## CHAPTER IV

## RESEARCH FINDINGS AND DISCUSSION

In this chapter, the researcher presents about the findings of the research. It discusses the data collected from conducting pre-test and post-test to experimental group and control group. This chapter also explain the description of data, hypothesis testing and discussion.

## A. Research Findings

In this point, the researcher displayed the descriptive statistics of the research. Those are the results of the students' writing descriptive text on pretest and post-test. Both of pre-test and post-test given to VII D as experimental group consist of 22 students and VII E as control group consist of 20 students. The students taught by using four squares writing method is experimental group and the students taught by using conventional method is control group.

The main purpose of this research is to know whether four squares writings method is effective or not towards students' writing descriptive text at seventh grade of Fathul Hidayah Junior High School. The data has collected from students' score in pre-test and post-test of the experimental group and control group. Then, to determine the significance different score of four squares writing method was effective or not, the comparison used by researcher is not the individual scores. However, it used class score or mean of the scores in writing descriptive text. The researcher used scoring criterion to know the students' ability was good or not in writing descriptive text. The
criterion has adopted from Azzahra (2017). The scores criteria explained as follows:

Table 4.1 Scoring Criteria

| No. | Criteria | Range of Score |
| :---: | :---: | :---: |
| $\mathbf{1}$ | Excellent | $81-100$ |
| $\mathbf{2}$ | Good | $61-80$ |
| $\mathbf{3}$ | Average | $41-60$ |
| $\mathbf{4}$ | Poor | $21-40$ |

The scores divided into five criteria. Those are excellent, good, average and poor. The students who got 81-100 classified into excellent score and if they got 61-80 classified into good score. The next is the students who got the score among 41-60 they classified into average score and the last was the student who got the score 21-40 classified into poor score.

## 1. The Students' Score of Experimental Class

a. Pre-test of Experimental Class

Experimental Group is a group or class which taught by using four squares writing method. Researcher administered pre-test before the class got the treatment. The pre-test contains of creating descriptive text. The students of experimental group whom done the pre-test mentioned as follows:

Table 4.2 Students' Scores of Pre-test

| No | Subject | Score |
| :---: | :---: | :---: |
| 1. | AHAB | 58 |
| 2. | ANF | 55 |


| 3. | AUP | 57 |
| :---: | :---: | :---: |
| 4. | DS | 42 |
| 5. | HN | 50 |
| 6. | IK | 60 |
| 7. | IA | 55 |
| 8. | LIW | 50 |
| 9. | MWYP | 42 |
| 10. | MI | 50 |
| 11. | MAP | 51 |
| 12. | MADS | 47 |
| 13. | MFA | 55 |
| 14. | NR | 59 |
| 15. | SNM | 65 |
| 16. | SAA | 47 |
| 17. | WN | 46 |
| 18. | YSQ | 48 |
| 19. | MRH | 41 |
| 20. | MRHA | 47 |
| 21. | AFU | 47 |
| 22. | ARM | 46 |

There were 22 students of experimental group followed the pretest. The time given to do the pre-test is about 45 minutes. The form of the pre-test is writing test. It contains of the instruction to create the descriptive text and the students have to choose one of the three topics given by the researcher. This test conducted before the treatment using four squares writing method held. The test purposed to know the students' ability in writing descriptive text before taught using four
squares writing method. The pre-test done on Saturday, $24^{\text {th }}$ of April 2021.

The score of pre-test calculated by using SPSS 16.0 to know the descriptive statistics and the percentage. The percentage criteria used in this research has explained above (see table 4.1), those are excellent, good, average and poor. The result of calculation showed as follows:

Table 4.3 Descriptive Statistics of Pre-test
Statistics
EXPERIMENTAL PRE-TEST

| N | Valid |
| :--- | ---: |
| Missing | 22 |
| Mean | 20 |
| Std. Error of Mean | 50.54 |
| Median | 1.427 |
| Mode | 50.00 |
| Std. Deviation | $47.00^{2}$ |
| Variance | 6.695 |
| Range | 44.831 |
| Minimum | 24 |
| Maximum | 41 |
| Sum | 65 |

a. Multiple modes exist. The smallest
value is shown

Based on the table 4.3 above, it showed that there were 22 students of experimental group done the test. The table showed that the mean score of pre-test was 50.54 . Then, the median score of the pretest was 50.00 and the mode score or frequently appeared number of pre-test was 47.00 . The standard deviation of this pre-test was 6.695 .

Then, the range of this pre-test was 24 . The minimum score of pre-test was 41 , the maximum score was 65 and the sum of pre-test was 1112 . After explained the descriptive statistics above, the researcher presents the frequency distribution of score in pre-test as follows:

Table 4.4 Frequency Distribution of Score in Pre-test

EXPERIMENTAL PRE-TEST

|  |  |  |  | Cumulative <br> Percent |
| :--- | ---: | ---: | ---: | ---: |
| Valid | 41 | 2 | Percent | Valid Percent |

According to the table 4.4 above, it presented the scores, which describe the categorization based on the frequency distribution by considering on the scoring rubric. The table showed that 21 students
got the score among 41-60 and only a student got the score among 6180.
b. Post-test of Experimental Class

The post-test of writing descriptive text for the experimental group has done. It purposed to know the improvement of students' writing ability in descriptive text after got the treatment or taught by using four squares writing method. The students of experimental group whom done the post-test mentioned on the table below:

Table 4.5 Students' Scores of Post-test

| No. | Subject | Score |
| :---: | :---: | :---: |
| 1. | AHAB | 76 |
| 2. | ANF | 65 |
| 3. | AUP | 78 |
| 4. | DS | 72 |
| 5. | HN | 67 |
| 6. | IK | 75 |
| 7. | IA | 70 |
| 8. | LIW | 76 |
| 9. | MWYP | 80 |
| 10. | MI | 71 |
| 11. | MAP | 75 |
| 12. | MADS | 82 |
| 13. | MFA | 85 |
| 14. | NR | 80 |
| 15. | SNM | 83 |
| 16. | SAA | 86 |
| 17. | WN | 78 |


| 18. | YSQ | $\mathbf{8 3}$ |
| :---: | :---: | :---: |
| 19. | MRH | 70 |
| 20. | MRHA | $\mathbf{8 4}$ |
| 21. | AFU | 75 |
| 22. | ARM | 71 |

There were 22 students of experimental group followed the posttest. The time given to do the pre-test is about 45 minutes. The form of the post-test is writing test. It contains of the instruction to create the descriptive text and the students have to choose one of the three topics given by the researcher. This test conducted after the treatment using four squares writing method held. The test purposed to know the students' ability in writing descriptive text after taught using four squares writing method. The post-test done on Saturday, $8^{\text {th }}$ of May 2021.

The score of post-test calculated by using SPSS 16.0 to know the descriptive statistics and the percentage. The percentage criteria used in this research has explained above (see table 4.1), those are excellent, good, average and poor. The result of calculation showed as follows:

Table 4.6 Descriptive Statistics of Post-test

| Statistics |  |  |
| :--- | :--- | ---: |
| EXPERIMENTAL POST- <br> TEST |  |  |
| N | Valid | 22 |
|  | Missing | 0 |
| Mean | 76.45 |  |
| Std. Error of Mean | 1.280 |  |


| Median | 76.00 |
| :--- | ---: |
| Mode | 75 |
| Std. Deviation | 6.005 |
| Variance | 36.069 |
| Range | 21 |
| Minimum | 65 |
| Maximum | 86 |
| Sum | 1682 |

Based on the table 4.6 above, it showed that there were 22 students of experimental group done the test. The table showed that the mean score of post-test was 76.45 . Then, the median score of the posttest was 76.00 and the mode score or frequently appeared number of post-test was 75 . The standard deviation of this post-test was 6.005 . Then, the range of this post-test was 21 . The minimum score of posttest was 65 , the maximum score was 86 and the sum of post-test was 1682. After explained the descriptive statistics above, the researcher presents the frequency distribution of score in post-test as follows:

Table 4.7 Frequency Distribution of Score in Post-test
EKSPERIMENT POST TEST

|  |  |  |  | Cumulative <br> Percent |
| :---: | ---: | ---: | ---: | ---: |
| Valid | 65 | 1 | 2.4 | 4.5 |
|  | 1 | 2.4 | 4.5 | 4.5 |
|  | Frequency | Percent | Valid Percent | 9.1 |
|  | 70 | 2 | 4.8 | 9.1 |



According to the table 4.7 above, it presented the scores, which describe the categorization based on the frequency distribution by considered on the scoring rubric. It showed that there were 16 students got the score among 61-80 and there were six students got the score among 81-100.

## 2. The Students' Scores of Control Class

a. Pre-test of Control Group

Control Group is a group or class which not taught by using four squares writing method. Researcher administered pre-test before the class conducting learning process. The pre-test contains of creating descriptive text. The students of control group whom done the pre-test mentioned as follows:

Table 4.8 Students' Scores of Pre-test

| No. | Subject | Score |
| :---: | :---: | :---: |


| 1 | AFW | $\mathbf{4 6}$ |
| :---: | :---: | :---: |
| 2 | ASS | 58 |
| 3 | EDS | $\mathbf{5 1}$ |
| 4 | FMP | 58 |
| 5 | HA | $\mathbf{4 6}$ |
| 6 | LNN | $\mathbf{5 3}$ |
| 7 | MRR | $\mathbf{4 7}$ |
| 8 | MRAA | $\mathbf{4 8}$ |
| 9 | MFMAM | $\mathbf{4 5}$ |
| 10 | MS | $\mathbf{4 2}$ |
| 11 | MLF | $\mathbf{4 7}$ |
| 12 | MKN | $\mathbf{6 2}$ |
| 13 | MHW | $\mathbf{6 0}$ |
| 14 | MASF | 57 |
| 15 | SDR | 52 |
| 16 | SA | $\mathbf{4 7}$ |
| 17 | NTS | 57 |
| 18 | MMAF | 55 |
| 19 | IBNQ | 52 |
| 20 |  | 57 |

There were 20 students of control group followed the pre-test. The time given to do the pre-test is about 45 minutes. The form of the pre-test is writing test. It contains of the instruction to create the descriptive text and the students have to choose one of the three topics given by the researcher. This test conducted before the learning process by using conventional method held. The test purposed to know
the students' ability in writing descriptive text before taught using conventional method. The pre-test done on $20^{\text {th }}$ of April 2021.

The score of pre-test calculated by using SPSS 16.0 to know the descriptive statistics and the percentage. The percentage criteria used in this research has explained above (see table 4.1), those are excellent, good, average and poor. The result of calculation showed as follows:

Table 4.9 Descriptive Statistics of Pre-test
Statistics
CONTROL PRE-TEST

| N | Valid |
| :--- | ---: |
| Missing | 20 |
| Mean | 0 |
| Std. Error of Mean | 52.00 |
| Median | 1.291 |
| Mode | 52.00 |
| Std. Deviation | $47.00^{2}$ |
| Variance | 5.776 |
| Range | 33.368 |
| Minimum | 20 |
| Maximum | 42 |
| Sum | 62 |

a. Multiple modes exist. The smallest
value is shown

Based on the table 4.9 above, it showed that there were 20 students of control group done the test. The table showed that the mean score of pre-test was 52.00 . Then, the median score of the pre-test was 52.00 and the mode score or frequently appeared number of pre-test was 47.00. The standard deviation of this pre-test was 5.776 . Then, the
range of this pre-test was 20 . The minimum score of pre-test was 42 , the maximum score was 62 and the sum of pre-test was 1040. After explained the descriptive statistics above, the researcher presents the frequency distribution of score in pre-test as follows:

### 4.10 Frequency Distribution of Score in Pre-test

CONTROL PRE-TEST

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 42 | 1 | 2.4 | 5.0 | 5.0 |
|  | 45 | 1 | 2.4 | 5.0 | 10.0 |
|  | 46 | 2 | 4.8 | 10.0 | 20.0 |
|  | 47 | 3 | 7.1 | 15.0 | 35.0 |
|  | 48 | 1 | 2.4 | 5.0 | 40.0 |
|  | 51 | 1 | 2.4 | 5.0 | 45.0 |
|  | 52 | 2 | 4.8 | 10.0 | 55.0 |
|  | 53 | 1 | 2.4 | 5.0 | 60.0 |
|  | 55 | 1 | 2.4 | 5.0 | 65.0 |
|  | 57 | 3 | 7.1 | 15.0 | 80.0 |
|  | 58 | 2 | 4.8 | 10.0 | 90.0 |
|  | 60 | 1 | 2.4 | 5.0 | 95.0 |
|  | 62 | 1 | 2.4 | 5.0 | 100.0 |
|  | Total | 20 | 47.6 | 100.0 |  |
| Missing | System | 22 | 52.4 |  |  |
| Total |  | 42 | 100.0 |  |  |

According to the table 4.10 above, it presented the scores, which describes the categorization based on the frequency distribution by considering on the scoring rubric. Looked to the table above, it showed
that there were 19 students got the score among 41-60 and there were a student got the score among 61-80.
b. Post-test of Control Class

The post-test of writing descriptive text for the control group has done. It purposed to know the improvement of students' writing ability in descriptive text after taught using conventional method. The students of control group whom done the post-test mentioned on the table below:

Table 4.11 Students' Scores of Post-test

| No. | Subject | Score |
| :---: | :---: | :---: |
| 1 | AFW | $\mathbf{6 5}$ |
| 2 | ASS | $\mathbf{6 2}$ |
| 3 | EDS | 66 |
| 4 | FMP | 70 |
| 5 | HA | 67 |
| 6 | LNN | $\mathbf{7 2}$ |
| 7 | MRR | $\mathbf{6 6}$ |
| 8 | MRAA | 71 |
| 9 | MFMAM | $\mathbf{6 3}$ |
| 10 | MS | $\mathbf{6 0}$ |
| 11 | MLF | 71 |
| 12 | MN | $\mathbf{6 1}$ |
| 13 | MKK | 70 |
| 14 | MHW | $\mathbf{6 2}$ |
| 15 | MASF | 73 |
| 16 | SDR | 62 |


| 17 | SA | $\mathbf{6 5}$ |
| :---: | :---: | :---: |
| 18 | NTS | 72 |
| 19 | MMAF | 55 |
| 20 | IBNQ | 67 |

There were 20 students of control group followed the post-test. The time given to do the post-test is about 45 minutes. The form of the post-test is writing test. It contains of the instruction to create the descriptive text and the students have to choose one of the three topics given by the researcher. This test conducted before the learning process by using conventional method held. The test purposed to know the students' ability in writing descriptive text before taught using conventional method. The post-test done on Tuesday, $4^{\text {th }}$ of May 2021.

The score of post-test calculated by using SPSS 16.0 to know the descriptive statistics and the percentage. The percentage criteria used in this research has explained above (see table 4.1), those are excellent, good, average and poor. The result of calculation showed as follows:

Table 4.12 Descriptive Statistics of Post-test

| Statistics |  |  |
| :--- | :--- | ---: |
| CONTROL POST-TEST |  |  |
| $N$ | Valid | 20 |
|  | Missing | 0 |
| Mean | 66.00 |  |
| Std. Error of Mean | 1.083 |  |
| Median | 66.00 |  |
| Mode | 62 |  |
| Std. Deviation | 4.844 |  |


| Variance | 23.474 |
| :--- | ---: |
| Range | 18 |
| Minimum | 55 |
| Maximum | 73 |
| Sum | 1320 |

Based on the table 4.12 above, it showed that there were 20 students of control group done the test. The table showed that the mean score of post-test was 66.00 . Then, the median score of the post-test was 66.00 and the mode score or frequently appeared number of posttest was 62 . The standard deviation of this post-test was 4.844 . Then, the range of this post-test was 18 . The minimum score of post-test was 55 the maximum score was 73 and the sum of post-test was1320. After explained the descriptive statistics above, the researcher presents the frequency distribution of score in post-test as follows:

Table 4.13 Frequency Distribution of Score in Post-test

CONTROL POST-TEST

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 55 | 1 | 2.4 | 5.0 | 5.0 |
|  | 60 | 1 | 2.4 | 5.0 | 10.0 |
|  | 61 | 1 | 2.4 | 5.0 | 15.0 |
|  | 62 | 3 | 7.1 | 15.0 | 30.0 |
|  | 63 | 1 | 2.4 | 5.0 | 35.0 |
|  | 65 | 2 | 4.8 | 10.0 | 45.0 |
|  | 66 | 2 | 4.8 | 10.0 | 55.0 |
|  | 67 | 2 | 4.8 | 10.0 | 65.0 |
|  | 70 | 2 | 4.8 | 10.0 | 75.0 |


| 71 | 2 | 4.8 | 10.0 | 85.0 |
| :--- | ---: | ---: | ---: | ---: |
| 72 | 2 | 4.8 | 10.0 | 95.0 |
|  | 13 | 2.4 | 5.0 | 100.0 |
|  | 100.0 |  |  |  |
| Total | 20 | 47.6 | 100 |  |
| Missing | System | 22 | 52.4 |  |
| Total |  | 42 | 100.0 |  |

According to the table 4.13 above, it presented the scores, which describe the categorization based on the frequency distribution by considered on the scoring rubric. The frequency distribution showed that there were two students got the score among 41-60 and 18 others got the score among 61-80.

## B. Data Analysis

1. Comparison of Statistical Data in Post-test of Experimental Group and Control Group

In this sub chapter, the researcher explained the comparison of students' scores of post-test from experimental and control group. Those are about the highest score, lowest score, and the mean score of writing descriptive text. This comparison purposed to find out the score of posttest in each group, whether the result lower, same or different. The result of difference score of post-test from both group was in the form of statistical data, it showed as follows:

Table 4.14 Descriptive Statistics of Post-test of Experimental and Control Group

| Statistics |  |  |
| :--- | :--- | ---: |
| POST TEST | CONTROL | EXPERIMENTAL |
| N | Valid | 20 |
|  | Missing | 0 |
| Mean | 66.00 | 22 |
| Std. Error of Mean | 1.083 | 76.45 |
| Median | 66.00 | 1.280 |
| Mode | 62 | 76.00 |
| Std. Deviation | 4.844 | 75 |
| Variance | 23.474 | 6.005 |
| Range | 18 | 36.069 |
| Minimum | 55 | 21 |
| Maximum | 73 | 65 |
| Sum | 1320 | 86 |

As showed on the table 4.14, the difference of students' score in post-test of experimental and control group described that the highest score of post-test in experimental group was 86 , the lowest score was 65 and the mean score was 76.45 . Meanwhile, the highest score of post-test in control group was 73 , the lowest score was 55 and the mean score was 66.00 .

From the description above, it showed that the students of experimental group whom taught descriptive text by using four squares writing method got higher score than the students of control class whom taught descriptive text by using conventional method. It could be said that there were significant difference score on students' writing descriptive text
between experimental group whom taught by using four squares writing method and control group whom taught by using conventional method. In the same word, the using of four squares writing method to teaching writing descriptive text toward students at seventh grade of Fathul Hidayah Junior High School Pangean Lamongan was effective.

## C. Hypothesis Testing

According to Kadir (2015:4), he stated that research hypothesis is the result of a literature review or rational process of research that already has theoretical truth. The truth of hypothesis still has to be tested.

There were $\mathrm{H}_{0}$ (null hypothesis) and Ha (alternative hypothesis) in this research. $\mathrm{H}_{0}$ rejected if the significant value is less than equal 0.05 and Ha accepted. However, if the $\mathrm{H}_{0}$ is bigger than 0.05 , it accepted and Ha is rejected. In conclusion, if Ho rejected it means there is no significant different score between control class and experimental class. Moreover, if Ha accepted it means there is significant different score between control class and experimental class.

This research purposed to know is there any significant different between students writing descriptive taught by using four square writing method and students writing descriptive text taught by using conventional method. Therefore, the researcher tested the result of post-test from both of control and experimental by using independent samples T-test. The result of the test showed on the table below:

Table 4.15 The Analyzing Result of 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 <br> Difference | Std. Error <br> Difference | 95\% Confidence Interval of the Difference |  |
|  |  | Lower |  |  |  |  |  |  | Upper |
| SKOR | Equal <br> variances assumed |  | 1.284 | . 264 | -6.169 | 40 | . 000 | -10.45455 | 1.69466 | -13.87959 | -7.02951 |
|  | Equal <br> variances <br> not <br> assumed |  |  | $-6.233$ | 39.471 | . 000 | $\|-10.45455\|$ | 1.67726 | -13.84583 | -7.06326 |

According to table 4.15, it displayed that the Lavene's Test for Equality of Variances has the F value 1.284 and the significant value was 0.264 . The significant value ( $p$ Value) was higher than 0.05 . From those result means that there was no difference in variance data or the data was homogeneous. At the column equal variances assumed, showed that the degree of freedom (df) value was 40 . In consequence, the way to test whether the null hypothesis rejected or not by comparing significant value ( p value) with the standard level of significant that was 0.05 . The significant value obtained in this research was 0.000 and it has to divide into two because this research has twotailed test (0.000: $2=0.000$ ).

The result of statistical calculation showed that the significant value was $<0.05(0.000<0.05)$ it was less than 0.05 . Therefore, there were
significant difference score between students writing descriptive text taught by using four squares writing method and students taught by using conventional method. In other word, the null hypothesis rejected and the alternative hypothesis was accepted.

## D. Discussion

The research finding of this research showed that the students whom taught using four squares writing method in this case was experimental class, they made significant improvement of score. Those proved on the mean score of pre-test was 50.54 and the mean score of post-test was 76.45 . The increasing of mean score on pre-test and the mean score of post-test was 25.91. Meanwhile, the mean score of pre-test in control class was 52.00 and the mean score of post-test was 66.00 . Then, the increasing between the mean score of pre-test and the mean score of post-test was 14.00 . From all those explanations, it concluded that the increasing of the mean score of experimental class was higher than the difference range of the mean score of control class.

According to the statistical calculation of independent sample T-test, the result showed that the significant value of this research was 0.000 and the significant level was 0.05 because $(0.000<0.05)$ those means that the null hypothesis is rejected. In conclusion, there were significant difference score between students writing descriptive text taught by using and without using four squares writing method.

The result of this research also supported by another research result or the previous study. It is began by the research from Rahman (2016) it research showed that there is slight improvement in students' achievement by using four squares writing method. The second was researcher used four squares writing method was Saniyah (2018) the result was four squares writing method good to improve students writing skill in recount text.

Moreover, this research also used the theory from experts. According to Gould (1999) stated that four squares was a tool to organizing idea before arrange a written and this method can be used easily. Students can used this method before they start to write the text. It can make students easier and more imaginative in developing their idea. Four squares was help them to grouping related words that used based on the theme. This idea supported by the statement of Robinson et al, they stated that four squares writing method offered teaching writing that leads students organize, compose information and concept as well as promote thinking before they start to write.

From those explanations above, the researcher took sum up that the four squares writing method was effective to improve students writing ability in descriptive text.

