CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter covers about research findings and discussion that include the description of data, the result of normality and homogeneity testing, hypothesis testing, and discussion.

A. The Description of Data

In this chapter, the researcher presented the data on the students' vocabulary achievement between students taught by using Hangman Game and those taught by using conventional method. The subjects of the research consisted of two classes, they were VIII H as Experimental class and VIII I as Control class. The purpose of the research was to know the effectiveness of using Hangman Game on eighth grade students' vocabulary achievement at SMPN 1 Kalidawir. The data were collected from students' score in pre-test and post-test of the two classes. Then, to determine the significance different whether using Hangman Game was effective or not, the researcher did not use individual scores for comparison. But, it used the results of class scores or mean of the scores in vocabulary. The data were presented as follow:

1. The Data of Experimental Class

The table below showed the students' score of pre-test and posttest of Experimental class that consisted of 32 students of eighth grade of SMPN 1 Kalidawir. The test were multiple choices consisted of 10 items and matching the meaning consisted of 10 items about verbs of simple present tense.

In this research the researcher did not use individual scores for comparison the result, but used the results of class scores or mean of the scores in vocabulary. To know the result of class scores in pre-test the researcher used SPSS *16.0 for windows* to know the students' vocabulary achievement at Experimental class, especially in their basic vocabulary. The result can be seen in the Table 4.1 below:

Table 4.1 Descriptive Statistic Pre-test of Experimental Class

Statistics

Pretest

N	Valid	32
	Missing	0
Mean		60.47
Median		60.00
Mode		50[a]
Std. Deviation		12.659
Minimum		40
Maximum		85
Sum		1935

According to the result of pre-test from the table above, it showed that the sum of data was 1935. The lowest score of pre-test was 40 and the highest score was 85. The mean of data was 60.47. And after the researcher gave the treatment by using Hangman Game in teaching vocabulary for one week, the researcher gave the students post-test scores. The data in the post-test showed in the Table 4.2 below:

Table 4.2 Descriptive Statistic Post-test of Experimental Class

Statistics

Posttest

N	Valid	32
	Missing	0
Mean		74.38
Median		75.00
Mode		75
Std. Deviation		12.098
Minimum		50
Maximum		90
Sum		2380

According to the result of post-test from the table above, it showed that the sum of data was 2380. The lowest score of post-test was 50 and the highest score was 90. The mean of data was 74.38.

Based on descriptive statistic pre-test and post-test of Experimental class, it showed the *Sum* of data pre-test was 1935 and the *Sum* of data post-test was 2380. The *Mean* of pre-test score was 60.47 and the *Mean* of post-test score was 74.38. Then, it can be concluded that the gained score between pre-test and post-test was 445 and the gained of mean score was 13.91.

2. The Data of Control Class

The table below showed the students' score of pre-test and posttest of Control class that consisted of 32 students on eighth grade of SMPN 1 Kalidawir. The test were multiple choices consisted of 10 items and matching the meaning consisted of 10 items about verbs of simple present tense.

In this research the researcher did not use individual scores for comparison the result, but used the results of class scores or mean of the scores in vocabulary. To know the results of score in pre-test, the researcher used SPSS *16.0 for windows* to know the students' vocabulary achievement at Control class. The result can be seen in the Table 4.3 below:

Table 4.3 Descriptive Statistic Pre-test of Control Class

Statistics

Pretest

N	Valid	32
	Missing	0
Mean		49.53
Median		50.00
Mode		30
Std. Deviation		14.332
Minimum		30
Maximum		70
Sum		1585

According to the result of pre-test from the table above, it showed that the sum of data was 1585. The lowest score of pre-test was 30 and the highest score was 70. The mean of data was 49.53. And after the researcher teaching vocabulary using conventional method, the researcher gave the students post-test scores. The data in the post-test were showed in the Table 4.4 below.

4.4 Descriptive Statistic Post-test of Control Class

Statistics

Posttest

N	Valid	32
	Missing	0
Mean		51.25
Median		55.00
Mode		55
Std. Deviation		17.916
Minimum		20
Maximum		80
Sum		1640

According to the result of post-test from the table above, it showed that the sum of data was 1640. The lowest score of post-test was 20 and the highest score was 80. The mean of data was 51.25.

Based on descriptive statistic pre-test and post-test of Control class, it showed the *Sum* of data pre-test was 1585 and the *Sum* of data post-test was 1640. The *Mean* of pre-test score was 49.53 and the *Mean* of post-test score was 51.25. Then, it can be concluded that the gained score between pre-test and post-test was 55 and the gained of mean score was 1.72.

B. **The Result of Normality and Homogeneity Testing**

1. **The Result of Normality Testing**

Normality testing is conducted to determine whether the gained data was normal distribution or not. The researcher used SPSS *16.0 One-Sample Kolmogorov-Smirnove* test by the value of significance (α) = 0.050. The result can be seen in table below:

Table 4.5 Normality Testing

One-Sample Kolmogorov-Smirnov Test

		Pretest	Posttest	Unstandardized Residual
N		32	32	32
Normal Parameters[a]	Mean	60.47	74.38	.0000000
	Std. Deviation	12.659	12.098	12.04764783
Most Extreme Differences	Absolute	.140	.177	.120
	Positive	.140	.102	.087
	Negative	-.118	-.177	-.120
Kolmogorov-Smirnov Z		.790	1.000	.681
Asymp. Sig. (2-tailed)		.561	.270	.742

a. Test distribution is Normal.

a. H_0: Data is in normal distribution

b. H_1: Data is not in normal distribution

The standard significant of education is 0.05 (α = 5%). To determine data was normal distribution or not it can be seen from the result of data normality testing. Based on the output from SPSS above is known that the significance value from pre-test was 0.790 and from the post-test was 1.000. Both value from pre-test and post-test were bigger than 0.05.

The sig/p value on pre-test is 0.790 and it is bigger than 0.05 (0.790 > 0.05). it means that H_0 is accepted and H_1 rejected, so the data is in normal distribution. Then, for post-test score value of sig/p is 1.000 and that is bigger than 0.05 (1.000 > 0.05). It also means that H_0 is accepted and H_1 is rejected and the data is in normal distribution. Thus, it can be

interpreted that both of data (pre-test and post-test score) are in normal distribution.

2. **The Result of Homogeneity Testing**

Homogeneity testing is conducted to know whether the gained data has a homogeneous variance or not. To know the homogeneity, the researcher used *Test of Homogeneity of Variances* with SPSS 16.0 by the value of significance (α) = 0.050. The result can be seen below:

Table 4.6 Homogeneity Testing

Test of Homogeneity of Variances

Pretest

Levene Statistic	df1	df2	Sig.
.898	1	62	.347

a. H_0: Data is homogeny

b. H_1: Data is not homogeny

The standard significant of education is 0.05 (α =5%). Based on the output from SPSS above is known that the test called homogeny if the significant score more than 0.05. According to the table above, the test is homogeny because $0.347 > 0.05$ and it means that H_0 is accepted and H_1 is rejected. So, it can be concluded that students of VIII H have homogeny of variances.

C. Hypothesis Testing

The hypothesis testing of this study as follow:

1. H_0 (null hypothesis): There is no significant difference score in vocabulary of the students taught by using Hangman Game and those taught by using conventional method at the eighth grade of SMPN 1 Kalidawir.

2. H_1 (alternative hypothesis): There is significant difference score in vocabulary of the students taught by using Hangman Game and those taught by using conventional method at the eighth grade of SMPN 1 Kalidawir.

The hypothesis testing of this study followed the rule as follows:

1. If the significant value is less than 0.05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_1) is accepted.

2. If the significant value is more than 0.05, the alternative hypothesis (H_1) is rejected and null hypothesis (H_0) is accepted.

To know whether there were any significance different students' vocabulary achievement between the students taught by using Hangman Game and those taught by using conventional method, the calculating result should show whether H_0 is rejected meanwhile H_1 is accepted. To analyze data, the researcher used SPSS *16.0 for windows*, the result can be seen in Table 4.7 below:

Table 4.7 Descriptive Statistic of Post-test in Two Groups

Group Statistics

Class	N	Mean	Std. Deviation	Std. Error Mean
Experimental_class	32	74.38	12.098	2.139
Control_class	32	51.25	17.916	3.167

The table above showed that there were two classes, experimental class and control class. Experimental class consisted of 32 students, the *Mean* of score experimental class was 74.38, the *Standard Deviation* for experimental class was 12.098. Meanwhile, the control class showed there were 32 students, the *Mean* of score control class was 51.25 and the *Standard Deviation* for control class was 17.916.

In addition, to know the significance different score in Experimental and Control classes, besides uses descriptive statistics the researcher also used Independent Sample T-test. The purpose was to know the effectiveness of Hangman Game in vocabulary achievement. To analyze the result of T-test, the researcher used SPSS *16.0 for windows*. The result can be seen in Table 4.8 as follow:

Table 4.8 Independent Sample T-test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Score	Equal variances assumed	7.706	.007	6.051	62	.000	23.125	3.822	15.486	30.764
	Equal variances not assumed			6.051	54.406	.000	23.125	3.822	15.465	30.785

The table of Independent Sample Test showed that the significant value (sig-2 tailed) was 0.000. According to the hypothesis testing rule, if the significant value is less than 0,05, the null hypothesis (H_0) is rejected and alternative hypothesis (H_1) is accepted. And if the significant value is more than 0.05, the alternative hypothesis (H_1) is rejected and null hypothesis (H_0) is accepted. The significant value (sig-2 tailed) was 0.000 and it was smaller than 0.05 (0.00 < 0.05), it means that H_0 was rejected and H_1 was accepted.

Thus, it can be interpreted that there was significant difference score in vocabulary of the students' taught by using Hangman Game and those taught by using conventional method. It means that Hangman Game was effective used to improve the students' vocabulary mastery.

D. Discussion

In this research, a researcher conducted the research in two class during the teaching and learning process. The subjects of the research consisted of 64 students. The sample was gotten by using purposive sampling technique where the researcher decided VIII I class as control class which was not given the treatment by using Hangman Game as teaching media and VIII H as experimental class which was given the treatment by using Hangman Game as teaching media. In this research, the researcher administered two kinds of test; those were pre-test and post-test.

After the data were collected, the data were analyzed by using of SPSS *16.0 for windows*. The students who were without using Hangman Game did not reveal significant improvement. It could be seen from the mean score of pre-test was 49.53 and the mean score of post-test was 51.25. The gained of the mean score of control class between pre-test and post-test was 1.72. In addition, there was a few of students who were in poor ability based on the table of control group students' qualification. In the other hand, the students who were taught by using Hangman Game reveal significant improvement. It was proved by the mean score in post-test was higher than the mean score in pre-test. The mean score of pre-test was 60.47 and the mean score of post-test was 74.38. The gained of the mean score of experimental class between pre-test and post-test was 13.91. The table of experimental class students' qualification showed that many students were categorized into good ability and no one student who were in poor ability after they were taught by using Hangman Game.

The data computation of T-test computation shown that P-value (Sig) was 0.000 it was lower than 0.05 or 5% (0.000 < 0.05). It could be concluded that the null hypothesis was rejected and the alternative hypothesis was accepted. It shown that there was significant difference ability of the eighth grade students' SMPN 1 Kalidawir in vocabulary between they who were taught vocabulary without using Hangman Game and those who were by using Hangman Game. It could be said that game was effective to be used in teaching vocabulary. The study was conducted by Wirawan (2013) from Muhammadiyah University of Purwokerto entitled *"The Effectiveness of Hangman Game for Teaching English Vocabulary"*. The result of the study found that Hangman Game was effective for teaching English vocabulary at fourth grade students of SDN 1 Sokanandi, Banjarnegara in academic year 2012/2013. The Hangman Game becomes a choice for those who want easiness, the efficient, and something simple.

Based on the explanation above, it can be said that Hangman Game gives contribution to the teaching and learning vocabulary in SMPN 1 Kalidawir. The media above is accepted by the researcher, especially in practicing the vocabulary to the junior high school because Hangman Game can help teaching and learning process for the students' vocabulary achievement at the eighth grade of SMPN 1 Kalidawir in academic year 2018/2019.

According to Coles (2012), Hangman Game is a fun game that students can play in the classroom in order to help them build their vocabulary skills, because they can play on blackboard, at their desk or even on the smart board. Then, according to Chalmers (2009) Hangman Game is a paper and pencil

guessing game for two or more players. One player thinks of a word, phrase or sentence and the other (s) tries to guess it by suggesting letters. Hangman Game can make students focus on vocabulary section, because this game creates condition in which the use of the target language is necessary for leading the players to the correct guess of the word. Related to vocabulary teaching learning, this game is suitable because students probably have fun and enjoyable in learning English.

In addition, some studies dealing vocabulary and Hangman Game to support the finding on the study. The first study was conducted by Fauziyyah (2015) from State Islamic University of Sunan Gunung Djati Bandung entitled *"The Effectiveness of Using Hangman Game in Increasing Students' Vocabulary Mastery (A Quasi Experimental Study at the Second Grade of MTs Yapin Kertasemaya, Indramayu)"*. The result of the study found that Hangman Game can increase students' vocabulary mastery. It is suggested to use Hangman Game in teaching vocabulary. The second study was conducted by Evi (2016) from Untan Pontianak entitled *"Teaching Vocabulary by Using Hangman Game to Eighth Grade Students SMP DDI SSA Pontianak in Academic Year 2016/2017)"*. The result of the study found that teaching vocabulary by using Hangman Game is effective.