THE RELATIONSHIP BETWEEN SELF-CONFIDENCE AND EMOTIONAL INTELLIGENCE WITH STUDENTS MATHEMATICS LEARNING OUTCOME

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ABSTRACT

This study aims to determine whether there is a positive and significant relationship between self-confidence and emotional intelligence with the math results in class VIII even semester at State Junior High School 2 Purwodadi (SMP Negeri 2 Purwadadi) Ciamis regency. The academic year of 2017/2018. This research sample is VIII class student at even semester in SMP Negeri 2 Purwadadi Regency of Ciamis academic year 2017/2018, which consists of class VIIIA, VIIIB, and VIIIC that consist of 71 students. The sample was taken from class VIIIA with a random sampling technique to the class. Data collection techniques used questionnaire method to obtain self-confidence data and emotional intelligence and test methods to obtain data of mathematics learning result Data analysis using product moment analysis and multiple linear regression analysis. The results showed a positive and significant relationship between self-confidence with the results of learning mathematics class VIII Semester Even SMP Negeri 2 Purwadadi Ciamis Regency Year 2017/2018. This is shown by the test- t is $t_{count} > t_{table}$ or 2,9720 > 2.0595. The simple correlation coefficient (r) between self-confidence and mathematics learning result of 0,5110 with linear regression equation $\hat{Y}$ = 35,0491 + 0,3939 X_1. There is a positive and significant relationship between emotional intelligence with mathematics learning outcomes of students of class VIII Semester Even SMP Negeri 2 Purwadadi Ciamis Regency Year 2017/2018. The test indicates this- t is $t_{count} > t_{table}$ or 3.0221 > 2.0595. Simple correlation coefficient (r) between emotional intelligence with mathematics learning result of 0,5173 with linear regression equation $\hat{Y}$ = 28,1534 + 0,4740 X_2. there is a positive and significant relationship between self-confidence and emotional intelligence with the result of learning mathematics with $F_{count} > F_{table}$ is 7,4311> 3,4028 with R = 0,6184 and R^2 = 0,3824 with $\hat{Y}$ = 15,8994 + 0, $2828X_1$ + $0.3454X_2$ with RC X_1= 49,0058% and RC X_2 = 50,9942% EC X_1 = 18,7415% and EC X_2 = 19,5019%.

Keywords: Self-Confidence, Emotional Intelligence, Math score.

INTRODUCTION

Education is the most crucial part of life as a provision in the form of intelligent and quality human beings. To support a nation's progress depends on its human resources, so the quality of education must continue to be improved. One way to improve the quality of mathematics learning from both the student and teacher factors is to improve the quality of mathematics learning. Mathematics is one branch of science that is very useful in developing various fields of study. This has become one of the reasons for students' difficulties in learning mathematics. So mathematics becomes a lesson that is still considered problematic by some students.

Table 1. Final Semester Mathematics Examination Score of SMP Negeri 2 Purwadadi Ciamis Regency

Score	Class		
	VIII A	VIII B	VIII C
Average	70	70	72
Highest	74	74	74
Lowest	69	69	69
<MMC	27	23	21
≥MMC	-	-	-
Number of students	27	23	21

From the table above, it can be seen that the average scores of the Mathematics Semester Odd Semester 2017/2018 Academic Year, there are still many students who have not yet reached the minimum completeness criteria of 75. This shows that student mathematics learning outcomes are still low and must be immediately corrected to match as expected. This is due to many factors that affect student success in learning.

Based on the interview results on November 27, 2017, at SMP Negeri 2 Purwadadi Ciamis Regency, some students of confidence from the school still have low self-confidence. This can be seen from the students' mathematics learning process that looks less effective. For example, students still do not dare to ask or answer questions given by the teacher directly. Students tend to be quiet when they do not understand the material or questions students are working on and ask their closest friends instead of asking the teacher directly. According to Mudjiono, Dimyati (2002: 245), self-confidence will provide self-realization recognized by the teacher and fellow students. The more successful a task is completed, the more it gets public recognition, and then the confidence gets stronger. Self-confidence will influence learning outcomes, such as the research results by Wulansari Fitriana (2013).

Based on the results of an interview on November 27, 2017, at SMP Negeri 2 Purwadadi Ciamis Regency, that students were still unable to control and manage their emotions. This is reflected in the attitude of students during the learning process in class. When the teacher explains mathematics material, many students make a fuss not only when the teacher explains, especially when the teacher gives an assignment. Students also do not try to solve problems through textbooks that already exist. This indicates that students are still unable to motivate themselves to understand and solve math problems. According to Goleman, Daniel (2003: 39) will provide the ability to master emotions and direct them to more positive things. Emotional intelligence will influence learning outcomes, such as the results of research conducted by Dewi Permata Steffi (2013) and Kamasari Ita Nur (2013).

In this study, the following problems were formulated: (1) Is there a positive and significant relationship between self-confidence and mathematics learning outcomes of eighth-grade students of the second semester of SMP Negeri 2 Purwadadi Ciamis Regency in the academic year 2017/2018. (2) Is there a positive and significant relationship between emotional intelligence and mathematics learning outcomes for students of class VIII in the even semester of SMP Negeri 2 Purwadadi Ciamis Regency in 2017/2018? (3) Is there a positive and significant relationship between self-confidence and emotional intelligence with mathematics learning outcomes for students of class VIII in the even semester of SMP Negeri 2 Purwadadi Ciamis Regency in 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 self-confidence and emotional intelligence with mathematics learning outcomes for students of class VIII, even semester of SMP Negeri 2 Purwadadi Ciamis Regency in the academic year 2017/2018.

METHODS

This research was conducted in class VIII SMP Negeri 2 Purwadadi Ciamis Regency, even semester of the academic year 2017/2018, on April 12 - April 21, 2018. The test class is class VIIIC. The sample class is VIIIA, where class VIIIC and class VIIIA each consists of 21 students and 27 students. In this study, three variables are consisting of two independent variables, namely self-confidence (X_1), emotional intelligence (X_2), and one dependent variable, namely mathematics learning outcomes (Y).

Based on the research variables above, the scheme of the relationship between the independent variable and the dependent variable can be arranged as follows:

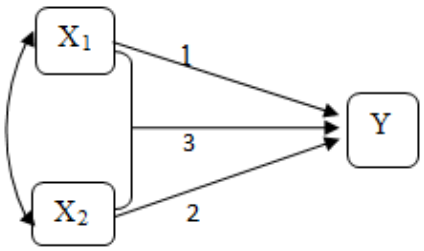

Figure I. Schema of the Relationship between Independent Variables and Bound Variables

Information:
X_1: Confidence
X_2: Emotional Intelligence
Y: Mathematical Learning Outcomes

Data collection techniques used a questionnaire method to obtain data on self-confidence and emotional intelligence, and test methods to obtain data on mathematics learning outcomes. The research instrument tests conducted were validity tests, different power tests, and reliability tests. Analysis prerequisite tests include normality test, linearity test, and independent test. Data analysis uses product moment analysis and multiple linear regression analysis.

RESULTS AND DISCUSSION

The confidence data was obtained from the instrument scores given to 27 students in 24 items. Then obtained the highest score of 106 and the lowest score of 60, obtained an average value of 80.3889, and a standard deviation of 12.2202. From these criteria obtained a grouping of confidence scores as follows:

Table 2. Distribution of Number of Students by Category of Confidence Scores

Category	Score	*F*	%
High	$X > 92,6091$	7	25,9259
Is	$68,1687 \leq X \leq 92,6091$	17	62,9630
Low	$X < 68,1687$	3	11,1111
Total		27	100

From the results of the categorization in the table above, it can be seen that the majority of class VIIIA SMP Negeri 2 Purwadadi Ciamis Regency Academic Year 2017/2018 is included in the medium category because the highest frequency lies in the interval $68,1687 \leq x \leq 92,6091$, namely as many as 17 students or 62.9630%.

Data on emotional intelligence was obtained from an instrument score given to 27 students totaling 24 items. Then obtained the highest score of 101 and the lowest score of 60, obtained an average value of 81.4074, and a standard deviation of 11.3451. From these criteria obtained a grouping of emotional intelligence scores as follows:

Table 3. Distribution of Number of Students by Category of emotional intelligence scores

Category	Score	*F*	%
High	92,7525	3	11,1111
Is	$70,0623 \leq X \leq 92,7525$	20	74,0471
Low	$X < 70,0623$	4	14,8148
Total		27	100

From the results of categorization, as shown in Table 15, it can be seen that the emotional intelligence of VIIIA class, even semester of SMP Negeri 2 Purwadadi Ciamis Regency in the academic year 2017/2018, is included in the medium category because the highest frequency lies in the interval of $70.0623 \leq x \leq 92.7525$ namely as many as 20 students or 74.0741%.

Value Mathematics learning outcome data obtained from the instrument scores given to 27 students totaling 18 items. Then obtained the highest score of 88.89 and the lowest score of 50.00. From these criteria, the grouping of mathematics learning outcomes is obtained as follows:

Table 4. Distribution of Number of Students by Student Mathematical Learning Outcomes Category

Category	Score	*F*	%
High	X > 76,9167	5	18,5185
Is	55,2585 ≤ X ≤ 76,9167	21	77,7778
Low	X < 55,2585	1	3,7037
Total		27	100

From the results of the categorization, as seen in Table 4, it can be seen that the results of mathematics learning in class VIIIA semester.

Even SMP Negeri 2 Purwadadi Ciamis Regency in the academic year of 2017/2018 is included in the medium category because the most significant frequency lies in the interval of 55,2585 ≤ x ≤ 76,9167, namely as many as 21 students or 77.7778%.

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

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

Table 5. Summary of Research Variable Normality Test Results

No	Variable	X^2_{count}	X^2_{table}	df	Info.
1	Confidence (X_1)	2,0941	5,9915	3	Normal
2	Emotional Intelligence (X_2)	1,8934	5,9915	3	Normal
3	Mathematics Learning Outcomes (Y)	3,4835	7,8147	4	Normal

After the normality test is performed, the linearity test. Linearity test is used to determine whether the independent and bound variables have a linear relationship using the linear regression formula (*F test*). The criterion for decision-making is the relationship between the variables and the linear when $F_{count} \leq F_{table}$ with a significant degree of 5% and the degree of freedom of the numerator $(v_1) = k - 2$ and the degree of freedom the denominator $(v_2) = n - k$. This study for X_1 against Y with $v_1 = 15$ and $v_2 = 10$, and X_2 against Y with $v_1 = 18$ and $v_2 = 7$. A summary of the results of the linearity of the independent variables and the bound variables can be found below:

Table 6. Summary of Linearity Test Results

No.	Variable	F_{count}	F_{table}	Info.
1	X_1 to Y	0,1643	2,8450	Linear
2	X_2 to Y	0,8338	3,4669	Linear

An Independent test is used to determine the presence or absence of a relationship between the independent variable, namely the confidence variable (X_1) and the emotional intelligence variable (X_2) using the chi-square formula. The decision making criteria are variable X_1 and variable X_2 are independent if $\chi^2_{count} \leq \chi^2_{table}$, at 5% and degrees of freedom $df = (B - 1)(K - 1)$. Where B is the number of rows, and K is the number of columns. The independent test results are presented in the following table:

Table 7. Summary of Independent Test Results

No.	Variable	X^2_{count}	X^2_{table}	Info.
1	X_1 to X_2	35,9464	37,6525	Independent

The purpose of the discussion of the results of this study was to determine the relationship of Confidence (X_1) and Emotional Intelligence (X_2) with Mathematics Learning Outcomes (Y) Grade VIII students of SMP Negeri 2 Purwadadi Ciamis Regency Academic Year 2017/2018. In this section, further discussion of the results of the research was analyzed in correlation.

In the first hypothesis test, a simple correlation coefficient (r) of 0.5110 was obtained. So that the coefficient of determination (r^2) is obtained for 0.2611, which can be explained that 26.11% of learning outcomes are influenced by self-confidence. In contrast, the rest is influenced by other factors. There is a variation in mathematics learning outcomes (Y), which is explained by an interest in learning (X_1) through a linear line $\hat{Y} = 35{,}0491 + 0{,}3939\, X_1$, with a regression coefficient 0.3939. The first hypothesis test result is accepted that there is a positive and significant relationship between self-confidence and mathematics learning outcomes. In other words, the higher the student's confidence, the better the student's learning outcomes.

In the second hypothesis test, a correlation coefficient (r) of 0.5173 is obtained. So that the coefficient of determination r^2) is obtained by 0.2676, which can explain 26.76% of learning outcomes influenced by emotional intelligence while other factors influence the rest. There is a variation in mathematics learning outcomes (Y) explained by emotional intelligence (X_2) through a linear line $\hat{Y} = 28{,}1534 + 0{,}4740\, X_2$ with a regression coefficient of 0.4740. The second hypothesis test result is accepted that there is a positive relationship between emotional intelligence and mathematics learning outcomes. The multiple correlation analysis obtained the value of the multiple correlation coefficient (R) of 0.6184. This study also obtained a coefficient of determination (R^2) of 0.3824, meaning that 38.24% of learning outcomes are influenced by self-confidence and emotional intelligence. In contrast, the rest is influenced by other factors. There is a variance in mathematics learning outcomes (Y), which can be explained by self-confidence (X_1) and emotional intelligence (X_2) through linear lines $\hat{Y} = 15{,}8994 + 0{,}2828X_1 + 0{,}3454X_2$. As for the relative contribution of X_1 by 49.0058% and X_2 by 50.9942%. Variable emotional intelligence provides the most significant contribution to learning outcomes than the confidence variable. While the significant contribution of X_1 was 18.7415%, and X_2 was 19.5019%. With a value (R^2) of 0.3824, it can be concluded that 38.24% of mathematics learning outcomes are influenced jointly by self-confidence and emotional intelligence. In comparison, 0.6184 or 61.84% of the remainder are influenced by other factors not examined in this study.

The third hypothesis test results are accepted that there is a positive and significant relationship between self-confidence and emotional intelligence with mathematics learning outcomes.

CONCLUSION

Based on the results of research and discussion as described above, it can be concluded that: (1) There is a positive and significant relationship between self-confidence and mathematics learning outcomes of students of class VIII Even Semester SMP Negeri 2 Purwadadi Ciamis Regency Academic Year 2017/2018. This is indicated by the t-test that is $t_{count} > t_{table}$ or $2.9720 > 2.0595$. The simple correlation coefficient (r) between confidence and mathematics learning outcomes of 0.5110 with a linear regression equation $\hat{Y} = 35{,}0491 + 0{,}3939\, X_1$. (2) There is a positive and significant relationship between emotional intelligence with mathematics learning outcomes for students of class VIII Even Semester, SMP Negeri 2 Purwadadi, Ciamis Regency, Academic Year 2017/2018. This is indicated by the t-test that is $t_{count} > t_{table}$ or $3.0221 > 2.0595$. The simple correlation coefficient (r) between emotional intelligence with mathematics learning outcomes of 0.5173 with a linear regression equation $\hat{Y} = 28{,}1534 + 0{,}4740\, X_2$. (3) There is a positive and significant relationship between self-confidence and emotional intelligence with the mathematics learning outcomes of eighth-grade students of the even

semester of SMP Negeri 2 Purwadadi Ciamis Regency in the academic year 2017/2018. This is indicated by the F-test that is $F_{count} > F_{table}$ or $7.4311 > 3.4028$. The multiple correlation coefficient (R) between self-confidence and emotional intelligence with mathematics learning outcomes of 0.6184 and (R^2) of 0.3824 with a double linear regression equation. $\hat{Y} = 15{,}8994 + 0{,}2828X_1 + 0{,}3454X_2$. The relative contribution of X_1 is 49.0058%, and the relative contribution of X_2 is 50.9942%. The effective contribution of X_1 is 18.7415%, and the effective contribution of X_2 is 19.5019%.

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