CHAPTER IV
RESEARCH FINDING AND DISCUSSION

This chapter of the thesis details with preparation of the analysis data collected from the research, the application of the one predictor regression formula, and analyzing the result of the research as well as discussing the data analysis of research finding.

A. Research Finding

1. Students' writing ability

The data of this variable is taken from English teacher documentation in SMP N 18 Semarang. The student's reading ability of eight grade student of SMP N 18 Semarang in the academic year of 2013/2014 is as follow:

Table IV

Table 4.1: The score of student's writing

No	Score	No	Score
1	80	17	60
2	80	18	65
3	80	19	65
4	70	20	65
5	70	21	70
6	70	22	70
7	85	23	70
8	85	24	75
9	85	25	75
10	90	26	75
11	90	27	75
12	75	28	75
13	75	29	80
14	75	30	80
15	60	31	80
16	60	32	65

Based on the table above, the next step is looking for the mean and the quality of student's reading ability variable (Y), there are as follow:

a. Find out the SUM of interval

K = 1 + 3, 3 log n

= 1 + 3, 3 log 32

= 1 + 4, 874

= 5, 874

= 6

b. Find out the range

R = H – L

Where:

R = Range

H = Highest value

L = Lowest value

From that data, it is known that:

H = 90 , L = 60

R = H – L

= 90 – 60

= 30

c. Determining class interval

$$I = \frac{range}{sumof\ \text{int}\ erval}$$

= R/K

= 30/6

= 5

So, class interval is 5 and the SUM of interval is 6

Table 4.2

Frequency Distribution of Student's Reading Ability

No	Class Interval	Absolut Frequency	Relative Frequency (%)
1	85 – 90	5	16
2	80 –84	6	19
3	75 – 79	8	25
4	70 – 74	6	19
5	65 – 69	4	12
6	60 – 64	3	9
Total		32	100

Based on the result of mean calculation above, the next step is making the category. There are as follow:

Table 4.3

The Quality of Students' Writing Ability

Mean	Raw Score	Criterium
74.22	85 – 90	Very good
	70 – 84	Good
	65 – 69	Enough
	60 – 64	Lack

Based on the table above, it is known that the mean from Students' writing ability variable in SMP N 18 Semarang is 70.5. It means that the category of Students' writing ability is good. It is on interval 70 – 84.

2. Student's Reading Ability

The data of this variable is taken from English teacher documentation in SMP N 18 Semarang. The student's reading ability of eight grade student of SMP N 18 Semarang in the academic year of 2013/2014 is as follow:

Table 4.4

The score of student's reading

No	Score	No	Score
1	80	17	70
2	80	18	65
3	80	19	65
4	70	20	65
5	70	21	70
6	70	22	70
7	85	23	70
8	85	24	80
9	85	25	75
10	90	26	75
11	90	27	75
12	75	28	75
13	75	29	75
14	75	30	80
15	65	31	80
16	60	32	65

Based on the table above, the next step is looking for the mean and the quality of student's reading ability variable (Y), there are as follow:

a. Find out the SUM of interval

K = 1 + 3. 3 log n

= 1 + 3. 3 log 32

= 1 + 4. 874

= 5. 874

= 6

b. Find out the range

R = H – L

Where:

R = Range

H = Highest value

L = Lowest value

From that data, it is known that:

H = 90 , L = 60

R = H – L

= 90 – 60

= 30

c. Determining class interval

$$I = \frac{range}{sumof\ \text{int}\ erval}$$

= R/K

= 30/6

= 5

So, class interval is 5 and the SUM of interval is 6

Table 4.5

Frequency Distribution of Student's Reading Ability

No	Interval	Absolut Frequency	Relative frequency (%)
1	85 – 90	5	16
2	80 – 84	6	18
3	75 – 79	8	25
4	70 – 74	7	22
5	65 – 69	5	16
6	60 – 64	1	3
	Total	32	100

Based on the result of mean calculation above, the next step is making the category. There are as follow:

Table 4.6

The Quality of Student's Reading Ability

Mean	Raw Score	Criterium
74,69	85 -90	Very good
	70 – 84	Good
	65 – 69	Enough
	60 – 64	Lack

Based on the table above, it is known that the mean from student's Reading ability variable in SMP N 18 Semarang is 75. It means that the category of student's reading ability is good. It is on interval 70 – 84.

3. Hypothesis Analysis

This analysis is used to prove that the hypothesis is accepted or rejected. In this research, the hypothesis is there is positive influence between Students' writing ability and the student's reading ability in SMP N 18 Semarang in the academic year of 2013/2014.

To prove that hypothesis, the writer used one predictor regression formula with SPSS as follows:

a. Looking for the correlation between predictor (X) and the criterion (Y) can be found by the correlation product moment technique , with spss 16:

Correlations

		Writing Ability	Reading Ability
Writing Ability	Pearson Correlation	1	.960**
	Sig. (2-tailed)		.000
	N	32	32
Reading Ability	Pearson Correlation	.960**	1
	Sig. (2-tailed)	.000	
	N	32	32

**. Correlation is significant at the 0.01 level (2-tailed).

To examine the hypothesis, the steps are as follow:

1) Looking for the value of correlation between variable (X); Students' writing ability and variable (Y); student's Reading

ability in SMP N 18 Semarang in the academic year of 2013/2014, with using the formula:

Based on the calculation above, it is known that the coefficient correlation (r) between variable X and variable Y is 0.96

2) Examining whether there is significant correlation or not by consulting the result of sig on α 5%.

After doing the correlation test with product moment correlation formula, the result is consulted with α 5% on the significant level 5%.

a) It is significant if sig < α 5% (0, 05), hypothesis is accepted

b) It is not significant if sig > α 5% (0,05), hypothesis is rejected

From the result of calculation above, it is known that sig = 0.000 < α 5% (0. 05). It means that hypothesis is accepted. So, there is a positive correlation between Students' writing ability and student's reading ability.

From the result above, the researcher will interpret that category of coefficient correlation based on the following:

0, 90 – 1, 00	means very high correlation
0, 70 – 0, 90	means high correlation
0, 40 – 0, 70	means enough correlation
0, 20 – 0, 40	means low correlation

Based on the calculation above, the researcher concludes that the correlation between variable X and variable Y has the positive correlation with the score correlation 0. 96 (it is categorized "very high correlation").

b. Looking for the regression similarity

$\hat{Y} = ax + K$

Where:

Y = Criterion

X = Predictor

a = the numeral of predictor coefficient

K = the numeral of constant

To look for the value of a and K, the writer uses deviation score method using SPSS 16 as follows:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960[a]	.922	.919	2.168

a. Predictors: (Constant), Writing Ability

Coefficients[a]

Model		Unstandardized Coefficients	Standardized Coefficients		T	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.868	3.528		2.514	.018
	Writing Ability	.887	.047	.960	18.770	.000

a. Dependent Variable: Reading Ability

c. Variant analysis of regression line

This analysis is used to looking for the correlation between criterion and predictor using one predictor regression with deviation score formula.

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1655.873	1	1655.873	352.309	.000[a]
	Residual	141.002	30	4.700		
	Total	1796.875	31			

a. Predictors: (Constant), Writing Ability

b. Dependent Variable: Reading Ability

After knowing the regression analysis, the next step is consulting the result with α 5%, on the significant level 5%. From the hypothesis test above, it is known that sig = 0.000 < α 5% (0, 05), it means the hypothesis is accepted. So there is positive influence between Students' writing ability and student's reading ability.

B. Discussion

The hypothesis analysis above shows that there is positive influence between Students' writing ability and student's Reading ability, sig = 0.000 < α 5% (0, 05), therefore, it can be summed up that the hypothesis in this research is proved and can be accepted.

The explanation of research acceptability which was proposed is as follows:

1. Change in education level background score will give significant effect

   On the change of student's reading ability, students' writing ability can reach maximum level that is 1, 000 but the student's reading ability is still being affected by other factors which are not studied now.

2. Based on the SPSS calculation, it is known that effective contribution of Students' writing ability to the student's English achievement is 96% can reach maximum level that is 100%. Thus the influence of students' writing ability to the student's reading ability is very high. It means that student's reading ability in SMP N 18 Semarang is still being affected by other factors which are not studied now, that are 4 %.