

CHAPTER IV
FINDINGS AND DISCUSSION

A. Data Description

The data analyzed in this research are the result of the test and questionnaire. The tests consist of reading comprehension test and vocabulary test. The test conducted to know the students' reading comprehension and students' vocabulary mastery. Then the researcher distributed questionnaire to know the students' learning motivation.

1. Reading Comprehension

In this case, students' reading comprehension was as the dependent variable (Y). The researcher conducted written test to know the students' reading comprehension score. The test was evaluated from six indicators of reading. They are finding topic, finding main idea, finding detailed information in the text, identifying reference of pronoun, drawing inferences, and guessing word meaning based context. The scoring system for the test was if the students answered the item correctly, they got score 1 whereas if the item was incorrectly, they got score 0. The result of students' reading comprehension test (see on appendix).

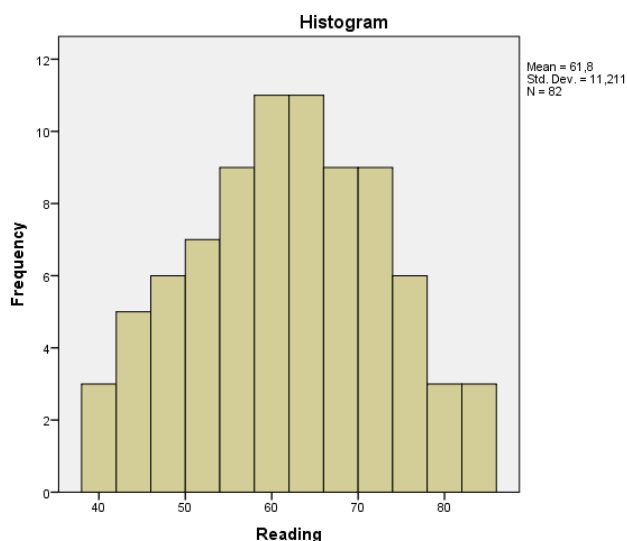
Table 4.1 Descriptive Statistics
Statistics

Reading		
N	Valid	82
	Missing	0
Mean		61,80
Std. Error of Mean		1,238
Median		62,00
Mode		62

Std. Deviation	11,211
Range	44
Minimum	40
Maximum	84
Sum	5068

From the table above, it can be seen that the total score of students' reading comprehension test was 5068. By applying SPSS for windows, it showed that the mean, median, mode, and standar deviation were 61,80, 62,00, and 11,211. The minimum score of students' reading comprehension score was 40 and the maximum score of students' reading comprehension was 84. Based on the result statistics above, the mean score of reading comprehension was 61,80. The histogram can be seen in figure 4.1

Figure 4.1 The Histogram of Students' Reading Comprehension Score



2. Vocabulary mastery

Vocabulary mastery is as the independent variable (X_1). The researcher conducted written test to know the students' vocabulary mastery score. The test was evaluated from indicators of reading. They are word classes, word meaning, and word building. Word classes consist of noun, verb, adjective and adverb. Word meaning consists of synonym, antonym, and hiponym. Word building consists of affixation, compounding, and conversion. The scoring system for the test is if the students answer the item correctly, they got score 1 whereas if the item incorrectly, they got score 0. The result of students' vocabulary mastery test (see on appendix).

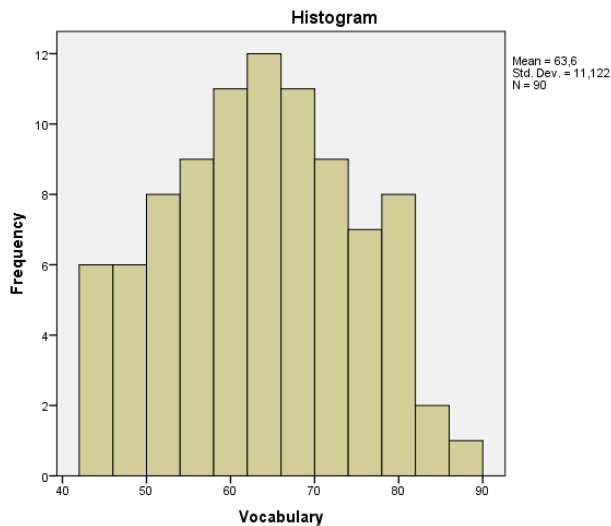
Table 4.2. Descriptive Statistics

Statistics		
Vocabulary		
N	Valid	82
	Missing	0
Mean		61,80
Std. Error of Mean		1,238
Median		62,00
Mode		62
Std. Deviation		11,211
Range		44
Minimum		44
Maximum		84
Sum		5264

From the data of students' vocabulary mastery test, it is found that highest score is 84 and the lowest score is 44 in the scoring scale of 0-100. The mean was 61,80, median was 62,00, mode was 62, range and standar deviation are 44, and 11,211. Based on the result statistics above,

the mean of vocabulary mastery is 61,80. It means that students' vocabulary mastery is in low level. The histogram can be seen at figure 4.2.

Figure 4.2. The Histogram of Students' Vocabulary Mastery Score



3. Learning motivation

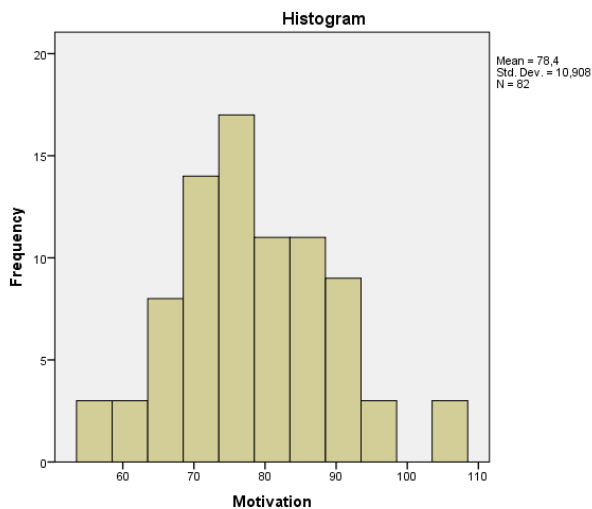
In this study, students' learning motivation is as independent variable (X_2). To measure students' learning motivation, the students is given questionnaire. The type of questionnaire is closed-type questionnaire (see on appendix). The questionnaire is evaluated from six indicators of motivation. They are the need for exploration, the need for manipulation, the need for activity, the need for simulation, the need for knowledge, and the need for ego-enhancement. The questionnaire were assessed by Likert scale rating. This scale has five options. They are Strongly Agree (Sangat Setuju), Agree (Setuju), Undecided (Ragu-ragu), Disagree (Tidak Setuju), and Strongly Agree (Sangat Tidak Setuju).

Table 4.3. Descriptive Statistics

Statistics		
Motivation		
N	Valid	82
	Missing	0
Mean		78,40
Std. Error of Mean		1,205
Median		78,00
Mode		78
Std. Deviation		10,908
Range		50
Minimum		56
Maximum		106
Sum		6429

From the data of students' learning motivation questionnaire, it is found that highest score is 106 and the lowest score is 56 in the scoring scale of 0-125. The mean, median, mode, and standar deviation are 78.40, 78,00, 78, and 10.908. The histogram can be seen in figure 4.3.

Figure 4.3. The Histogram of Students' Learning Motivation Score



B. Testing of Pre-Requimen Analysis

The characteristic of the data of the research determines the techniques of analyzing the data. Before analyzing the data, it is necessary to examine the data. The examination covers normality and linearity.

1. Normality Test

Normality test is done to find out whether the population is in normal distribution or not. In this research, Kolmogorov-Smirnov test is used to test normality.

Table 4.4. Normality Test of Reading Comprehension, Vocabulary Mastery and Learning Motivation

Tests of Normality						
	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	D f	Sig.
Reading	.078	82	.200*	.975	82	.110
Vocabulary	.078	82	.200*	.975	82	.110
Motivation	.063	82	.200*	.985	82	.486

Based on the result of normality test using SPSS, it can be concluded that the sample of reading, vocabulary, and motivation is in normal distribution because the significance value (0,200) is greater than 0,05.

2. Linearity Test

a. Reading Comprehension and Vocabulary Mastery

Table 4.8. Linearity of Reading Comprehension and Vocabulary Mastery.

Table 4.5. Linearity of Reading Comprehension and Vocabulary Mastery

ANOVA Table

			Sum of Squares	Mean Square	F	Sig.
Reading * Motivation	Between Groups	(Combined)	6408,878	178,024	2,124	,009
		Linearity	3876,634	3876,634	46,248	,000
		Deviation from Linearity	2532,244	72,350	,863	,671
	Within Groups		3772,000	83,822		
	Total		10180,878			

Based on the result of linearity test using SPSS, it can be concluded that the data is linear if significance is greater than 0,05. The result of significance computed by ANOVA table is 0,671. The significance is greater than 0,05 so the data is linear.

b. Reading Comprehension and Motivation

Table 4.6 Reading Comprehension and Motivation

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Reading * Motivation	Between	(Combined)	6408,878	36	178,024	2,124	,009
	Groups	Linearity	3876,634	1	3876,634	46,248	,000
		Deviation from Linearity	2532,244	35	72,350	,863	,671
	Within Groups		3772,000	45	83,822		
	Total		10180,878	81			

Based on the result of linearity test using SPSS, it can be concluded that the data is linear if significance is greater than 0,05. The result of significance computed by ANOVA table is 0,671. The significance is greater than 0,05 so the data is linear.

C. Hypothesis Testing

1. Correlation between vocabulary mastery (X_1) and

reading comprehension (Y).

The researcher uses the null hypothesis (H_0) saying that there is no correlation between vocabulary mastery (X_1) and reading comprehension (Y), against the alternative hypothesis (H_a) saying that there is significant correlation between vocabulary mastery (X_1) and reading comprehension (Y). The researcher follows some assumptions as follow:

- a. If the result of calculation r_o is lower than r_t (r_{table}) $r_o < r_t$, the null hypothesis (H_0) is accepted, and the alternative hypothesis (H_a) is rejected.
- b. If the result of calculation r_o is higher than r_t (r_{table}) $r_o > r_t$, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted.

Table 4.7. Correlation between vocabulary mastery and Reading Comprehension.

Correlations			
		Reading	Vocabulary
Reading	Pearson Correlation	1	,598**
	Sig. (2-tailed)		,000
	N	82	82
Vocabulary	Pearson Correlation	,598**	1
	Sig. (2-tailed)	,000	
	N	82	82

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

The result of r_{count} value (0,598) is higher than r_{table} (0,220) $N=82$ with significant value 0.05. So the conclusion is:

- 1) H_0 is rejected

- 2) H_a is accepted
 - 3) There is significant correlation between vocabulary mastery and reading comprehension of the tenth grade students of SMAN 1 Plosoklaten.
2. Correlation between learning motivation (X_2) and reading comprehension (Y).

The researcher uses the null hypothesis (H_0) saying that there is no correlation between learning motivation (X_2) and reading comprehension (Y), against the alternative hypothesis (H_a) saying that there is significant correlation between learning motivation (X_2) and reading comprehension (Y). The researcher follows some assumptions as follow:

- a. If the result of calculation r_o is lower than r_t (r_{table}) $r_o < r_t$, the null hypothesis (H_0) is accepted, and the alternative hypothesis (H_a) is rejected.
- b. If the result of calculation r_o is higher than r_t (r_{table}) $r_o > r_t$, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_a) is accepted.

Table 4.8. Correlation between Learning Motivation (X_2 variable) and Reading Comprehension (Y Variable)

Correlations			
		Reading	Motivation
Reading	Pearson Correlation	1	,617**
	Sig. (2-tailed)		,000
	N	82	82

Motivation	Pearson Correlation	,617**	1
	Sig. (2-tailed)	,000	
	N	82	82

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

The result of r_{count} value (0,617) is higher than r_{table} value (0,220)

1N=82 with significant value 0.05. So the conclusion is:

- 1) H_0 is rejected.
 - 2) H_a is accepted.
 - 3) There is significant correlation between learning motivation and reading comprehension of the tenth grade students of SMAN 1 Plosoklaten
3. Correlation between vocabulary mastery (X_1), learning motivation (X_2), and reading comprehension (Y).

The first hypothesis that will be tested is null hypothesis (H_0) saying that there is no significant correlation between vocabulary mastery (X_1), learning motivation (X_2), and reading comprehension (Y) against the alternative hypothesis (H_a) saying that there is significant correlation between vocabulary mastery (X_1), learning motivation (X_2), and reading comprehension (Y). The technique used is regression.

Table 4.9. Model Summary of Vocabulary Mastery, Learning Motivation and Reading Comprehension

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	,668 _a	,446	,432	8,447	,446	31,837	2	79	,000

a. Predictors: (Constant), Motivation, Vocabulary

After being calculated by regression helping by SPSS 20.00 for windows, it is found significant Fchange is $0,000 < 0.05$. It can be concluded that the variables had correlation. To know the correlation between all variables by computing R_{table} . The value of r_{table} can be seen $R = 0,668$ $r_{table} > 0.220$, it can be concluded that the correlation between the variables had strong correlation.

Table 4.10. Correlation between Vocabulary Mastery (X_1), Learning Motivation (X_2), and Reading Comprehension (Y).

Correlations				
		Reading	Vocabulary	Motivation
Pearson Correlation	Reading	1,000	,598	,617
	Vocabulary	,598	1,000	,657
	Motivation	,617	,657	1,000
Sig. (1-tailed)	Reading	.	,000	,000
	Vocabulary	,000	.	,000
	Motivation	,000	,000	.
N	Reading	82	82	82
	Vocabulary	82	82	82
	Motivation	82	82	82

From the table 4.10 above, the significant is 0,000. If significant < 0.05 , it can be concluded that the correlation between vocabulary mastery, learning motivation and reading comprehension is significant correlation.

The result of this hypothesis as follows:

1. H_0 is rejected
2. H_a is accepted.
3. There is significant correlation between vocabulary mastery and learning motivation toward reading comprehension of the tenth grade students of SMAN 1 Plosoklaten.

D. Discussion

From the data description, it is found that the mean scores and standard deviation score in each variable. The mean score of the data description students' reading comprehension is 61,80 and the standard deviation is 11,211. The mean score of the data description students' vocabulary mastery is 61,80 and the standard deviation is 11,211. The mean score of the data description students' learning motivation is 78,40 and the standard deviation is 10,908

After analyzing the correlation between the variables, a discussion can be given as follows. The discussion emphasized more on finding the possible causes of the result of the study. Since the computation of the normality, linearity, and the significant testing show that the data are in normal distribution and regression is linear and significant. Then the researcher continues to the hypothesis.

From hypothesis testing, it is found that there is positive correlation between vocabulary mastery and reading comprehension. It means that the hypothesis is accepted. $r_{xy} = 0,598 > r_{table} = 0,220$ it can be concluded that vocabulary mastery and reading comprehension has correlation. The level of correlation had strong correlation. There is positive correlation between vocabulary mastery and reading comprehension. A positive correlation indicates that vocabulary mastery give contribution to reading comprehension, it meant that every improvement of vocabulary mastery will be followed by the improvement of reading comprehension.

David Wilkins in Thornbury (2002: 13) states that without vocabulary nothing can be conveyed. Students need vocabulary mastery to understand the text that they read. If the students have low skill of vocabulary mastery, they

will get difficulty in understanding the text and get the important information of the text. On the contrary, if the students have high skill or vocabulary mastery will easily to understand the text. Increasing vocabulary mastery will be followed by improving students' reading comprehension.

There is correlation between learning motivation and reading comprehension. $r_{xy} = 0,617 > r \text{ table} = 0,220$ $N=82$ with significant value 0,05 so it can be concluded that learning motivation and reading has correlation. Nunan (2003: 22) says that motivation and learning attitude are important predictors of achievement. In relation with that statement, Slavin (2011:100) said that students who are highly motivated to learn something are more likely to be active than others to consciously plan their learning, to carry out a learning plan, and to retain the information they obtain. It means that learning motivation has contribution on the result of reading comprehension.

The low of learning motivation will result in the low of reading comprehension while the high of learning motivation will result in the high of reading comprehension. It meant students' learning motivation support in students' reading comprehension. Increasing of learning motivation will followed by improving reading comprehension. The motivated students are easier to understand the content of the text.

There is positive correlation between vocabulary mastery and learning motivation toward reading comprehension. $r_{xy} = 0,668 > r \text{ table} = 0,220$ $N=82$ with significant value 0,05 so it had correlation.

The finding of this study can support the previous study which found that Multiple correlations between students vocabulary mastery and

metacognitive reading strategy toward reading comprehension obtained was, 420. It means there was moderate significant correlation. In addition, good control of students metacognitive reading strategy use will better to help them easy understanding the text. The result of this present study was in accordance based on result Harati (2011) who found the coefficient correlation between reading motivation and reading comprehension obtained was, 424. It means that there was medium relationship between rioningeadng motivation and reading comprehension achievement. Medillton (2011) in this study found moderate significant correlation between reading motivation ($r=64$). Dimar (2012) also found there is medium significant correlation between reading motivation and reading comprehension and the coefficient correlation was (0.483).