## CHAPTER IV

## FINDING AND DISCUSSION

In this chapter, the researcher presented the finding and the discussion of the research. Four main topics could be discussed in this part description of data, the result of normality and homogeneity, hypothesis testing, and discussion.

## A. The Description of Data

In this sub chapter, the researcher presented the descriptive statistics of the research. The result of students' vocabulary in recount text in term of pretest and post-test, then those were calculated by using vocabulary scoring rubric. The tests were given to eighth graders of MTsN 7 Tulungagung. The total of students was 38 . The students' scores of pre-test and post-test could be seen in table 4.1. In addition, the test was conducted before and after using Mnemonic Acrostic Technique as the treatment in teaching vocabulary in recount text.

Table 4.1
The Result of Students' Score in Pre-Test and Post-Test

| No | Students' Name | Pre-test (X) | Post-test <br> (Y) | Gained Score (Y-X) |
| :---: | :---: | :---: | :---: | :---: |
| 1 | RR | 80 | 90 | 10 |
| 2 | FA | 80 | 90 | 10 |
| 3 | IN | 60 | 80 | 20 |
| 4 | F | 100 | 100 | 0 |
| 5 | MA | 100 | 100 | 0 |
| 6 | MJ | 90 | 100 | 10 |
| 7 | MA | 90 | 100 | 10 |
| 8 | MAP | 100 | 100 | 0 |
| 9 | MF | 90 | 95 | 5 |
| 10 | MFF | 100 | 100 | 0 |
| 11 | H | 90 | 100 | 10 |
| 12 | APM | 90 | 100 | 10 |
| 13 | MK | 90 | 95 | 5 |
| 14 | RE | 90 | 100 | 10 |
| 15 | AF | 95 | 100 | 5 |
| 16 | DW | 100 | 100 | 0 |
| 17 | A | 55 | 75 | 20 |
| 18 | AL | 65 | 75 | 10 |
| 19 | RA | 65 | 80 | 15 |
| 20 | D | 60 | 50 | 10 |
| 21 | NA | 70 | 80 | 10 |
| 22 | LDL | 45 | 65 | 20 |
| 23 | N | 100 | 100 | 0 |
| 24 | MDF | 90 | 100 | 10 |
| 25 | MN | 75 | 70 | -5 |
| 26 | RN | 75 | 75 | 0 |
| 27 | AA | 25 | 55 | 30 |
| 28 | SNH | 60 | 75 | 15 |
| 29 | AD | 55 | 80 | 25 |
| 30 | RL | 55 | 80 | 25 |
| 31 | SWT | 55 | 75 | 20 |
| 32 | UKH | 65 | 75 | 10 |
| 33 | CDY | 70 | 80 | 10 |
| 34 | NNG | 65 | 90 | 25 |


| 35 | O | 65 | 90 | 25 |
| :---: | :--- | :---: | :---: | :---: |
| 36 | NAK | 55 | 75 | 20 |
| 37 | DWL | 75 | 55 | -20 |
| 38 | MY | 80 | 100 | 20 |

Based on the table 4.1, the lowest score of the students in pre-test was 25 and the highest one in pre-test was 100 . After the researcher gave the treatment by using mnemonic acrostic, then the researcher gave post-test to students to know whether there was different score or not. Based on the table above, the lowest score of the students in post-test was 55 and the highest one was 100 . So, that the students' score in post-test was higher than the students' score in pre-test.

## 1. Computation Result of The Students' Score Before being taught by using Mnemonic Acrostic Technique (Pre-Test)

The number of item in pre-test was 20 questions were administered for 38 students. This pre-test was done before teaching vocabulary by using mnemonic acrostic technique to know the students' vocabulary before they were given the treatment. The result of pre-test based on processing in SPSS 24.0 version software. The descriptive statistic of pre-test score consisted of mean (table 4.2), the frequency distribution and percentage of pre-test (table 4.3), and histogram of pre-test (figure 4.1), those could be seen as below:

Table 4.2 The Descriptive Statistic of Pre-test Scores Statistics

Pretest

| N $\quad$ Valid | 38 |
| :--- | :--- |
| Missing | 0 |
| Mean | 75.53 |
| Median | 75.00 |
| Mode | 90 |
| Std. Deviation | 18.483 |
| Minimum | 25 |
| Maximum | 100 |

Descriptive statistic is functioning to describe the condition of certain group. In this research, the group was intended to eighth a students of MTsN 7 Tulungagung. The table 4.2 above showed that there were 38 test takers. The mean score was 75.53 the mean 75.53 meant that the average of 38 students' score was 75.53 . Then, the half number of data sample which determined as median score was 75 . Meanwhile, the mode score showed the most frequently appeared number, and the most appeared number was 90 . In addition, the minimum score was 25 and the maximum score was 100 . Then to know the
number of score appeared in pre-test, the researcher presented frequency distribution. It could be seen in table 4.3 below:

Table 4.3 Frequency Distribution and Percentage of Pre-test

Pretest

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | :--- | :--- | :--- | :--- |
| Valid 25 | 1 | 2.6 | 2.6 | 2.6 |
| 45 | 1 | 2.6 | 2.6 | 5.3 |
| 55 | 5 | 13.2 | 13.2 | 18.4 |
| 60 | 3 | 7.9 | 7.9 | 26.3 |
| 65 | 5 | 13.2 | 13.2 | 39.5 |
| 70 | 2 | 5.3 | 5.3 | 44.7 |
| 75 | 3 | 7.9 | 7.9 | 52.6 |
| 80 | 3 | 7.9 | 7.9 | 60.5 |
| 90 | 8 | 21.1 | 21.1 | 81.6 |
| 95 | 1 | 2.6 | 2.6 | 84.2 |
| 100 | 6 | 15.8 | 15.8 | 100.0 |
| Total | 38 | 100.0 | 100.0 |  |

The table 4.3 showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.
a. There were 15 students who got score between $25-65$, it meant that the students vocabulary was still fair.
b. There were 17 students who got score between70-95, it meant that the students vocabulary was good.
c. There were 6 students who got score 100 , it meant that the students vocabulary was excellent.

After knowing the result of pre-test, the researcher gave the treatment with the purpose probably the student's vocabulary could be increased. At last, the researcher gave post-test to measure the difference scores after conducting the treatment.
2. Computation Result of The Students' Score After being taught by Mnemonic Acrostic Technique (Post-Test)

In Post-test, the researcher gave test was 20 items. There were 38 students as the sample of this research. The purpose of conducting post-test was intended to measure the students' vocabulary after they were given the treatment.

The result of post-test based on processing in SPSS 24.00 version software. The descriptive statistic of post-test score consisted of mean (Table 4.4) and the frequency distribution of post-test (Table 4.5), could be seen below.

Table 4.4 The Descriptive Statistic of Post-Test Scores
Statistics
Posttest

| N $\quad$ Valid | 38 |
| :--- | :--- |
| Missing | 0 |
| Mean | 85.53 |
| Median | 90.00 |
| Mode | 100 |
| Std. Deviation | 14.649 |
| Minimum | 50 |
| Maximum | 100 |

Descriptive statistic functioned to describe the condition of certain group. In this research, the group was intended to eighth A students MTsN 7 Tulungagung. The table 4.4 above showed that there were 38 test takers. The mean score was 85.53 . The mean 85.53 meant that the average of 38 students' score was 85.53 . Then, the half number of data sample which determined as median score was 90 . Meanwhile, the mode score showed the most frequently appeared number, and the most appeared number was 100 . In addition, the minimum score was 50 and the maximum score was 100 . Then to know the number of score appeared in post-test, the researcher presented frequency distribution. It could be seen in table 4.5 below.

Table 4.5 Frequency Distribution of Post-Test

## Posttest

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | :--- | :--- | :--- | :--- |
| Valid 50 | 1 | 2.6 | 2.6 | 2.6 |
| 55 | 2 | 5.3 | 5.3 | 7.9 |
| 65 | 1 | 2.6 | 2.6 | 10.5 |
| 70 | 1 | 2.6 | 2.6 | 13.2 |
| 75 | 7 | 18.4 | 18.4 | 31.6 |
| 80 | 6 | 15.8 | 15.8 | 47.4 |
| 90 | 4 | 10.5 | 10.5 | 57.9 |
| 95 | 2 | 5.3 | 5.3 | 63.2 |
| 100 | 14 | 36.8 | 36.8 | 100.0 |
| Total | 38 | 100.0 | 100.0 |  |

The table 4.5 showed the numbers that describe about the division and percentages of frequency distribution. The frequency of post-test after being distributed showed based on the categorizing of scoring rubric:
a. There were 12 students who got score between $50-75$, it meant that the students vocabulary was fair.
b. There were 12 students who got score between $80-95$, it meant that the students vocabulary was good.
c. There were only 14 students who got score between 100 , it meant that the students vocabulary was excellent.

## B. The Result of Normality and Homogeneity Testing

In this sub chapter, the researcher presented and discussed the result of normality and homogeneity testing by using SPSS 24.0 version. Calculating normality is used to know whether the data has been normal distributed or not. Meanwhile, calculating homogeneity is used to know whether the sample of data is homogeny or heterogenic. The result of normality and homogeneity testing were presented below.

## 1. The Result of Normality Testing

The normality of both pre-test and post-test was measured by SPSS 24.0 version using the formula of One Sample Kolmogorov-Smirnov Test. The result could be seen in the table 4.6 below:

### 4.6 One-Sample Kolmogorov-Smirnov Test

|  |  | Pre_test | Post_test |
| :--- | :--- | :--- | :--- |
| N |  | 38 | 38 |
| Normal Parameters ${ }^{\text {a,b }}$ | Mean | 75.53 | 85.53 |
|  | Std. Deviation | 18.483 | 14.649 |
| Most Extreme | Absolute | .178 | .207 |
| Differences | Positive | .110 | .162 |
|  | Negative | .-178 | .-207 |
| Kolmogorov-Smirnov Z | 1.097 | 1.275 |  |
| Asymp. Sig. (2-tailed) |  | .180 | .077 |

a. Test distribution is Normal.
b. Calculated from data.

Based on the table above, it could be seen that the significance value of pre-test was 0.180 , it was bigger than 0.050 . It meant that the data distribution of pre-test was normal. Then the significance value of post-test was 0.077 , it was bigger than 0.050 . It meant that the data distribution of posttest was also normal. It could be concluded that both of the data (pre-test and post-test) were normal distributions.

## 2. The Result of Homogeneity Testing

Homogeneity was conducted after ensuring whether the data has been normal distributed. The purpose of calculating homogeneity is to know whether the data includes to homogeneous or heterogeneous data. In calculating the data, the researcher used SPSS 24.0 version using formula Homogeneity of Levene Statistic. The result could be seen as below:

Table 4.7 Homogeneity Result (Pre-test)

## Test of Homogeneity of Variances



The description of the homogeneity data pre-test and post-test showed the significance value. The significance value was 0,135 it was bigger than 0.050 , it meant that the data of pre-test and post-test was homogeny. When the data was normal distribute and homogeny. Next, the researcher tested the hypothesis, in testing the hypothesis the researcher used parametric testing in term of Paired Sample T Test by using SPSS 24.0 version.

The result of hypothesis testing could be seen figure 4.8 as below:

### 4.8 Paired Samples T- Test

|  | Paired Differences |  |  |  |  |  | df | $\begin{aligned} & \text { Sig. (2- } \\ & \text { tailed) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. Deviation | Std. Error Mean | $95 \%$ Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| $\begin{array}{\|ll} \hline \text { Pair } & \text { Pre_test - } \\ 1 & \text { Post_test } \end{array}$ | ${ }^{-} 10.000$ | 10.718 | 1.739 | -13.523 | -6.477 | -5.752 | 37 | . 000 |

## C. Hypothesis Testing

This research was conducted to know whether there is significant difference in students' vocabulary in recount text of the eighth grade students in MTsN 7 Tulungagung in academic year 2018/2019 before and after being taught by using Mnemonic Acrostic Technique. To analyze the finding data, the researcher used Paired Sample Test by using SPSS 24.0 version. The hypothesis of this research was stated as follows:

1. When the significant value $<$ significant level, the alternative $\left(\mathrm{H}_{\mathrm{a}}\right)$ is accepted and the null hypothesis $\left(\mathrm{H}_{0}\right)$ was rejected. It meant there was significant difference score on the students' vocabulary mastery in recount text before and after being taught by using Mnemonic Acrostic Technique.
2. When the significant value $>$ significant level, the null hypothesis $\left(\mathrm{H}_{0}\right)$ was accepted and the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ was rejected. It meant there was
no significant difference score on the students' vocabulary before and after being taught by using Mnemonic Acrostic Technique.

Based on the table 4.9 above, the significant value of this research was 0.000 , standard significant is 0.050 . It meant the significant value was smaller than significant level $(0.000<0.050)$. When the significant value $(0.000)<$ significant level (0.050), it could be concluded that the alternative hypothesis $\left(\mathrm{H}_{\mathrm{a}}\right)$ was accepted and the null hypothesis $\left(\mathrm{H}_{0}\right)$ was rejected. It meant that there was any significant different score on students' vocabulary before and after being taught by using Mnemonic Acrostic Technique.

## D. Discussion

In this research, the researcher only used one sample as a subject for the research; the researcher used class A of eighth grade students of MTsN 7 Tulungagung which consisted of 38 students. It had been chosen by purposive sampling technique in term suggestion by some eligible people in the school. The purpose of this research was to find out whether there was any significant different score on the students' vocabulary in recount text before and after being taught by using mnemonic acrostic technique. This research was done in three steps. The first was giving pre-test to students; it purposed to know the score of the students' vocabulary in recount text before given the treatment by applying mnemonic acrostic technique. The second steps were giving the treatment by applying mnemonic acrostic technique. The third steps were giving post-test to know the score of the students' vocabulary in recount after given the treatment by
applying mnemonic acrostic technique. To know whether this technique was effective or not, the researcher used the score of students' pre-test and post-test then calculate both of the tests into SPSS 24.0 version software. Based on the result of statistical calculation, the used of mnemonic acrostic technique was effective toward the students' vocabulary in recount text it was proved in hypothesis testing by the gained significance value which less than 0.050 , when the significance value less than 0.050 , thus the alternative hypothesis $\left(H_{a}\right)$ was accepted and the null hypothesis $\left(\mathrm{H}_{0}\right)$ was rejected. It meant there was any significant difference score on students' vocabulary before and after being taught by using mnemonic acrostic technique. The difference could be seen in the result of pre-test and post-test scores from the mean of pre-test 75.53 become 85.53 in post-test. Thus finding result by using mnemonic acrostic technique, the students' vocabulary in recount text was increased.

The result of this study was supported by Gofar (2008) who examined Teaching Vocabulary through Mnemonics Devices at the Second year of SMP Assujjaiyyah Sukaraja Bogor. This study was categorized into an experimental study. Based on the data collected from the posttest gained from experiment class taught by using mnemonic device and controlled class without using mnemonic device showed the mean scores of post-test in experiment class is 89.9. While the mean of post-test in controlled class is 74.6 . The results of the study indicated that there is significant difference in students vocabulary score between those taught using mnemonic device and those who aren't. In conclusion, teaching by using
mnemonic device is successful or effective than teaching without mnemonic device (included acrostic technique). In this case, the result of the mean score of the mean score of the experimental group from previous study above was 89.9 and from this research 85.53.Its mean that the mean of this research is lower than this previous study.

This study was also parallel to Rosdiana (2009) who investigated the effectiveness of mnemonic devices in vocabulary learning process the fifth grade of elementary school students in SDN Babakan. According to the data collected from the pre-test and post-test gained from the experimental class taught vocabulary by using mnemonic devices and without mnemonic devices in analyzing the student's error in vocabularies, it shared the means score of pre-test was 68.8 while the mean score of post-test was 90.53 . In conclusion, teaching by using mnemonic device is successful or effective than teaching without mnemonic device (included acrostic technique). It meant that the mean of this research is lower than this previous study.

Then it was in line with by Lestari (2016) who examined mnemonic devices in vocabulary learning the study was categorized class action research. The result of the mean of post-test was 69,09 is higher than pre-test was 60,56 in cycle $I$. The mean of post-test was 83,21 is higher than pre-test was 64,62 in cycle II. From the result, that teaching vocabulary through mnemonics technique is successful. The result of the students' mean score of pre-test and post-test in
cycle I and cycle II showed a better improvement. Based on the analysis of the result in cycle I and cycle II, the researcher concluded that the use of mnemonics technique (included; mnemonic acrostic technique) can increase students' vocabulary mastery in SMP N 2 Banyu Biru in the academic year of 2016/2017. It means that the mean of this research is higher than this previous study.

Overall, it can be said that mnemonic technique to teach vocabulary is effective. Including mnemonic acrostic technique because this technique one kinds of mnemonic devices. Based on this result analysis data teaching vocabulary by using mnemonic acrostic technique is effective to teach students vocabulary in the level of the eighth grade students of MTsN 7 Tulungagung.

