedom (dk) numerator (v1 = p = 2) and the denominator (v2 = n-p-1= 32-2-1 = 31). with a multiple correlation coefficient (R) of 0.459 to obtain $F_{count} > F_{table}$ or 4.139 > 3.33. This can be explained through a linear relationship $\widehat{Y} = 24,865 + 0,357 \, X_1 + 0,252X_2$. This means that every increase in one unit X_1 results in a 0.357 increase in Y, and every increase in one unit of X_2 results in a 0,252 increase in Y. If the readiness of learning and parents' attention is high, then the results of learning mathematics will increase. In this study, a coefficient of determination (R^2) of 0.211 was obtained, which means that 21.11% of mathematics learning outcomes are influenced by learning readiness and parents' attention. At the same time, the rest are related to other factors. The relative contribution of X_1 is 64.023%, and X_2 is 35.977%, meaning that the contribution made by each variable without regard to other internal and external factors is 64.023% by the readiness of learning and 35.977% by the attention of parents and the effective contribution of X_1 by 13.492% and X_2 of 7.582% means that the contribution made by each research variable by looking at other internal and external factors is 13.492% by learning readiness and 7.582% by parents 'attention or contribution to learning readiness and parents' attention is relatively small at 21.075 %. It can be concluded that the variable of readiness to learn gives the greatest contribution to learning outcomes than the parents' attention variable. The third hypothesis test results accept a positive and significant relationship between learning readiness and parental attention with mathematics learning outcomes.

CONCLUSION

Based on the results of research and discussion as described, it can be concluded that there is a positive and significant relationship between learning readiness and people's attention with mathematics learning outcomes of Grade VII students of SMP Negeri 3 Wates, Kulon Progo Regency, even semester of the academic year 2017/2018. This is indicated by the F-test, which is $F_{count} \leq F_{table}$ or 4.139 > 3.33. The multiple correlation coefficient (R) between learning readiness and parents' attention with mathematics learning outcomes is 0.459 and (R^2) is 0.211 with a multiple linear regression equation $\widehat{Y} = 24,865 + 0,357 \, X_1 + 0,252X_2$. The relative contribution of X_1 is 64,023%, and the relative

contribution of X_2 is 35,977%. The effective contribution of X_1 is 13,492 %%, and the effective contribution of X_2 is 7,582%.

REFERENCES

Asmara, Ndaru. 2014. *Hubungan Tingkat Kecemasan, Kesiapan Belajar dan Persepsi Siswa terhadap cara Mengajar Guru dengan Hasil Belajar Matematika Siswa Kelas VII Semester II SMP Negeri 1 Pandak Kabupaten Bantul Tahun Ajaran 2013/2014*. Yogyakarta: Universitas Ahmad Dahlan.

Hasbullah. 2015. *Dasar-Dasar Ilmu Pendidikan*. Jakarta: Rajawali Press.

Marfuah. 2017. *Hubungan Kemandirian Belajar dan Perhatian Orang Tua Siswa Kelas VIII Semester Genap SMP N 2 Turi Kabupaten Sleman Tahun Pelajaran 2016/2017*. Yogyakarta: Universitas Ahmad Dahlan.

Slameto. 2015. *Belajar dan Faktor yang Mempengaruhi.* Jakarta: Rineka Cipta.

Sugandi. 2014. Hubungan antara Lingkungan Belajar di Rumah dan Kesiapan Belajar dengan Hasil Belajar Matematika Siswa Kelas VIII Semester Ganjil SMP Muhammadiyah 2 Gamping Kabupaten Sleman Tahun Ajaran 2013/2014, Yogyakarta: Universitas Ahmad Dahlan.

Suryabrata, Sumadi. 2012. *Psikolog Pendidikan*. Jakarta: PT Remaja Rosdakarya.

Undang-Undang RI Nomor 20 Tahun 2003. *Sistem Pendidikan Nasional*. http://kelembagaan.ristekdikti.go.id/wpcontent/uploads/2016/08/UU_no_20_th_2003.pdf Tanggal Akses: 11 Juni 2018

Uno, Hamzah B. & Mohammad, Nurdin. 2015. *Belajar dengan Pendekatan PAILKEM: Pembelajaran, Aktif, Inovatif, Lingkungan, Kreatif, Menarik*. Jakarta: Bumi Aksara

Uno, Hamzah B. 2007. *Model Pembelajaran Menciptakan Proses Belajar Mengajar yang Kreatif dan Efektif.* Jakarta: PT Bumi Aksara

Wendari. 2014. *Hubungan antara Perhatian Orang Tua, Kecerdasan Intelektual (1Q) dan Minat Belajar dengan Hasil Belajar Matematika Siswa Kelas VII Semester Genap SMP Muhammadiyah 1 Minggir Kabupaten Sleman Tahun Ajaran 2013/2014*. Yogyakarta: Universitas Ahmad Dahlan.