

## **CHAPTER IV**

### **FINDING AND DISCUSSION**

This chapter presents two points: research finding and discussion. The research finding discusses about the result of data analysis and the result of hypothesis testing. The discussion section discuss about data presentation, data analysis and discussion.

#### **A. Research Findings**

##### **1. Data Presentation**

In this research, the purpose of the researcher is to know the use word search puzzle game to improve the students' vocabulary mastery of second grade in MTs Negeri Tulungagung. The researcher involves a class that consists of 36 students.

##### **a. The Students' Score before Being Taught Using Word Search Puzzle Game**

This pre test was given by asking students to answer the question about narrative text. The number of question was given by researcher about 20 questions. There were 36 students' as respondent or subject. It was done before the treatment process by giving word search puzzle game in the teaching and learning vocabulary. This test was intended to know the students' vocabulary mastery before students' got treatment. The descriptive statistic of pre test which consist of mean (table 4.1), the frequency of pre test (table 4.2), the frequency distribution of pre test (table 4.3) and the histogram (table 4.4) can be seen below:

**Table 4.1 Descriptive Statistic of pretest score**

N	Valid	36
	Missing	0
Mean		70.3333
Median		72.0000
Mode		64.00

Based on table above, the researcher can defined that the mean score is 70.33, it's mean that average of 36 students are get score 70.33. the median score 72.00 and the mode 64.00.

**Table 4.2 Frequency of pretest**

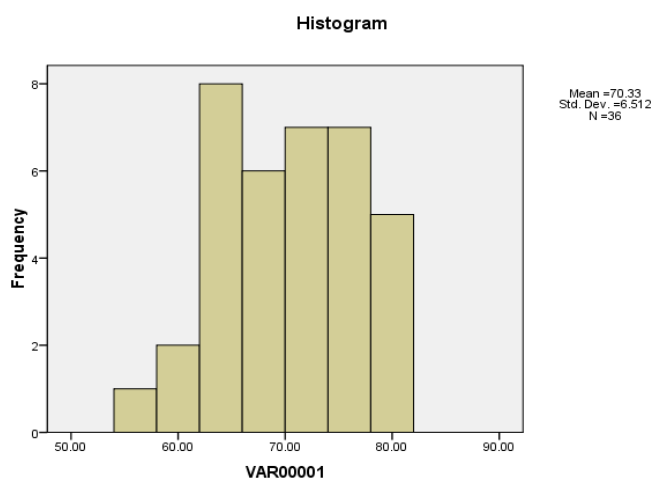
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 56	1	2.8	2.8	2.8
60	2	5.6	5.6	8.3
64	8	22.2	22.2	30.6
68	6	16.7	16.7	47.2
72	7	19.4	19.4	66.7
76	7	19.4	19.4	86.1
80	5	13.9	13.9	100.0
Total	36	100.0	100.0	

Based on the table above, the frequency of pretest can defined there is only one students (2.8%) getting score 56, 2 students (5.6%) getting score 60, 8 students (22.2%) getting students 64, 6 students (16.7%) getting score 68, 7 students (19.4%) getting score 72, 7 students (19.4%) getting score 76, 5 students (13.9) getting score 80.

**Table 4.3 Frequency Distribution of pre test score**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 55-57	1	2.8	2.8	2.8
58-60	2	5.6	5.6	8.3
61-63				
64-66	8	22.2	22.2	30.6
67-69	6	16.7	16.7	47.2
70-72	7	19.4	19.4	66.7
73-75				
76-78	7	19.3	19.4	86.1
79-81	5	13.9	13.9	100.0
Total	36	100.0	100.0	

Based on the table above, the frequency distribution of pretest score can defined there is only one students (2.8%) getting score between 55-57, 2 students (5.6%) getting score between 58-60, no one (0%) getting score between 61-63, 8 students (22.2%) getting score between 64-66, 6 students (16.7%) getting score between 67-69, 7 students (19.4%) getting score between 70-71, no one (0%) getting score between 73-75, 7 students (19.3%) getting score between 76-78, 5 students (13.9%) getting score between 79-81.

**Figure 3.1 Histogram of pretest**

Based on the histogram above, the histogram of pretest shows that the mean score is 70.33 of 36 students, and Std.dev score 6.512.

Descriptive statistics is a statistics functioning to describe the condition of a certain group of people or a group of entities. Based on the tables and histogram of experimental group above, that consists of 36 students'. On the tables and histogram shows that the mean score is 70.33, it's mean that the average of 36 students are get score 70.33. The median score 72.00; there is an equal score above and below the median. In the data score (score 56- score 80) median is 72 there are six data scores greater than this value and six data scores less than this value. In this case, the mode score is 64. The frequency of pretest after distributed there is only one student (2.8%) getting score between 55-57, 2 students (5.6%) getting score between 58-60, no one (0%) getting score between 61-63, 8 students (22.2%) getting score between 64-66, 6 students (16.7%) getting score between 67-69, 7 students (19.4%) getting score between 70-72, no one (0%) getting score between 73-75, 7 students (19.4%) getting score between 76-78 and there are 5 students (13.9%) getting score between 79-81.

**b. The students' score after Being Taught Using Word Search Puzzle Game**

After got a treatment (using word search puzzle game), the students were given a post test. The total question is still 20 too. It is used to know whether the treatment gives effect toward students' vocabulary mastery. The descriptive statistics of posttest score which consists of mean (table 4.5), the frequency of posttest (table 4.6), the frequency distribution of posttest (table 4.7) and the histogram (table 4.8) can be seen below:

**Table 4.4 Descriptive Statistics of posttest score**

N	Valid	36
	Missing	0
Mean		85.5556
Median		84.0000
Mode		84.00

Based on the table above, descriptive statistics of posttest score can defined that the mean score is 85.55, it's mean that the average of 36 students are get score 85.55. The median score 84.00, and the mode score 84.00.

**Table 4.5 Frequency of Posttest score**

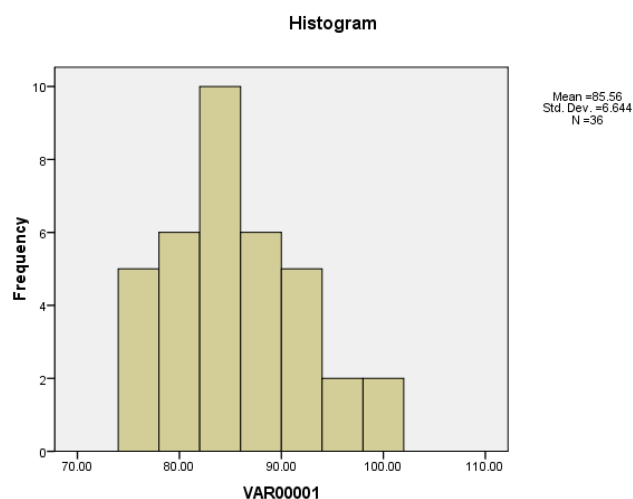
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 76	5	13.9	13.9	13.9
80	6	16.7	16.7	30.6
84	10	27.8	27.8	58.3
88	6	16.7	16.7	75.0
92	5	13.9	13.9	88.9
96	2	5.6	5.6	94.4
100	2	5.6	5.6	100.0
Total	36	100.0	100.0	

Based on the table above, can defined there are 5 students (13.9%) getting score 76, 6 students (16.7%) getting score 80, 10 students (27.8%) getting score 84, 6 students (16.7%) getting score 88, 5 students (13.9%) getting score 92, 2 students (5.6%) getting score 96, 2 students (5,6%) getting score 100.

**Table 4.6 Frequency Distribution of posttest score**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	74-76	5	13.9	13.9	13.9
	77-79				
	80-82	6	16.7	16.7	30.6
	83-85	10	27.8	27.8	58.3
	86-88	6	16.7	16.7	75.0
	89-91				
	92-94	5	13.9	13.9	88.9
	95-97	2	5.6	5.6	94.4
	98-100	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

Based on the table above, the frequency distribution of Posttest Score can defined there are 5 students (13.9%) getting score between 74-76, no one (0%) getting score between 77-79, 6 students (16.7%) getting score between 80-82, 10 students (27.8%) getting score between 83-85, 6 students (16.7%) getting score between 86-88, no one (0%) getting score between 89-91, 5 students (13.9%) getting score between 92-94, 2 students (5.6%) getting score between 95-97, 2 students (5.6%) getting score between 98-100.

**Figure 3.2 Histogram posttest**

Based on the histogram above, the histogram of posttest shows that the mean score is 85.56 of 36 students, and Std.dev score 6.644.

Based on the tables and histogram of posttest score above, the mean score 85.56. Its mean that the averages of 36 students are get score 85.56. the median score 84.00 , there is an equal score above and below the median. In this case, the median is equal to the mode. The mode score is also 84.00. The frequency of posttest score after distributed there are 5 students (13.9%) getting score between 74-76, there are 6 students (16.7%) getting score between 80-82, 10 students (27.8%) getting score between 83-85, there are 6 students (16.7%) getting score between 86-88, 5 students (13.9%) getting score between 92-94, there are 2 students (5.6%) getting score between 95-97 and 2 students (5.6%) getting score between 98-100.

## **B. Hypothesis Testing**

The hypotheses testing of this study are as follow:

- a. If the significant level is bigger than T-table (0,05%), the alternative hypothesis ( $H_a$ ) is accepted and null hypothesis ( $H_0$ ) is rejected. Its means that there is different score to the students before taught using word search puzzle game and the students after taught using word search puzzle game. The difference is significant.
- b. If the significant level is smaller than T-table (0,05%), the Null Hypothesis ( $H_0$ ) is accepted and the alternative hypothesis ( $H_a$ ) is rejected. It means that there is not different score to the students before taught using word search

puzzle game and the students after taught using word search puzzle game.

The difference is not significant.

After the researcher knew the scores of pre test and post test, the researcher analyzed the results using t-test. It was intended to find out whether or not word search puzzle game gave effect on the second grade students vocabulary mastery. Before discussing the result of t-test, the researcher should know the computation table of t-test whole scores.

The result of data analysis (t-test) was 14,205 and the value of t-table at level of significance 0,05% was 2,042. This mean that the result of t-test was higher that t-table. Therefore, Ho (null hypothesis) was rejected. These finding mean that using word search puzzle game give effect to the second grade students' vocabulary mastery. Thus, teaching vocabulary by word search puzzle game was effective in build the students' vocabulary mastery.

### **C. Discussion**

Based on research finding, it showed that the mean scores were significantly different between pretest that using traditional method and post test that using word search puzzle game. The students score when they were taught using word search puzzle game showed that puzzle game gave effect on vocabulary achievement than before they were taught using word search puzzle game. It can be seen from the computation on table of t-test wholes scores. Based on the hypothesis testing, null hypothesis was rejected. In general, it could be stated that word search puzzle game had a positive effect on the students vocabulary achievement. The students were more interested and they enjoyed



learning and memorizing vocabularies. Word search puzzle game could motivate the students in learning activities.

The games not only function as time filling activities but also bring some educational values. Games should be treated as central not peripheral to the foreign language teaching program. Here, using word search puzzle game helps the students to write the spelling of vocabulary correctly, not write the in its spoken form as many students did in general.

Using word search puzzle game given significant effect to the students' vocabulary was effective in building up the students' vocabulary mastery and also the students' attitude and interest in the use of puzzle game. The effective said by the researcher here means that the using word search puzzle game gives a positive change in the teaching learning process. It can be seen from the students' motivation and achievement. Before they were given a treatment, they were lazy because they felt difficult to memorize the vocabulary. Beside that they were bored because the activity only to complement from the sentence or paragraph and memorizing, so when the researcher introduce the using word search puzzle game they were interested and motivated to finish it as fast as they can. Besides, using word search puzzle game could develop their thinking in learning and playing vocabulary because they must guess the difficult word and the content of word search puzzle when they cannot to complement from the sentence or paragraph the words. According to Hadfield (1990), the puzzle is the questions or issues that are difficult to understand or answer.

Word search puzzle game is effective to improve vocabulary ability. It is because word search puzzle game can encourage the students to study vocabulary more active, effective and enthusiastically. Word search puzzle game also fun activities in study vocabulary. As the theory stated by Wendy (2010) that learners love to play, and learn the best when they are enjoying themselves.

In addition they also learn to do cooperation because here the researcher divided the students in a pair group. So they must help each other to win the game, and they enjoyed the game while practicing. Another change is that the students are able to write the vocabulary in a correct spelling because they must fill the puzzle which the squares are fit with the total letter. The students often felt difficult in write a word. They tend to write it as it's pronounced.

From the explanation above, it can be concluded that using word search puzzle game is effective in this research. So, after seeing the result, the Junior High School teacher can use this method as alternative way in teaching English especially in vocabulary. By using word search puzzle game the teaching learning process will run attractively and exciting. So the class will be live because the students will not feel bored or sleepy. The students can learn while enjoy the game competitively. The students can memorize many vocabularies and its spelling in happy situation easily. In addition students will learn to work cooperatively and competitively.