

## CHAPTER IV

### RESEARCH FINDING AND DISCUSSION

#### 4.1 Try-out Analysis

This analysis was meant to find out the validity and reliability of the instrument before it was used as pre-test and post-test. Try-out test was conducted for 7 class. There were twenty nine as a respondent. The try out is available in Appendix 2.

##### 4.1.1 Validity

The vocabulary test consists of forty item numbers. From try-out test that was conducted, it was obtained that item numbers were valid. As mentioned in the third chapter, the test is said to be valid if the result  $r_{xy}$  are higher than  $r_{table}$ . The data was calculated by using product moment and the result showed that the index validity of item number 2 was 0,419. Then the researcher consulted the table of r with N=29 and significance level 5% in which then  $r_{table}$  is 0,367.

The following is the example of counting the validity of item number 2. The value of  $r_{xy}$  is as follows:

$$\begin{aligned} r_{xy} &= \frac{(N \cdot \sum XY) - (\sum X \cdot \sum Y)}{\sqrt{\{N \cdot \sum X^2 - (\sum X)^2\} \{N \cdot \sum Y^2 - (\sum Y)^2\}}} \\ r_{xy} &= \frac{(29 \cdot 537) - (22 \cdot 679)}{\sqrt{\{29 \cdot 22 - (22)^2\} \{29 \cdot 16413 - (679)^2\}}} \\ r_{xy} &= \frac{15573 - 14938}{\sqrt{\{638 - 484\} \{475977 - 461041\}}} \\ r_{xy} &= \frac{635}{\sqrt{\{154\} \{14936\}}} \end{aligned}$$

$$r_{xy} = \frac{635}{\sqrt{2300144}}$$

$$r_{xy} = \frac{635}{1516,623}$$

$$r_{xy} = 0,419$$

The item number 2 of the try-out test was valid since its  $r_{xy}$  = 0,419 was higher than critical value (0,367). The analysis of the other items was presented in the following table:

**Table 4.1**

**The validity of the try-out test**

Criteria	Number of item	The total number
Valid	7,10,11,14,16,17,18,19,20,21,22,24,26,27,30,31,32, 36,40	20
Invalid	3,4,5,6,8,9,12,13,15,23,25,28,29,33,34,35,37,38,39	20

From the table above it can be seen that the try-out instrument had 20 valid and 20 invalid items.

#### 4.1.2 Reliability

A good instrument has to be valid and reliable. After validity items of instrument had be done, the next analysis was to test reliability of instrument. The test is reliable if the result  $r_{xx}$  is higher than  $r_{table}$ . In this computation, the researcher used the formula of Kuder-Richardson formula 20 (K-R 20) and the result showed that the  $r_{xx}$  was 0,569 for  $\alpha=5\%$ ,  $N=29$ , and the  $r_{table}$  was 0,367.

Based on the try-out test, the calculation can be seen as follows:

$$r_{xx} = \frac{K}{K-1} \left( \frac{S_x^2 - \sum pq}{S_x^2} \right)$$

$$r_{xx} = \frac{40}{40-1} \left( \frac{18,39-8,15}{18,39} \right)$$

$$r_{xx} = \frac{40}{39} \left( \frac{10,24}{18,39} \right)$$

$$r_{xx} = 1,025 \times 0,556$$

$$r_{xx} = 0,569$$

From the calculation above, it shows that the coefficient reliability is 0,569 meanwhile  $r_{table}$  for the significant 0,05 (5%) = 0,367. Therefore, the test is reliable because  $r_{xx} > r_{table}$ . Moreover, the calculation of reliability test was also done by using SPSS calculation. It can be seen as follows:

**Table 4.2**

**The Reliability Computation Using SPSS Calculation**

Case Processing Summary		N	%
Cases	Valid	29	100.0
	Excluded <sup>a</sup>	0	.0
	Total	29	100.0

a. Listwise deletion based on all variables in the procedure.

### Reliability Statistics

Cronbach's Alpha	N of Items
.555	40

From the SPSS calculation above showed that in Cronbach's Alpha column was 0,555. This was reliability of the K-R 20 associated with items. There was difference at a digit behind comma. Reliability in manual calculation was 0,569 and in SPSS was 0,555. But, both of them were same because they were higher than  $r_{table} = 0,367$ . So, it can be said that the instrument of this research was reliable.

## 4.2 Description of Data

The researcher held field research by teaching learning process. It was done into one class as experiment class. By doing pre-test and post-test the data was gotten by the researcher. Pre-test was given before the treatment began and post-test was given after the treatment finished.

The researcher obtained two kinds of data; the scores of pre-test and the scores of post-test. The followings are the results of pretest and posttest presented in the Table 4.3, Table 4.4, and Table 4.5.

### 4.2.1 The Pre-Test Scores

This section described the data of pre-test scores. It can be seen in the table 4.3 below:

**Table 4.3**

<b>No</b>	<b>Students Code</b>	<b>Pre-Test Score</b>
1	Q-1	40
2	Q-2	55
3	Q-3	40
4	Q-4	65
5	Q-5	60
6	Q-6	55
7	Q-7	50
8	Q-8	65
9	Q-9	65
10	Q-10	50
11	Q-11	55
12	Q-12	45
13	Q-13	40
14	Q-14	50
15	Q-15	50
16	Q-16	45
17	Q-17	50
18	Q-18	55
19	Q-19	60
20	Q-20	50
21	Q-21	45
22	Q-22	50
13	Q-23	60
24	Q-24	60

25	Q-25	50
26	Q-26	45
27	Q-27	50
28	Q-28	60
29	Q-29	50
<b>N=29</b>	<b>TOTAL</b>	<b>1515</b>
	<b>MEAN</b>	<b>52,24</b>

As mentioned in table, after the data analyzed, it shows that the mean is 52,24 the median is 50 the highest score is 65 and the lowest score is 40.

#### 4.2.2 The Post-Test Scores

This section described the data of post-test scores. It can be seen in the table 4.4 below:

**Table 4.4**

No	Students Code	Post-Test Score
1	Q-1	85
2	Q-2	90
3	Q-3	70
4	Q-4	90
5	Q-5	80
6	Q-6	85
7	Q-7	80
8	Q-8	90
9	Q-9	90

10	Q-10	80
11	Q-11	80
12	Q-12	85
13	Q-13	80
14	Q-14	80
15	Q-15	75
16	Q-16	90
17	Q-17	85
18	Q-18	80
19	Q-19	95
20	Q-20	90
21	Q-21	80
22	Q-22	85
13	Q-23	90
24	Q-24	90
25	Q-25	90
26	Q-26	80
27	Q-27	90
28	Q-28	85
29	Q-29	80
<b>N=29</b>	<b>TOTAL</b>	<b>2450</b>
	<b>MEAN</b>	<b>84,48</b>

As mentioned in table, after the data analyzed, it shows that the mean is 84,48 the median is 85 the highest score is 90 and the lowest score is 70.

### 4.2.3 The Comparison of the Test Result

The comparison of the test result was used to compare between pre-test and post-test. it can be seen in the table 4.5 below:

**Table 4.5**

No	Pre-Test Score (X <sub>1</sub> )	Post-Test Score (X <sub>2</sub> )	D (X <sub>2</sub> -X <sub>1</sub> )	D <sup>2</sup> (X <sub>2</sub> -X <sub>1</sub> ) <sup>2</sup>
1	40	85	45	2025
2	55	90	35	1225
3	40	70	30	900
4	65	90	25	625
5	60	80	20	400
6	55	85	30	900
7	50	80	30	900
8	65	90	25	625
9	65	90	25	625
10	50	80	30	900
11	55	80	25	625
12	45	85	40	1600
13	40	80	40	1600
14	50	80	30	900
15	50	75	25	625
16	45	90	45	2025
17	50	85	35	1225
18	55	80	25	625
19	60	95	35	1225
20	50	90	40	1600



21	45	80	35	1225
22	50	85	35	1225
13	60	90	30	900
24	60	90	30	900
25	50	90	40	1600
26	45	80	35	1225
27	50	90	40	1600
28	60	85	25	625
29	50	80	30	900
<b>N = 29</b>	<b><math>\sum X=1515</math></b>	<b><math>\sum Y=2450</math></b>	<b><math>\sum D=935</math></b>	<b><math>\sum D^2=874225</math></b>

This table shows that the result of  $\sum D = 935$  and  $\sum D^2 = 874225$ .

### 4.3 The Analysis of the Data

This section was intended to answer the research question “was there a significant effect of teaching vocabulary through Word Wall media toward students’ vocabulary mastery at the seventh grade of MTs Nurul Athfal Pelang?”.

The researcher made calculation of the scores of pre-test and post-test by using SPSS calculation. The researcher conducted a paired t-test to discover the different scores before and after the students were given the treatments. The calculation of paired t-test was used to analyze the score of pre-test and post-test.



Based on the result, the students' scores on post-test were better in which the mean 84,48 than their scores on pre-test the mean 52,24. The degree of freedom 5% the value of 28 (degree of significance) as scared in the ttable 2,048. The score of tcount is -26,204 means that negative number t does not mean minus (count), but it means that the hypothesis test is done on the left side. So, that  $t_{\text{count}} 26,204 > t_{\text{table}} 2,048$  or  $-t_{\text{count}} -26,204 < -t_{\text{table}} -2,048$ . In addition, the two-tailed value of  $p$  was 0,000 which was lower than 0,05. In conclusion, the calculation of paired t-test showed that there was a significant difference between the pre-test and post-test scores. Thus, there was significant effect after Word Wall media was used to teach vocabulary. In other word, the treatment worked very well.

#### 4.4 Hypothesis Testing

In this section, the researcher described the interpretation of the research finding and hypothesis. The research was held to answer research question was there a significant effect of teaching vocabulary through Word Wall media toward students' vocabulary mastery. In order to answer the question, the researcher writes the hypothesis as follows:

- a.  $H_0$  : There was no significant effect of teaching vocabulary through Word Wall media toward students' vocabulary mastery.
- b.  $H_a$  : There was a significant effect of teaching vocabulary through Word Wall media toward students' vocabulary mastery.

The assumption of these hypotheses as follows:

$H_0$  accepted if the significance  $> 0,05$  and  $t_{\text{count}} < t_{\text{table}}$  or  $-t_{\text{count}} > t_{\text{table}}$

$H_0$  rejected if the significance  $< 0,05$  and  $t_{count} > t_{table}$  or  $-t_{count} < -t_{table}$

According to the analysis, the null hypothesis was rejected because the significance  $0,000 < 0,05$  and  $t_{count} 26,204 > t_{table} 2,048$  or  $-t_{count} -26,204 < -t_{table} -2,048$ . Thus, there was a significant difference between pre-test and post-test. The result report that the effectiveness of teaching vocabulary through Word Wall media was significant. It can be concluded that teaching vocabulary through Word Wall media was effective.

#### 4.5 Discussion

The research was meant to answer the problem of the research. It was to examine whether there was a significant effect of teaching vocabulary through Word Wall media toward students' vocabulary mastery at the seventh grade of MTs Nurul Athfal Pelang. The researcher took 1 class consist of 29 students. The researcher gave the treatments through Word Wall media in two meetings.

The improvement of students' vocabulary mastery can be seen from average pre-test score (52,24) and the average of post-test (84,48). It is increased 32,24 point, which means that Word Wall media has influence in teaching vocabulary. From the result above, the researcher found that the mean of pre-test and post-test have the difference average score. . It can be conclude that the students got good achievement in vocabulary mastery after taught through Word Wall media

This result related to the earlier study by (Nuzulina, 2011) entitled The Influence of Using Word Wall Toward Student's Vocabulary Mastery at The

Second Year Students of MTs Al-Furqan Dumai. The aim of the research was to find out the students' mastery in using vocabulary and find out the information about any influence of using Word Wall in students' vocabulary mastery. The data analysis shows that there was a significant influence of using Word Wall toward students' vocabulary mastery. It can be seen from the students' vocabulary test scores in post-test (79,23) were higher than before the treatment given in pre-test (60,90).

Another result of the SPSS calculation and diagram shows that  $-t_{\text{count}} - 26,204 < -t_{\text{table}} -2,048$  or  $t_{\text{count}} 26,204 > t_{\text{table}} 2,048$ . The two-tailed value of  $p$  was 0,000 which was lower than 0,05. Since the scores obtained from the result of calculating,  $H_0$  rejected because the significance  $<0,05$  and  $-t_{\text{count}} < -t_{\text{table}}$   $t_{\text{count}} > t_{\text{table}}$ . In other word, the researcher hypothesis is accepted. The calculation t-test showed that there was a significant difference between the pre-test and post-test scores. Therefore, teaching vocabulary through Word Wall media was effective.

Based on the reality that the reseacher got during the research, she said that teaching vocabulary through Word Wall media makes the students memorize vocabulary easily, improve students' motivation and made students to be active and happy in teaching learning process. So, Word Wall can be an alternative media for teacher to teach especially in vocabulary.