# CHAPTER IV

# RESEARCH FINDING AND DISCUSSION

In this chapter, the researcher presents the description of data, normality testing, the result of t-test, hypothesis testing and discussion.

## A. The Description of Data

The researcher conducted the research at MTsn 1 Tulungagung in academic year of 2019/2020. There were 9 classes at the eight grade. The sampled unit of this research was 8-1 that consisits of 30 students, 10 male and 20 female. This research used essay writing test for instrument of collecting data. There were pre-test and post-test. Both of them were different pictures that the researcher gave. The purpose of this research is to find the difference after and before using edmodo in descriptive writing. The researcher want to know whether using edmodo in descriptive writing is effective or not.

Based on available data, the researcher described the data using SPSS 16.0 as follows:

### 1. The Data of Pre-test

In this research, the researcher used 30 samples to collect the data of pre-test. This data took from eighth grade of Junior High School. The researcher asked the student to describe one picture that has given in 60 minutes. Students' score of pre-test can be seen on the table 4.1 the descriptive statistic of pre-test on the table 4.2. the frequency distribution

of pre-test on the table 4.3. and the histogram chart of pre-test on the table 4.4.

**Table 4.1. The Students' Score in Pre-test**

| No. | Name | Score |
|---|---|---|
| 1 | S1 | 16 |
| 2 | S2 | 20 |
| 3 | S3 | 19 |
| 4 | S4 | 14 |
| 5 | S5 | 14 |
| 6 | S6 | 17 |
| 7 | S7 | 14 |
| 8 | S8 | 12 |
| 9 | S9 | 17 |
| 10 | S10 | 15 |
| 11 | S11 | 21 |
| 12 | S12 | 18 |
| 13 | S13 | 15 |
| 14 | S14 | 15 |
| 15 | S15 | 19 |
| 16 | S16 | 13 |
| 17 | S17 | 16 |
| 18 | S18 | 15 |

| | | |
|---|---|---|
| 19 | S19 | 16 |
| 20 | S20 | 15 |
| 21 | S21 | 18 |
| 22 | S22 | 17 |
| 23 | S23 | 20 |
| 24 | S24 | 15 |
| 25 | S25 | 17 |
| 26 | S26 | 15 |
| 27 | S27 | 14 |
| 28 | S28 | 16 |
| 29 | S29 | 17 |
| 30 | S30 | 19 |

Based on the table above, the lowest score is 12 and the highest score is 21.

**Table 4.2. The Descriptive Statistic of Pre-test**

**Statistics**

Pretest

| | | |
|---|---|---|
| N | Valid | 30 |
| | Missing | 0 |
| Mean | | 16.30 |
| Std. Error of Mean | | .404 |
| Median | | 16.00 |
| Mode | | 15 |
| Std. Deviation | | 2.215 |
| Variance | | 4.907 |
| Range | | 9 |
| Minimum | | 12 |
| Maximum | | 21 |
| Sum | | 489 |

From the results of the data spss output above, it is known that the mean value is 16.30. Standard error of mean is 0.404. The median value is 16.00. The mode value is 15. Standard defiation value is 2.215. Variance value is 4.907. The range value is 9. The minimum value is 12. The maximum value is 21. The last is sum value is 489.

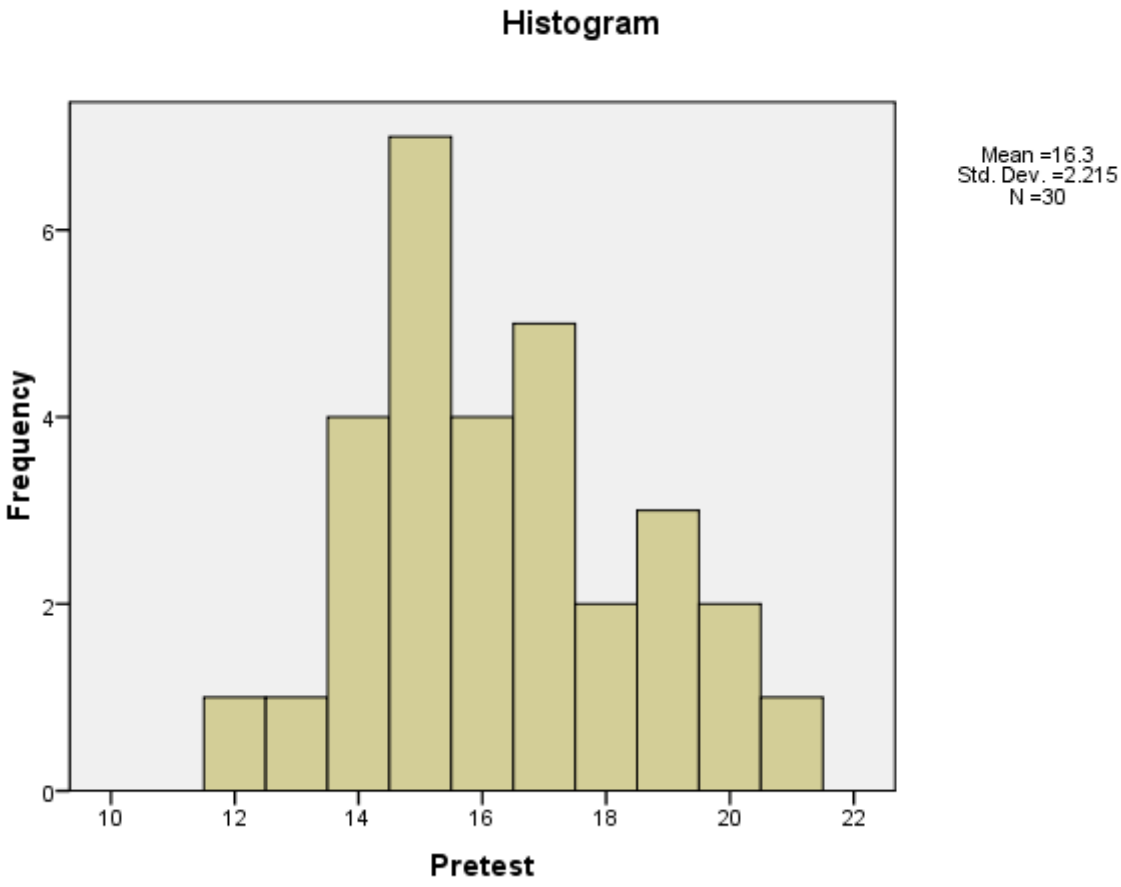
Presentation of pre-test data in the form of a frequency distribution table using the SPSS application as follows:

**Table 4.3. The Frequency Distribution of Pre-test**

**Pretest**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 12 | 1 | 3.3 | 3.3 | 3.3 |
| | 13 | 1 | 3.3 | 3.3 | 6.7 |
| | 14 | 4 | 13.3 | 13.3 | 20.0 |
| | 15 | 7 | 23.3 | 23.3 | 43.3 |
| | 16 | 4 | 13.3 | 13.3 | 56.7 |
| | 17 | 5 | 16.7 | 16.7 | 73.3 |
| | 18 | 2 | 6.7 | 6.7 | 80.0 |
| | 19 | 3 | 10.0 | 10.0 | 90.0 |
| | 20 | 2 | 6.7 | 6.7 | 96.7 |
| | 21 | 1 | 3.3 | 3.3 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

### 4.4. The Histogram Chart of Pre-test




**2. The Data of Post-test**

In this research, the researcher used 30 samples to collect the data of post-test like pre-test before. This data still took from eighth grade of Junior High School. The researcher asked the student to describe one picture that has given in 60 minutes. Students' score of post-test can be seen on the table 4.5. the descriptive statistic of post-test on the table 4.6.

the frequency distribution of post-test on the table 4.7. and the histogram chart of post-test on the table 4.8.

**Table 4.5. The Students' Score in Post-test**

| No. | Name | Score |
|---|---|---|
| 1 | S1 | 18 |
| 2 | S2 | 22 |
| 3 | S3 | 20 |
| 4 | S4 | 25 |
| 5 | S5 | 15 |
| 6 | S6 | 19 |
| 7 | S7 | 20 |
| 8 | S8 | 19 |
| 9 | S9 | 20 |
| 10 | S10 | 19 |
| 11 | S11 | 22 |
| 12 | S12 | 22 |
| 13 | S13 | 23 |
| 14 | S14 | 25 |
| 15 | S15 | 23 |
| 16 | S16 | 23 |
| 17 | S17 | 20 |

| | | |
|---|---|---|
| 18 | S18 | 25 |
| 19 | S19 | 17 |
| 20 | S20 | 19 |
| 21 | S21 | 24 |
| 22 | S22 | 24 |
| 23 | S23 | 25 |
| 24 | S24 | 20 |
| 25 | S25 | 20 |
| 26 | S26 | 22 |
| 27 | S27 | 25 |
| 28 | S28 | 24 |
| 29 | S29 | 20 |
| 30 | S30 | 20 |

**Table 4.6. The Descriptive Statistic of Post-test**

**Statistics**

Posttest

| | | |
|---|---|---|
| N | Valid | 30 |
| | Missing | 0 |
| Mean | | 21.33 |
| Std. Error of Mean | | .485 |
| Median | | 21.00 |
| Mode | | 20 |
| Std. Deviation | | 2.657 |
| Variance | | 7.057 |
| Range | | 10 |

| | |
|---|---|
| Minimum | 15 |
| Maximum | 25 |
| Sum | 640 |

From the results of the data spss output above, it is known that the mean value is 21.33. Standard error of mean is 0.485. The median value is 21.00. The mode value is 20. Standard defiation value is 2.657. Variance value is 7.057. The range value is 10. The minimum value is 15. The maximum value is 25. The last is sum value is 640.

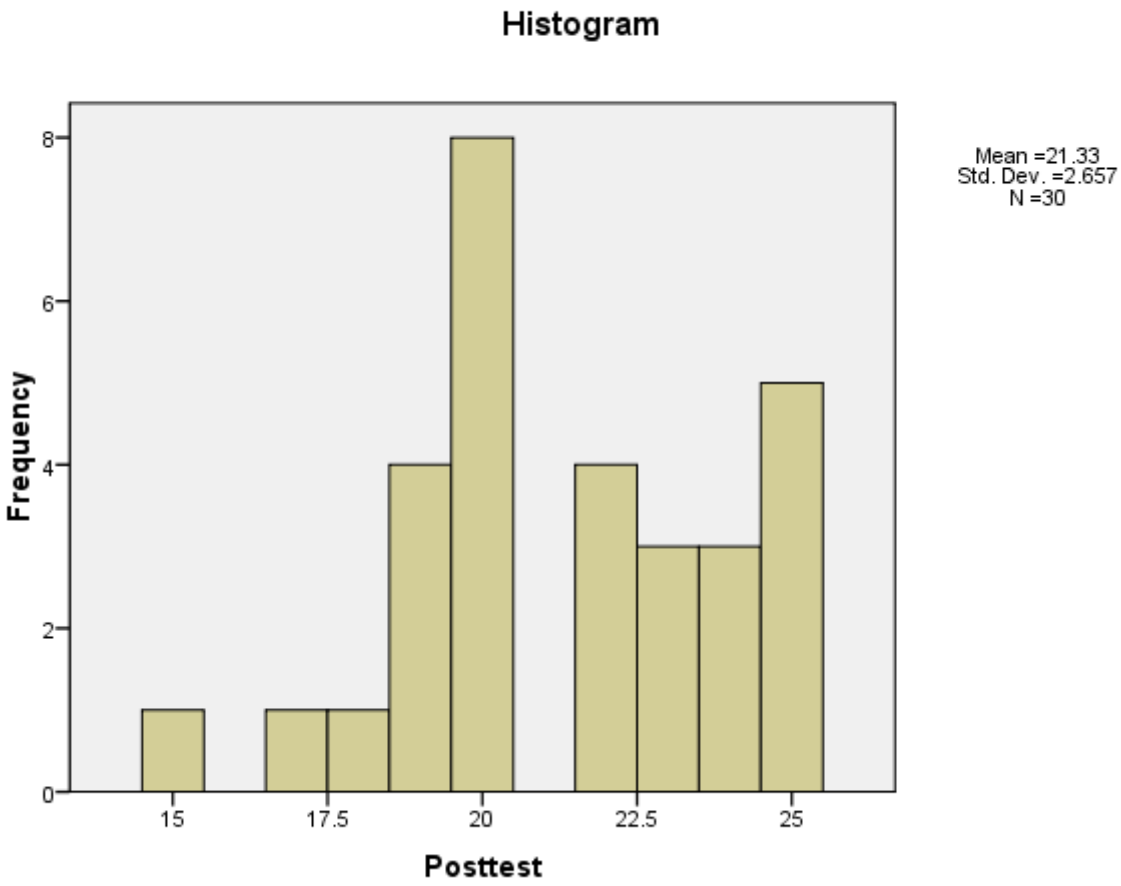
Presentation of pre-test data in the form of a frequency distribution table using the SPSS application as follows:

**Table 4.7. The Frequency Distribution of Post-test**

**Posttest**

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|---|
| Valid | 15 | 1 | 3.3 | 3.3 | 3.3 |
| | 17 | 1 | 3.3 | 3.3 | 6.7 |
| | 18 | 1 | 3.3 | 3.3 | 10.0 |
| | 19 | 4 | 13.3 | 13.3 | 23.3 |
| | 20 | 8 | 26.7 | 26.7 | 50.0 |
| | 22 | 4 | 13.3 | 13.3 | 63.3 |
| | 23 | 3 | 10.0 | 10.0 | 73.3 |
| | 24 | 3 | 10.0 | 10.0 | 83.3 |
| | 25 | 5 | 16.7 | 16.7 | 100.0 |
| | Total | 30 | 100.0 | 100.0 | |

**Table 4.8. The Histogram Chart of Post-test**




## B. Normality Testing

Normality testing is a test to know the data is normal or not. Kolmogorov Smirnov normality test is part of the classical assumption test. Normality test

aims to determine whether the residual value is normally distributed or not. A good regression model is to have a residual value that is normally distributed.

The basic decision making :

- If the significance value > 0.05, then the residual value is normally distributed.
- If the significance value < 0.05, then the residual value is not normally distributed .

It can be seen on the table below :

**Table 4.9. Normality Result**

**One-Sample Kolmogorov-Smirnov Test**

| | | Unstandardized Residual |
|---|---|---|
| N | | 30 |
| Normal Parameters[a] | Mean | .0000000 |
| | Std. Deviation | 2.63442333 |
| Most Extreme Differences | Absolute | .145 |
| | Positive | .145 |
| | Negative | -.096 |
| Kolmogorov-Smirnov Z | | .793 |
| Asymp. Sig. (2-tailed) | | .556 |

a. Test distribution is Normal.

From the output SPSS above, the table shows that Asymp. Sig. (2-tailed) is 0.556. It is higher than 0.05 (0.556 > 0.05). It means that the data is absolutely normal.

**C. The Result of T-test**

Paired sample t-test is used to determine the difference in the average pre-test and post-test. The purpose of paired sample t-test is to test the difference.

The two samples in question are the same two samples but have different data. Paired sample t-test is part of parametric statistics. Therefore, some of the rules in the parametric statistics of research data must be normally distributed.

The result of t-test can be seen on the tables above :

**Table 4.10. Paired Samples Statistic**

**Paired Samples Statistics**

| | | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | PRE TEST | 16.3000 | 30 | 2.21515 | .40443 |
| | POST TEST | 21.3333 | 30 | 2.65659 | .48502 |

This output from SPSS shows that the summary of descriptive statistics from the pre-test and post-test data. Here is the description of the mean, mean is the average value. The mean value of the pre-test is 16.3000, and the mean value of the post-test is 21.3333. Then N is the number of samples taken. This research using 30 samples. Here is also informed that standard deviation of pre-test is 2.21515 and also post-test is 2.65659. The last is about standard error mean. Standard error mean of pre-test is 0.40443 and post-test is 0.48502.

**Table 4.11. Paired Sample Correlations**

**Paired Samples Correlations**

| | | N | Correlation | Sig. |
|---|---|---|---|---|
| Pair 1 | PRE TEST & POST TEST | 30 | .129 | .497 |

This second output part is the result of correlation or relationship between the two data or variables, namely pre-test and post-test by using correlation test, that is person product moment correlation. Known value of significance is 0.497, which means this value is bigger than 0.05 (0.497 > 0.05). Then, the indications are pre-test and post-test there is no relationship because the significance value is bigger than 0.05 (0.497 > 0.05).

**Table 4.12. Paired Sample Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 PRE TEST - POST TEST | -5.03333 | 3.23220 | .59012 | -6.24026 | -3.82641 | -8.529 | 29 | .000 |

Next is the final output which is the most important output in this test. This output illustrates whether there is a difference between pre-test and post-test. The way to find out is if the value of sig. (2-tailed) < 0.05 it means that there is a significant difference between the pre-test and post-test results. If the results are the opposite, there is no significant difference between pre-test and post-test data. If the value of sig. (2-tailed) 0.000 < 0.05, it can be concluded that there is a significant difference between the pre-test and post-test data.

And this table shows that sig.(2-tailed) is 0.000. It means that sig.(2-tailed) is smaller than 0.05 and the data is significant difference. So, learning descriptive

writing using edmodo application can improve learning score of descriptive writing.

**D. Hypothesis Testing**

From the data which already discussed above, that :

1. If Sig. value is smaller than 0.05, it means that null hypothesis is rejected and the alternative is accpeted. It means that eighth grade students' descriptive writing at MTsN 1 Tulungagung by using edmodo is effective.
2. If otherwise that Sig. Value is bigger than 0.05, it means that null hypothesis is accepted and the alternative is rejected. It means that eighth grade students' descriptive writing at MTsN 1 Tulungagung by using edmodo is not effective.

So, based on the table paired test above by using SPSS 16.0, the Sig. Value is 0.000. It means that 0.000 is smaller than 0.05. It means that null hypothesis is rejected and the alternative is accpeted. It means that eighth grade students' descriptive writing at MTsN 1 Tulungagung by using edmodo is effective.

**E. Discussion**

In this occasion, the researcher conducted the research by using one sample of population. It is eight 1 students of MTsN 1 Tulungagung. The number of students are 30, it has been chosen by purposive sampling technique in term suggestion by the English teacher in the school. In order to know the result of this research whether this media is effective or not, the researcher used pre-test and post-test then computed both of the tests into SPSS 16.0. the result of computation between pre-test and post-test shows that the use of Edmodo application is

effective in teaching descriptive writing by looking the students' score in the descriptive writing ability.

The analysis data by using SPSS 16.0 that the mean of the pre-test was 16.30 and post-test improved into 21.33 after getting treatment. The mean of the pre-test is lower than the post-test (16.30 < 21.33), it means that the null hypothesis could be rejected, and it can concludes that using Edmodo application in teaching descriptive writing was effective on students' writing ability of descriptive writing.

Although, some of students' score of pre-test and post-test were not perfect but it showed post-test were significant that pre-test. On the output of paired sample test after calculated the data, it showed t value (Sign. 2-tailed) was 0.000. from comparing with the standard level of significance (0.05). (0.000 < 0.05) , it means that the alternative hypothesis (Ha) was accapted and null hypothesis (H0) was rejected. It could be concluded tht there was significant difference of studets' score before and after being taught by using Edmodo in teaching descriptive writing. Thus, it can be interpreted that writing ability of the students had been improved after getting the treatment by using Edmodo application in teaching descriptive writing.

Finding the result by using Edmodo application in teaching descriptive writing can increase students achievements in writing descriptive at Junior High School especially at 8-1 students of MTsN 1 Tulungagung. based on the mean of pre-test 16.30 becomes 21.33 in post-test. The increasing score above related with the benefit of using Edmodo application in teaching descriptive writing.

Regarding on the result of the data analysis above, it is also strongly with previous study as stating that the use of Edmodo is effective for teaching writing. From Adin Fauzi (2015) " THE EFFECTIVENESS OF EDMODO IN INCREASING STUDENTS' WRITING SKILL IN RECOUNT TEXT (AN EXPERIMENTAL STUDY TOWARDS THE FIRST GRADERS OF MAN 3 TULUNGAGUNG IN ACADEMIC YEAR 2014-2015". In Adin's research also used edmodo but for writing recount text towards the first grade of senior high school. The study investigated the effect of Edmodo on the first graders' skill in writing recount text at MAN Rejotangan. Through the analysis of the findings gained from the students' writing pre-test and post-test, it was concluded that the contribution of Edmodo in writing led to a higher level of writing improvement. The findings revealed that after using Edmodo in post-test, the students' score were significantly better.it can be seen that pre-test score was 71.1111 and post-test score was 80.5556. Therefore, consequently, after doing some statistical test indicating that Edmodo was effective, the researcher concluded that Edmodo is a useful way of increasing students' writing skill and can play an important role in teaching writing to the first graders of MAN Rejotangan. Because, the study also used paired samples test, this researcher got sig 2 tailed score 0.006. it means before and after using edmodo for recount text was significant different because $0.006 < 0.05$.

The students became more free to generate and share their ideas, something that could not be achieved when they composed a text without using any media. This finding shows that the use of digital technologies such computer and social network like Edmodo can shape students' writing myriad ways

including in generating ideas, composing, revising, editing, formatting, and printing anything from a single word to a lengthy essay (Purcell et al. 2013; Langan, 2005). When conducting on-line session using Edmodo, teachers can give the students quite time to understand the material, and then giving response. In giving response, students have a longer time to compose a good sentence so that their response will not lead to a misunderstanding. In this case, using on-line social network like Edmodo makes students improve their critical reading and writing skill as well (Lie, 2013). Also, the students can gain the knowledge from what their teachers or other students post in Edmodo, and they can share their knowledge to Edmodo such good articles, links, etc. so that other students and teacher can benefit it as well, too. On-line social networks determine the way students are related to themselves and the way they gain access to information (Arroyo, 2011).

Overall it can be said that Edmodo application as media in teaching descriptive writing is also suitable in writing essay, descriptive text, or just writing assignment. Furthermore, teaching descriptive writing by using Edmodo application is effective to increase students' achievement in the level of eight grade students of MTsN 1 Tulungagung in academic year 2019/2020.