# RELATIONSHIP OF LEARNING MOTIVATION AND ATTENTION OF PARENTS WITH MATHEMATICS LEARNING OUTCOMES OF CLASS VIII STUDENTS OF SMP NEGERI 3 WONOSARI

# Herdhian Qurniawati Widyaningruma, Uswatun Khasanah.b

Program Studi Pendidikan Matematika Universitas Ahmad Dahlan Jalan Ring Road Selatan, Tamanan, Banguntapan, Bantul Yogyakarta 

<sup>a</sup> herdhianqw@gmail.com, <sup>b</sup>uswatun.khasanah2@yahoo.co.id

# **ABSTRACT**

Student learning is influenced by several factors. Lack of student learning motivation and parental attention are some of the factors that can influence learning outcomes, so the achievement of learning is not optimal. This study aims to determine whether there is a positive and significant relationship between learning motivation and parents' attention with mathematics learning outcomes of VIII grade students of SMP Negeri 3 Wonosari odd semester 2014/2015 Academic Year. The population in this study were all students of class VIII odd semester 3 of Wonosari Middle School in the 2014/1015 Academic Year. Consisting of 6 classes with a total of 192 students. While the sample was taken VIIIF class with random sampling techniques to the class. The data collection technique was used a questionnaire method to find out about parents' motivation and attention, and documentation techniques to find out the results of learning mathematics. Data analysis using correlation analysis and linear regression analysis. The results showed there was no positive and significant relationship between (1) learning motivation with mathematics learning outcomes, with  $t_{count}$  = -0.15 and  $t_{table}$  = 2.04 so  $t_{count}$  <  $t_{tabel}$ . Simple correlation coefficient (r) = -0.027 and linear regression equations  $\widehat{Y} = 63.35845214$  - $0.059206659X_1$ . (2) the attention of parents with mathematics learning outcomes, with  $t_{stat} = -0.71$  and  $t_{table} = 2.04$  so  $t_{count} < t_{table}$ . Simple correlation coefficient (r)= -0.126 and linear regression equations  $Y = -6201351.5 - 0.2184533X_2$ . (3) learning motivation and attention of parents with mathematics learning outcomes, with  $F_{stat} = 0.000365$  and  $F_{table} = 3.3276545$  so  $F_{count} < F_{table}$ . Multiple correlation coefficient (r) = 6648107.89 and linear regression equations  $\hat{Y} = 69.02729864 +$ 0,177029465X1-0.31304263X2. Relative contribution  $X_1 = -10.49$  and  $X_2 = 110.49$  and effective donations  $X_1 = -0.217$  and  $X_2 = 2.289$  with a double determination coefficient = 0.021, this means that the learning outcomes of Grade VIII students of SMP Negeri 3 Wonosari in the odd semester of the 2014/2015 Academic Year are influenced by parents' learning motivation and attention (double determination coefficient 2.1%) while 97,927% is influenced by other factors that are not discussed in this study.

Keywords: Learning Motivation, Parental Attention, and Learning Outcomes

#### INTRODUCTION

Education is a very important aspect of our lives. In general, national education is still far from being expected to compete with the development of world-class education. Difficulty in learning mathematics is influenced by several factors, both internal and external factors. After an interview with a mathematics teacher at SMP Negeri 3 Wonosari, the problem in mathematics learning is that many students do not understand the meaning and benefits of mathematics in daily life, causing students to be afraid and less interested in the subject. The difficulty of learning mathematics is reflected in the low learning achievement achieved by students. This can be seen also from the average value of the Odd Semester Midterm (UTS) odd semester in the table below.

**Table 1**. List of Grade VIII Mathematics Midterm Tests 2014 Wonosari Middle School Odd Semester 2014/2015 Academic Year

Class	A	В	C	D	E	F
UTS Average	62.1	60.2	61.6	50.3	53.7	54.5

The problem in the field is how to apply a positive mindset to students and motivate students that mathematics is not as difficult as they imagine. In addition to motivation, what affects students' learning achievement is family. However, many parents assume that the problem of children's education is entirely the responsibility of the school. Children's learning outcomes that most parents notice are different from the learning outcomes of children who don't get the attention of their parents. Based on the description above, the researcher is interested in conducting research under the title "The Relationship of Learning Motivation and Parents' Attention with Mathematics Learning Outcomes of Class VIII Students in Odd Semester 3 Wonosari Middle School Academic Year 2014/2015".

# LITERATURE REVIEW

1. Understanding Mathematics

Mathematics is science that can help the child's personal formation in order to behave and have critical, creative, scientific, and practical qualities so that they can use notions, ideas, and symbols to solve problems both towards further mathematical science in other sciences as well as in everyday life.

2. School Mathematics

School mathematics has a very important role for students to have the knowledge and the formation of attitudes and thought patterns.

3. Definition of Learning Mathematics

Mathematical learning is an effort made by a teacher in a learning environment to make students active in understanding and learning ideas, patterns of relationships, concepts related to one another that emphasizes on providing learning resources and influencing each other to achieve learning goals.

4. Learning Motivation

Learning motivation is an encouragement to improve the way of learning that arises from oneself or from outside the students themselves to achieve goals better than before.

5. Attention Parents

Parent's attention is the concentration of soul force on an object (child) given by parents (father and mother).

#### **METHODS**

This type of research is quantitative research that is a report of the research results containing what will be studied in full, the reasons it was examined, and how to conduct research. This research was conducted in class VIII of SMP Negeri 3 Wonosari. The time used in this study was during the odd semester of the 2014/2015 school year. The variables in this study are independent variables, namely Learning Motivation and Parents' Attention, and the dependent variable in this study is Mathematics Learning Outcomes. Data collection techniques used in data collection in this study were questionnaire and documentation techniques. The population in this study were eighth-grade students of SMP Negeri 3 consisting of 6 classes with 192 students. The sample in this study was class VIII E, amounting to 32 students. Data analysis techniques used include (1) Description of the data including the mean, median, and mode, (2) The analysis prerequisite tests include normality and linearity tests, (3) Hypothesis Testing. Hypothesis testing to determine whether there is a relationship between variables using Product Moment correlation.

# RESULTS AND DISCUSSION

**Table 2**. summarizes the results of the correlation coefficient between the independent variable and the dependent variable

independent	dependent	t		Information	
variable	variable	Count	Table	inoi manon	
X <sub>1</sub>	Y	-0.15	2,04	Not significant	
$X_2$	Y	-0.71	2,04	Not significant	

# 1. First Hypothesis Testing

The results of the correlation analysis between learning motivation with mathematics learning outcomes coefficients  $r_{x1y} = -0.026967$ , with  $t_{count} = -0.15$  and  $t_{table} = 2.04$  at a significant level of 5% and db = 30 seen  $t_{count} < t_{table}$  so that Ho is accepted, which means there is no positive relationship between learning motivation with mathematics learning outcomes for students of class VIII of SMP Negeri 3 Wonosari in the 2014/2015 school year. The equation of the regression line is  $\hat{Y}=63.35845214-0.059206659X_1$ .

# 2. Second Hypothesis Testing

The results of the correlation analysis between parents' attention and mathematics learning outcomes indicate the price coefficient  $r_{x1y} = -0.1264119$ , with  $t_{stat} = -0.71$  and  $t_{table} = 2.04$  at a significant level of 5% and db = 30 seen  $t_{count} < t_{table}$  so that Ho is accepted which means there is no positive relationship between parents' attention with mathematics learning outcomes of students of class VIII SMP Negeri 3 Wonosari 2014/2015 school year. The equation of the regression line is  $\hat{Y}$ =-6201351.5-0.2184533X<sub>2</sub>.

# 3. Third Hypothesis Testing

Test the significance of the multiple correlation coefficient ( $Ry_{(1,2)}$ ), done by finding the F price from the calculation results obtained  $F_{count}$  value of 0.00036. The results were then consulted with the  $F_{table}$  at df = 2 against 30 and a significance level of 5%, obtained an  $F_{table}$  of 3.316. Thus it can be concluded that there is no positive and significant relationship between learning motivation and parents' attention with mathematics learning outcomes of Grade VIII students of SMP Negeri 3 Wonosari in the 2014/2015 school year, while the regression line equation is  $\hat{Y}=69.02729864+0.177029465X1-0.31304263X_2$ .

## 4. Additional Hypothesis Testing

Test the significance of the multiple correlation coefficient (Ry<sub>(1,2,3)</sub>), done by finding the price F from the calculation results obtained by the  $F_{count}$  price of -0.002187728. The results were then consulted with  $F_{table}$  at df = 3 vs. 30 and a significance level of 5%, obtained  $F_{table}$  of 2.934029. Thus it can be concluded that there is no positive and significant relationship between learning motivation, parents' attention and  $X_3$  with the mathematics learning outcomes of Grade VIII students of SMP Negeri 3 Wonosari in the 2014/2015 school year, while the equation of the regression line is  $\hat{Y} = 409.9060626 - 1.169368494X_1 + 2.372999585X_2 + 0.01185245X_3$ .

This study aims to determine whether there is a relationship between learning motivation and parents' attention to mathematics learning outcomes. Based on the research data analyzed, a discussion about the results of the study is carried out as follows:

# 1. The relationship between learning motivation and mathematics learning outcomes Based on the results of the analysis conducted by researchers students' motivation to learn is in the high category, this is because of the greatest frequency of 20 students or 62.5%. Then obtained a correlation coefficient of -0.026967 and significant at the level of 5%. The functional relationship between learning motivation $(X_1)$ and learning outcomes (Y) in the form of a linear regression equation is $\hat{Y}$ =63.35845214-0.059206659X1. With the regression direction coefficient of -0.059206659, it means that every unit X1 causes 0.059206659 to decrease Y.

2. From the results of testing the hypothesis obtained that there is no positive and significant relationship between learning motivation with learning outcomes in mathematics. So this study is

- not in accordance with the hypothesis expressed by other sources and researchers. The relationship between parents' attention and mathematics learning outcomes
- 3. Based on the results of the analysis conducted by researchers the attention of parents is in the high category, this is because the largest frequency of 22 students or 68.75% .. Then obtained a correlation coefficient of -0.1264119 and significant at the level of 5%. The functional relationship between parental attention (X<sub>2</sub>) with learning outcomes (Y) in the form of linear regression equations is  $\hat{Y}$ =6201351.5-0.2184533X<sub>2</sub>. With a regression direction coefficient of -0.2184533 means that every single unit of X<sub>2</sub> results in a 0.2184533 decrease in Y.

From the results of hypothesis testing, it was found that there was no positive and significant relationship between parents' attention and mathematics learning outcomes. So this study is not in accordance with the hypothesis expressed by other sources and researchers.

- 1. Relationship between parents' learning motivation and attention with mathematics learning outcomes
  - In this study, it is known that the learning outcomes of eighth-grade students of SMP Negeri 3 Wonosari are still in the medium category of 20 students 62.5%. and in this study obtained a coefficient of double determination ( $R^2$ ) of 0.0207 between learning motivation and parents' attention with mathematics learning outcomes in students with a correlation coefficient of 6648107.9. The functional relationship between variables  $X_1$  and  $X_2$  to the dependent variable (Y) in the form of a linear regression equation is  $\hat{Y}=69,02729864+0,177029465X_1-0,31304263X_2$ . This means that each increase of one unit  $X_1$  results in 0.177029465 Y increase, and an increase in one unit  $X_2$  results in 0.31304263 increase Y. While for learning motivation contributes a relative contribution of -10.49% and parental attention of 110.49%. The effective contribution of the learning motivation variable is -0.217% and parents' attention is 2.29%.
- 2. The relationship of learning motivation, parents' attention, and  $X_3$  with the results of learning mathematics
  - In this study, it is known that the learning outcomes of eighth-grade students of SMP Negeri 3 Wonosari are still in the medium category of 20 students 62.5%, and in this study obtained a coefficient of double determination (R<sup>2</sup>) of -0.225143577 between learning motivation, parents' attention and X<sub>3</sub> with the results of learning mathematics in students with a correlation coefficient of 6648107.9. The functional relationship between variables  $X_1, X_2$  and  $X_3$  to the dependent variable (Y) in the form of the linear regression equation is Ŷ=409.9060626- $1.169368494X_1+2.372999585X_2+0.01185245X_3$ . This means that every increase of one unit  $X_1$ results in 1.169368494 increase Y, and an increase in one unit X2 causes 2.372999585 an increase in Y and an increase in one unit X<sub>3</sub> results in 0.01185245 increase in Y.

From the results of hypothesis testing, it is found that there is no positive and significant relationship between learning motivation and parents' attention to mathematics learning outcomes. So this study is not in accordance with the hypothesis expressed by other sources and researchers.

# CONCLUSION

Based on the data obtained from the results of the analysis carried out, the conclusions that can be stated in this study are as follows. There is no positive and significant relationship between learning motivation and mathematics learning outcomes of VIII grade students of SMP Negeri 3 Wonosari in the 2014/2015 academic year. Thus the greater or stronger the motivation to learn, it has no effect on the learning outcomes of mathematics obtained by students.

#### REFERENCES

Abdurrahman, Mulyono. 2003. *Pendidikan Bagi Anak Yang Berkesulitan Belajar*. Jakarta: Rineka Cipta. Arikunto, S. 2009. *Dasar-dasar Evaluasi Pendidikan*. Jakarta: Bumi Aksara.

\_\_\_\_\_\_. 2010. Prosedur Penelitian Suatu Pendekatan Praktik: Jakarta: Rhineka Cipta. Hadi, S. 2000. Analisis Regresi. Yogyakarta: Andi.

Hamalik,O. 2002. Psikologi Belajar dan Mengajar. Jakarta: SinarBaru Al Gesindo

Mahmud, Indra Martayana. *Hubungan Antara Perhatian Orang Tuadan Minat Belajar Siswa Kelas VII Semester II SMP Muhammadiyah 9 Yogyakarta Tahun Ajaran 2012/2013*. Yogyakarta: UAD.

Praptiwi, HeviEka. Hubungan Antara Perhatian Orang Tuadan Kemandirian Belajar Siswa Dengan Prestasi Belajar Matematika Siswa Kelas VII Semester Genap SMP Muhammadiyah 1 Karangpucung Kabupaten Cilacap Tahun Ajaran 20091/2010. Yogyakarta: UAD.

Purwanto, N. 1985. Psikologi Pendidikan. Bandung: PT Remaja Karya.

Rusefendi, E.T. 1980. Pengajaran Matematika Modern Untuk Orang TuaMurid Guru dan SPG. Bandung :Tarsito

Sahkori, Ninin. Hubungan Teman Sebaya dan Motivasi Belajar Terhadap Prestasi Belajar Matematika Siswa Kelas VIII Semester Genap SMP N 1 Pleret Kabupaten Bantul Tahun Ajaran 2011/2012. Yogyakarta: UAD.

http://septinurkhasana.blogspot.co.id/2014/03/bentuk-perhatian-orang-tua-terhadap-anak.html

Soemanto, W. 2003. Psikologi Pendidikan. Jakarta: Rineka Cipta

Sugiyono. 2012. Metode Penelitian Pendidikan. Bandung: Alfa Beta

Suherman, E, dkk. 2003. Strategi Pembelajaran Matematika Kontemporer. Bandung: UPI.

Sudjana. 2002. Metode Statistika. Bandung. Tarsito.

Suryabrata, S. 2004. *Psikologi Pendidikan*. Jakarta: Raja Grafindo Persada

Syah, M. 2004. Psikologi Pendidikan Dengan Pendekatan Baru. Bandung: PT Remaja Rosdakarya.

Uno, H. 2007. Teori Motivasi dan Pengukurannya. Jakarta: Gramedia

Walgito, B. 1985. Pengantar Psikologi Umum. Yogyakarta: Fakultas Psikologi UGM

Wendari, Weni. Hubungan Antara Perhatian Orang Tua, Kecerdasan Intelektual (IQ) dan Minat Belajar Dengan Hasil Belajar Matematika Siswa Kelas VII Semester Genap SMP Muhammadiyah 1 Minggir Kabupaten Sleman Tahun Ajaran 2013/2014. Yogyakarta: UAD.

www.scribd.com/document/164665346/3-Analisis-Regresi-Berganda-Dua -Peubah.