## CHAPTER IV

## FINDING AND DISCUSSION

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

## A. The Description of Data

In this sub chapter, the researcher presents the descriptive statistics of the research. The result of student's writing recount text in term of pre-test and post-test, then those were calculated by using writing scoring rubric. The tests were given to VIII G of SMPN 6 Tulungagung. The number of students were 32 that consist of 16 male and 16 female. The student's scores of pretest and post-test. In addition, The test was conducted before and after using STAD as the treatment in teaching writing recount text.

## 1. Computation Result of The Student's Score Before being Taught by Using STAD (Pre-Test)

In this part of test, the researcher asked the students to write the past experience. The students were given about 90 minutes to write the descriptive text. There were 32 students as the sample of this research. The purpose of conducting pre-test was intended to measure the student's writing ability before they were given the treatment. The result of pre-test based on processing in SPSS 18.0 version software . The histogram chart of pre-test.

The descriptive statistic of pre-test score consisted of mean and the frequency distribution of pre-test, those can be seen as below:

Table 4.1 The Result of Student's Score in Pre-Test

| No | Student's Name | Pre-test (X0) |
| :---: | :--- | :---: |
| 1 | WU | 76 |
| 2 | RA | 70 |
| 3 | HN | 68 |
| 4 | RD | 68 |
| 5 | SA | 70 |
| 6 | EN | 63 |
| 7 | AN | 63 |
| 8 | GE | 75 |
| 9 | MI | 53 |
| 10 | DI | 73 |
| 11 | KA | 74 |
| 12 | MA | 81 |
| 13 | FA | 71 |
| 14 | SI | 83 |
| 15 | NW | 83 |
| 16 | BG | 70 |
| 17 | NA | 75 |
| 18 | YG | 83 |
| 19 | AV | 74 |
| 20 | FD | 83 |
| 21 | ND | 95 |
| 22 | GG | 75 |
| 23 | RI | 75 |
| 24 | RY | 78 |
| 25 | NI | 63 |
| 26 | AA | 84 |
| 27 | RE | 71 |
| 28 | AF | 75 |
| 29 | AT | 81 |
| 30 | TH | 95 |
| 31 | AD | 75 |
| 32 | AM | 79 |
|  |  | 2402 |
|  |  | N |

Based on the table, it could be seen the lowest and the highest scores of VIII-G. The lowest score in pre-test was 63 and the highest one in pre-test was 95 . The researcher used SPSS 18.0 version to know the descriptive statistic and the percentage of student's score of pre-test.

Table 4.2 The Histogram Chart of Pre-Test


Table 4.3 The descriptive statistic of pre-test scores
Statistics
PRETEST

| N Valid | 32 |
| :--- | ---: |
| Missing | 0 |
| Mean | 75,06 |
| Std. Error of Mean | 1,543 |
| Median | 75,00 |
| Mode | 75 |
| Std. Deviation | 8,729 |
| Variance | 76,190 |
| Range | 42 |
| Minimum | 53 |
| Maximum | 95 |
| Sum | 2402 |

In this research, the group was intended to VIII-G students SMPN 6 Tulungagung. Table showed that the total of data were divided with number of data which determined as mean score from pre-test. It was 75,06 . Then, the half number of data sample which determined as median score from pre-test was75.00. To know the most frequently appeared number, the data used mode score and the most appeared number was 75 . The standard deviation of pretest is 8.729 . The range of pre-test is 42 . In addition, the minimum score was 53. The maximum score was 95 . The sum of pre-test is 2402 . Then, the number of score appeared in pre-test, the researcher presents frequency distribution as below:

Table 4.4 Frequency Distribution of pre-test
PRETEST

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 53 | 1 | 3,1 | 3,1 | 3,1 |
|  | 63 | 3 | 9,4 | 9,4 | 12,5 |
|  | 68 | 2 | 6,3 | 6,3 | 18,8 |
|  | 70 | 3 | 9,4 | 9,4 | 28,1 |
|  | 71 | 2 | 6,3 | 6,3 | 34,4 |
|  | 73 | 1 | 3,1 | 3,1 | 37,5 |
|  | 74 | 2 | 6,3 | 6,3 | 43,8 |
|  | 75 | 6 | 18,8 | 18,8 | 62,5 |
|  | 76 | 1 | 3,1 | 3,1 | 65,6 |
|  | 78 | 1 | 3,1 | 3,1 | 68,8 |
|  | 79 | 1 | 3,1 | 3,1 | 71,9 |
|  | 81 | 2 | 6,3 | 6,3 | 78,1 |
|  | 83 | 4 | 12,5 | 12,5 | 90,6 |
|  | 84 | 1 | 3,1 | 3,1 | 93,8 |
|  | 95 | 2 | 6,3 | 6,3 | 100,0 |
|  | Total | 32 | 100,0 | 100,0 |  |

The table 4.4 showed the numbers that describe the categorizing based on frequency distribution by considering on qualification of the scoring rubric.
a. There are 1 student' who got score between 41-60, it means that the students writing achievement was still fair. It needed much improvement.
b. There are 22 student's who got score between $61-80$, it means that the student's writing achievement was good enough. However, it also still needed the improvement.
c. There are 9 student's who got score $81-95$, it means that the students writing achivement was excellent.

After knowing the result of pre-test, the researcher gave the treatment or stad with the purpose probably the students writing ability could be increased. At last, the researcher gave post-test to measure the difference scores or achievement after conducting the treatment.
2. Computation Result of The Student's Score After being Taught by Using STAD (Post-Test)

In Post-test, the researcher asked the students to write the description with different topic than pre-test. The topic was Your Personal Experience. The allocation time was 90 minutes. There were 32 students as the sample of this research. The purpose of conducting post-test was intended to measure the student's writing ability after they were given the treatment.

The result of post-test based on processing in SPSS 18.0 version software (Table 4.5). The histogram chart of post-test (Table 4.6).The
descriptive statistic of post-test score consisted of mean (Table 4.7) and the frequency distribution of post-test (Table 4.8), can be seen below :

Table 4.5 The Result of Student's Score in Post-Test

| No | Student's Name | Post-test (X1) |
| :---: | :--- | :---: |
| 1 | WU | 79 |
| 2 | RA | 79 |
| 3 | HN | 86 |
| 4 | RD | 79 |
| 5 | SA | 79 |
| 6 | EN | 76 |
| 7 | AN | 83 |
| 8 | GE | 75 |
| 9 | MI | 84 |
| 10 | DI | 79 |
| 11 | KA | 84 |
| 12 | MA | 86 |
| 13 | FA | 79 |
| 14 | SI | 83 |
| 15 | NW | 83 |
| 16 | BG | 80 |
| 17 | NA | 79 |
| 18 | YG | 83 |
| 19 | AV | 84 |
| 20 | FD | 86 |
| 21 | ND | 95 |
| 22 | GG | 79 |
| 23 | RI | 83 |
| 24 | RY | 83 |
| 25 | NI | 75 |
| 26 | AA | 84 |
| 27 | RE | 76 |
| 28 | AF | 80 |
| 29 | AT | 86 |
| 30 | TH | 95 |
| 31 | AD | 79 |
| 32 | AM | 83 |
|  |  | 2642 |

Based on the table 4.5, it could be seen the lowest and the highest scores of VIII-G students. The lowest score in post-test was 75 and the highest one was 95 .

The researcher used SPSS 18.0 version to know the descriptive statistic andthe percentage of student's score of post-test.

Table 4.6 The Histogram Chart of Post-Test


Table 4.7 The Descriptive Statistic of Post-Test Scores

## Statistics

POSTTEST

| N $\quad$ Valid | 32 |
| :--- | :--- |
| Missing | 0 |
| Mean | 82,00 |
| Std. Error of Mean | 830 |
| Median | 83,00 |
| Mode | 79 |
| Std. Deviation | 4,697 |
| Variance | 22,065 |
| Range | 20 |



In this research, the group was intended to VIII-G students SMPN 6 Tulungagung. Based on table 4.7 showed the total all data were divided with number of data which determined as mean score from post-test, it was 82.00. Then, the half number of data sample which determined as median score from post-test was 83.00 . To know the most frequently appeared number, the data used mode score and the most appeared number was 79. The standard deviation of post-test is 4.697 . The range of post-test is 20 . In addition, the minimum score was 75 . The maximum score was 95 . The sum of post-test is 2624.

To know the number of score appeared in pre-test, the researcher used frequency distribution as follow below:

Table 4.8 Frequency Distribution of post-test

## POSTTEST

|  | Frequenc <br> $y$ | Percent | Valid <br> Percent | Cumulative <br> Percent |
| :---: | :--- | :--- | :--- | :--- |
| Valid 75 | 2 | 6,3 | 6,3 | 6,3 |
| 76 | 2 | 6,3 | 6,3 | 12,5 |
| 79 | 9 | 28,1 | 28,1 | 40,6 |
| 80 | 2 | 6,3 | 6,3 | 46,9 |
| 83 | 7 | 21,9 | 21,9 | 68,8 |
| 84 | 4 | 12,5 | 12,5 | 81,3 |
| 86 | 4 | 12,5 | 12,5 | 93,8 |
| 95 | 2 | 6,3 | 6,3 | 100,0 |
| Total | 32 | 100,0 | 100,0 |  |
|  |  |  |  |  |

The table 4.8 showed the numbers that describe about the division and percentages of frequency distribution. The frequency of post-test after being dsitributed showed based on the categorizing of scoring rubric:
a. There are 15 student who got score $75-80$, it means that the students writing achievement in recount text was fair.
b. There are 17 students who got score between 83-95, it means that the students writing achivement was excellent.

## B. Normality Testing

Normality testing is conducted to determine whether the gotten data is normal distribution or not. The main reason of conducting normality testing in a research is to know that the population or data involved in the research is in normal distribution.The computation of normality testing in this research using One- Sample Kolmogorov-Smirnov test in IBM SPSS Statistics 18.0 by significant level (0.05). The data presented on the table. The hypothesis of normality as follows :
a. $\mathrm{H}_{0}$ : Data is in normal distribution.
b. $H_{a}$ : Data is not in normal distribution.

After determining the hypothesis, the researcher used the rule of Asymp. Sig (2-tailed) to measure the normality testing. This rule was used to know the test distribution was normal or not. The interpretation of normality testing as follows :

1. If the significant value $>0.050$, it means that the data distribution is normal
2. If the significant value $<0.050$, it means that the data distribution is not normal

Table 4.9 Normality Result
One-Sample Kolmogorov-Smirnov Test

|  |  | PRETES <br> T | POSTTES <br> T |
| :---: | :---: | :---: | :---: |
| N |  | 32 | 32 |
| Normal Parameters ${ }^{\text {a,b }}$ | Mean | 75,06 | 82,00 |
|  | Std. Deviation | 8,729 | 4,697 |
| Most Extreme | Absolute | ,128 | ,148 |
| Differences | Positive | ,128 | ,148 |
|  | Negative | -,093 | -,137 |
| Kolmogorov-Smirnov Z |  | ,723 | ,835 |
| Asymp. Sig. (2-tailed) |  | ,672 | ,488 |

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

The table shows that the significance value of pre-test is 0.200 and it is bigger than $0.672(0.672>0.05)$. It means the data distribution of pre-test is normal. The significance value of post-test is 0.488 and it is bigger than 0.05 (0.488> 0.05). It means the data distribution of post-test is also normal. It can be concluded that both of the data (pre-test and post-test) are normal distributions.

## C. Hypothesis Testing

This research is conducted to know whether there is significant difference achievement of eight grade students in SMPN 6 Tulungagung in academic year 2018/2019 in writing recount text before and after being taught by using STAD. To analyze the finding data, the researcher uses Paired Sample Test by using SPSS 18.0 version.

When the sample size is large or at least 30 , the z test is used. However, the z test is inappropriate when the sample size is less than 30 . In such a case, t test is caleed for. In relation with this, Bluman states that t test is a statistical test for the population mean, and is used when the population is normally distributed or approximately normally distributed, $\sigma$ is unknown, and $\mathrm{n}<30$ (1998:378).

The hypothesis is stated as follow:

1) $\mathrm{Ho}=\mu 1 \leq \mu 2$ or the mean of the pre-test is smaller than or equal to the mean of the post-test.The student's recount writing ability after being taught using stad is less than or equal to their ability before being taught using stad.
2) $\mathrm{H} 1=\mu 1>\mu 2$ or the mean of post-test was higher than the mean of pretest.The student's recount writing ability after being taught using stad is higher than their ability before being taught using stad. The result of hypothesis testing can be seen in table 4.7 below:

## Table 4.10 t-test

## Paired Samples Statistics

|  |  | Mean | N | Std. <br> Deviation | Std. <br> Mean | Error |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pair 1 | PRETEST | 75,06 | 32 | 8,729 | 1,543 |  |
|  | POSTTES | 82,00 | 32 | 4,697 | , 830 |  |

Paired Samples Correlations


Paired Samples Test

|  | Paired Differences |  |  |  |  | T | df | $\begin{aligned} & \text { Sig.(2- } \\ & \text { tailed) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | Std. <br> Deviation | Std. <br> Error <br> Mean | 95\% <br> Confidence Interval of the Difference |  |  |  |  |
|  |  |  |  | Lower | Upper |  |  |  |
| $\begin{array}{ll} \text { Pair } & \text { PRETEST - } \\ 1 & \text { POSTTEST } \end{array}$ | -6,938 | 6,749 | 1,193 | -9,371 | -4,504 | -5,815 | 31 | ,000 |

1. If P -value $\leq a$, the null hypothesis $(\mathrm{H} 0)$ is rejected and the alternative (Ha) is accepted. It means that the use of STAD is effective for improving or raising the student's recount writing ability.
2. If P-value $>a$, the null hypothesis ( H 0 ) is accepted and the alternative (Ha) is rejected. It means that the use of STAD is not effective for improving or raising the studentss' recount writing ability.

Based on the table 4.10 above, the output confirms that the means of the students after and prior the treatment are respectively 75,06 and 82,00 . The result of the t -test reveals that the t value is $-5,815$ with the df 31 , and the $p$ value (two-tailed) is 0.000 . Given that the present test is one-tailed test, so the $p$-value ( 0.000 ) is divided by two ( $0,000 / 2$ ) equals to 0 . Since 0 is smaller than the $a=0.05$, so the null hypothesis is rejected. And hypothesis $a$ is accepted. Automatically the mean after treatment is bigger than the one before treatment. The conclusion is that the use of STAD is effective for improving the student's recount writing ability.

## D. Discussion

In this research, the researcher conducted the research by using one sample of population. It is eighth grade G students of SMPN 6 Tulungagung. The number of students are 32 , it has been chosen by purposive sampling technique in term suggestion by some eligible people in the school. To know the result of this research whether this media is effective or not, the researcher used pre-test and post-test then compute both of the tests into SPSS 18.0 version software. The result of computation between pre-test and post-test shows that there is a significant difference on the student's writing ability before and after being taught by using STAD in writing recount text.

The standard deviation is to measure how much the variance of the sample. The standard deviation of pre-test is $8.466<65.75$ and post-test is $8.248<77.42$ where if the standard deviation is getting higher than the mean it means that the mean is not homogeny and if the standard deviation is getting smaller than the mean it means that the mean is homogeny. Therefore, it can be concluded that standard deviation of pre-test and post-test was homogeny means that the sample of this research almost has the same mean.

The standard error mean is to measure the accuracy with which a sample represents a population. The standard error mean of pre-test is 1.411 $<65.75$ and post-test is $1.375<77.42$, where if the standard error mean is getting higher than the mean it means that the sample is not representative and if the standard error mean is getting smaller than the mean it means that
the sample is representative. Therefore, it can be concluded that the sample of this research indicated good sample or representative from population.

As the requirement of hypothesis, if the $p$-value is smaller than or equal to the $a(0.05)$, it means that the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected. It can be said that the student's writing recount text ability after being taught using STAD is higher than their skill before being taught using STAD. In fact based on the table of paired sample t -test, the result shows that the number of the significant value is $0.000 / 2$ equals to 0 , and it is smaller than the $a=0.05$. It means that the use of STAD is effective for improving or raising the student's recount writing ability.

Finding result by using STAD can increase students ability in recount writing at Junior High School students of SMPN 6 Tulungagung. Based on the mean of pre-test 75,06 becomes 82,00 in post-test. The increasing score above related with the benefit of using STAD generally on writing recount text. Suharso (2017) states that the use of Instagram elicits a statistical improvement on the student's writing skill.

Regarding on the result of data analysis above with previous study as stating that the use of STAD is of effective for teaching writing. Mufidah (2013) studied by the title: "The Effectiveness of Student team Achievement Division (STAD) Technique Reading Comprehension to the Eight Grade Students at MTs aswaja Tunggangri Kalidawir" for fulfilling the requirements for the degree of post graduate program in English Education Department which presented to State Islamic Institute Tulungagung. The
sample of this research is the second grade students of MTsN Kunir. The result of the researcher was successful. It was proven that Sig.Asymp was higher than $t$-table in significant $5 \%$. It can be seen $(1.725>0,05)$. It means that the alternative hypothesis which states that there is any significant difference between the student's reading skill before and after being taught by using STAD is accepted.

Sumianto (2012) studied by the title: the Effectiveness of Teaching Reading Comprehension by Using STAD of Second Year Students` of MA Islamiyah Bulurejo" for fulfilling the requirement for the degree of graduated program in Students of Kediri Islamic University Faculty of Teacher Training and Education English Department. The sample of this research are Second Years Students of MA Islamiyah Bulurejo.The result of the research, means of variable before being taught by using STAD is 61,36 and after being taught by using STAD is 66,21 it means there is significant different score before and after being taught by using STAD. And the result of using T test is 4,848, with degree of freedom 32. Then it is consulted in t-table in significance $5 \%$. The significance of level $5 \%$ is 2,03 . From those data, it is known that $2,848>2,02$. The result shows that t -Test is higher than t -table. So, there is significant difference before and after being taught by using STAD.

Saputri (2014) research entitled "Improving the writing recount text by using picture series for the eighth grade students of SMP Muhammadiyah 2 Kalasan". This research had purpose to solve student's problem in writing lesson and to improve students skill in writing recount text. After getting the
data, this research finds out that the use of picture series gave positive effect in students to writing recount text. Picture series increased fun writing teaching learning and motivated students to writing recount text.

Overall, it can be said that STAD as strategy in teaching writing is also suitable used in writing essay or recount text. Furthermore, teaching writing recount text by using STAD is effective to increase students ability in the level of eight grade students of SMPN 6 Tulungagung in academic year 2018/2019.

