# CHAPTER IV

# RESEARCH FINDING AND DISCUSSION

## A. Description of the Data

In this chapter, the writer explains the result of the research. The writer will attempt to submit the data as outcomes of research has hold in ninth grade of Madrasah Tsanawiyah Sabilul El-Muhtadin. The writer takes 60 students as a subject this research. It is divided into two classes. They are 30 students from IX A as the control class and 30 students from IX B as the experimental class. The data of this research were the score of the students' pre-test and post-test both experimental class and control class. The score of pre-test was taken before the treatment, while the score of post-test was taken after the treatment. The result of pre-test is to know students' reading comprehension before receiving the treatment, meanwhile the result of post-test is to give the information whether there is any improvement on students' reading comprehension achievement of narrative text after receiving the treatments. In this research, the writer gave treatments to experimental class and control class related to narrative text material. In the experimental class, the writer applied SQ3R strategy to teach reading narrative text, while in control class the writer applied conventional technique. Conventional technique is

a technique which is usually used by the teacher such as asking the students to read the narrative text, translate and answer the questions based on the text. The writer measured students' reading comprehension achievement by using a test essay forms. Below are the data of pre-test and post-test in experimental and control class.

1. **The Score of Pre-test and Post-test of Experimental Class**

**Table 4.1**

**The Result Score of Pre-test and Post-test in Experimental**

**Class**

| NO | SCORE | |
|---|---|---|
| | PRE-TEST | POST-TEST |
| 1 | 55 | 85 |
| 2 | 70 | 75 |
| 3 | 75 | 85 |
| 4 | 60 | 90 |
| 5 | 65 | 70 |
| 6 | 65 | 70 |
| 7 | 60 | 65 |
| 8 | 75 | 85 |
| 9 | 60 | 75 |

| | | |
|---|---|---|
| **10** | 55 | 65 |
| **11** | 75 | 95 |
| **12** | 65 | 70 |
| **13** | 65 | 75 |
| **14** | 70 | 80 |
| **15** | 55 | 65 |
| **16** | 65 | 75 |
| **17** | 60 | 70 |
| **18** | 60 | 70 |
| **19** | 50 | 65 |
| **20** | 50 | 75 |
| **21** | 65 | 70 |
| **22** | 70 | 75 |
| **23** | 65 | 80 |
| **24** | 65 | 75 |
| **25** | 60 | 70 |
| **26** | 50 | 65 |
| **27** | 40 | 65 |
| **28** | 75 | 90 |
| **29** | 75 | 85 |

| **30** | 60 | 70 |
|---|---|---|
| $\sum X_1$ | **1880** | **2250** |
| **M$_1$** | **62,66** | **75** |

**Pre-test**                              **Post-test**

$M_1 = \sum \dfrac{X1}{N1}$                $M_1 = \sum \dfrac{X1}{N1}$

$M_1 = \sum \dfrac{1880}{30}$                $M_1 = \sum \dfrac{2250}{30}$

$\quad = \quad 62.66$                      $\quad = \quad 75$
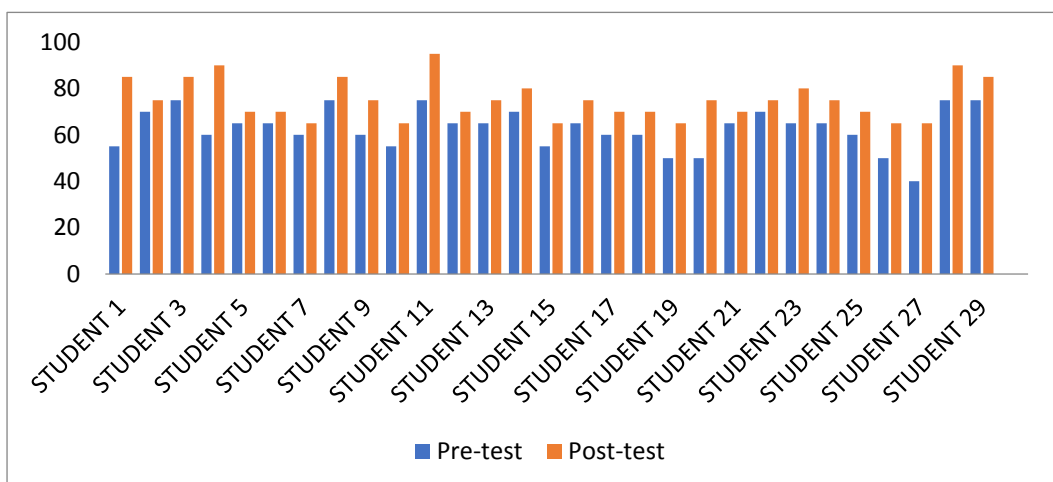
Note:

$\sum X_1$    : The score of pre-test and post-test experimental class

$M_1$      : Mean of pre-test and post-test experimental class

$N_1$      : Numbers of students of experimental class

**Graphic 4.1**

**The Score of Pre-test and Post-test of Experimental Class**

Based on graphic above, it showed that the result of experimental class got the significant improvement after giving treatment. It is seem from average score of post-test is better than the average score of pre-test that 75 >62.66, it means that using SQ3R strategy can effect to improve students' reading comprehension on Narrative text

## 2. The Score of Pre-test and Post-test of Control Class

### Table 4.2

### The Result of Pre-test and Post-test in Control Class

| NO | SCORE | |
| --- | --- | --- |
| | PRE-TEST | POST-TEST |
| 1 | 70 | 75 |
| 2 | 45 | 55 |
| 3 | 75 | 70 |
| 4 | 65 | 65 |
| 5 | 70 | 65 |
| 6 | 55 | 60 |
| 7 | 75 | 75 |
| 8 | 60 | 65 |

| 9 | 75 | 65 |
|---|---|---|
| 10 | 60 | 55 |
| 11 | 65 | 60 |
| 12 | 60 | 65 |
| 13 | 70 | 75 |
| 14 | 65 | 60 |
| 15 | 75 | 75 |
| 16 | 50 | 55 |
| 17 | 60 | 65 |
| 18 | 60 | 60 |
| 19 | 65 | 75 |
| 20 | 45 | 55 |
| 21 | 60 | 65 |
| 22 | 60 | 50 |
| 23 | 75 | 65 |
| 24 | 65 | 70 |
| 25 | 70 | 70 |
| 26 | 60 | 50 |
| 27 | 65 | 75 |
| 28 | 45 | 55 |

| 29 | 70 | 65 |
|---|---|---|
| 30 | 60 | 60 |
| $\sum X_1$ | **1895** | **1920** |
| $M_1$ | **63,16** | **64** |

**Pre-test**                              **Post-test**

$M_1 = \sum \dfrac{X1}{N1}$                 $M_1 = \sum \dfrac{X1}{N1}$

$M_1 = \sum \dfrac{1895}{30}$                $M_1 = \sum \dfrac{1920}{30}$

$\quad = \quad 63.16$                       $\quad = \quad 64$

Note:

$\sum X_1$    : The score of pre-test and post-test experimental class

$M_1$       : Mean of pre-test and post-test experimental class

$N_1$       : Numbers of students of experimental class

**Graphic 4.1**

**The Score of Pre-test and Post-test of Experimental Class**
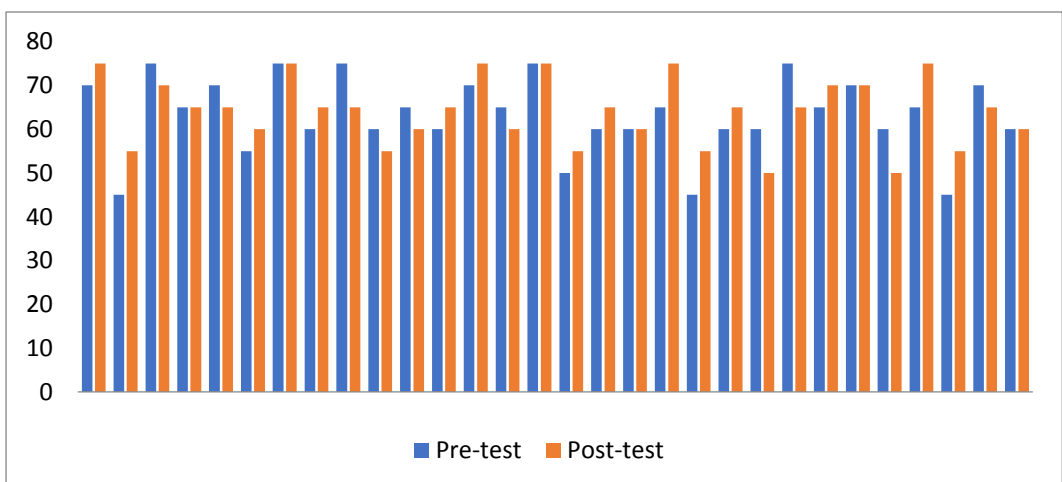
Based on graphic above, it showed that the result of control class did not have the significant improvement, It is seem from average score of post-test that is score of pre-test 63.16>64. This class also realized can effect improvement but lower than experimental class.

## B. Analysis of Data

After getting the data from pre-test and post-test score of two classes. Then the writer analysed it by using t-test formula with the degree of significant 5% and 1%, the writer used step as follows:

**Table 4.3**

**The Score of Distribution Frequency**

| NO | SCORE | | X1 | X2 | | |
|---|---|---|---|---|---|---|
| | X1 | X2 | (X1-M1) | (X2-M2) | $X_1{}^2$ | $X_2{}^2$ |
| 1 | 85 | 75 | 10 | 11 | 100 | 121 |
| 2 | 75 | 55 | 0 | -9 | 0 | 81 |
| 3 | 85 | 70 | 10 | 6 | 100 | 36 |
| 4 | 90 | 65 | 15 | -1 | 225 | 1 |
| 5 | 70 | 65 | -5 | -1 | 25 | 1 |
| 6 | 70 | 60 | -5 | -4 | 25 | 16 |

| 7 | 65 | 75 | -10 | 11 | 100 | 121 |
|---|---|---|---|---|---|---|
| 8 | 85 | 65 | 10 | 1 | 100 | 1 |
| 9 | 75 | 65 | 0 | 1 | 0 | 1 |
| 10 | 65 | 55 | -10 | -9 | 100 | 81 |
| 11 | 95 | 60 | 20 | -4 | 400 | 16 |
| 12 | 70 | 65 | -5 | 1 | 25 | 1 |
| 13 | 75 | 75 | 0 | 11 | 0 | 121 |
| 14 | 80 | 60 | 5 | -4 | 25 | 16 |
| 15 | 65 | 75 | -10 | 11 | 100 | 121 |
| 16 | 75 | 55 | 0 | -9 | 0 | 81 |
| 17 | 70 | 65 | -5 | 1 | 25 | 1 |
| 18 | 70 | 60 | -5 | -4 | 25 | 16 |
| 19 | 65 | 75 | -10 | 11 | 100 | 121 |
| 20 | 75 | 55 | 0 | -9 | 0 | 81 |
| 21 | 70 | 65 | -5 | 1 | 25 | 1 |
| 22 | 75 | 50 | 0 | -14 | 0 | 16 |
| 23 | 80 | 65 | 5 | 1 | 25 | 121 |
| 24 | 75 | 70 | 0 | 6 | 0 | 81 |
| 25 | 70 | 70 | -5 | 6 | 25 | 1 |
| 26 | 65 | 50 | -10 | 14 | 100 | 196 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **27** | 65 | 75 | **-10** | **11** | **100** | **121** |
| **28** | 90 | 55 | **15** | **-9** | **225** | **81** |
| **29** | 85 | 65 | **10** | **1** | **100** | **1** |
| **30** | 70 | 60 | **-5** | **-4** | **225** | **16** |
| | **2250** | **1920** | | | **3000** | **1720** |
| | **75** | **64** | | | | |

**Note:**

$X_1$ = Score Post-Test (Experimental Class)

$X_2$ = Score Post-Test (Control Class)

$X_1$ = X1-M1 (Mean X1)

$X_2$ = X2-M2 (Mean X2)

$X_1^2$ = The squared value of X1

$X_2^2$ = The squared value of X2
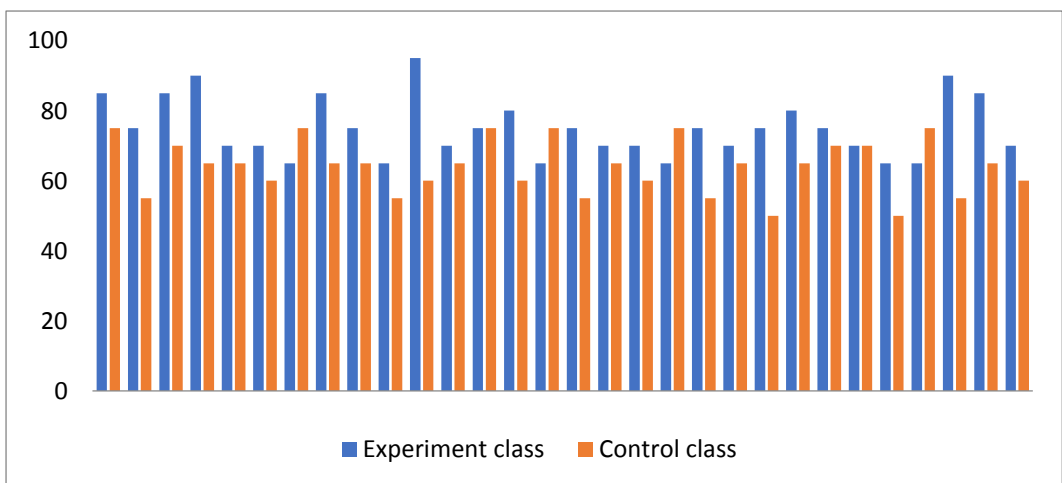
Based on the graphic above the experimental class = 2250 that higher than control class=1920 had different value. The experimental class was higher than the control class. From the table above, the writer got the data $\sum X_1$=2250, $\sum X_2 = 1920$, $\sum X1\ 2 =3000$, and $\sum X_2\ 2 =1720$ , whereas N1=30 and N2=30. After getting the data from pre-test and post-test, the writer analysed it by using statistic calculation of t-test formula with the degree of significance 5% and 1% the formula as follow:

1. Determine mean of variable X1and X2

   **variable X1**                **variable X2**

   $M_1 = \sum \frac{X1}{N1}$        $M_1 = \sum \frac{X1}{N1}$

   $M_1 = \sum \frac{2250}{30}$      $M_1 = \sum \frac{1920}{30}$

   $\quad =\quad 75$                 $\quad =\quad 65$

2. Determine t-test

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1.N_2}\right)}}$$

$$t = \frac{75 - 64}{\sqrt{\left(\frac{3000 + 1720}{30 + 30 - 2}\right)\left(\frac{30 + 30}{30.30}\right)}}$$

$$t = \frac{11}{\sqrt{\left(\frac{4720}{58}\right)\left(\frac{60}{100}\right)}}$$

$$t = \frac{11}{\sqrt{(18,37)\,(0.07)}}$$

$$t = \frac{11}{\sqrt{5,69}}$$

$$t = \frac{11}{2.38}$$

$$t = 2,38$$

**Note :**

M1  = The average score of experimental class (Mean X1)

M2  = The average score of control class (Mean X2)

$\sum X_1{}^2$ = Sum of the squared deviation score of experimental

class

$\sum X_2{}^2$ = Sum of the squared deviation score of control class

N1 = The number of student of experimental class

N2 = The number of student of control class

2 = Constant number

3. Degree of Freedom

df $= N1+N2-2$

$= 30+30-2$

$= 58$

There is no degree of freedom for 58, so the writer uses the closer from 58. In degree of significance 5% from 58 $t_t = 1.67$ and in degree of significance 1% from 58 $t_t = 2.39$.

Based on the result statistic calculation, it is obtained that the score of to is $= 4.62 > t_t = 1.67$ in degree of significance 5%. The score of to $= 12.23 > t_t = 4.62$ in degree of significance 1%. To prove the hypothesis, the data obtained from the experimental class is calculated by using t-test formula with assumption as follow:

If $t_{observation} > t_{table}$ : The alternative hypothesis is accepted. It means there is a significant effectiveness of SQ3R strategy toward student's reading comprehension of narrative text.

If $t_{observation} < t_{table}$ ; The alternative hypothesis is rejected. It means there is no significant effectiveness of SQ3R strategy toward student reading comprehension of narrative text.

## C. Interpretation of Data

From the result of pre-test and post-test in experimental class, the writer can conclude that from the lowest score in pre-test is 40 and the highest score in pre-test is 75. After the writer conducted treatment SQ3R strategy toward student's reading comprehension of narrative text and also conducted post-test. It is founded the lowest score in post-test is 65 and the highest score in post-test is 95.

Before deciding the result of hypothesis, the writer proposes interpretation towards with procedure as follow:

a. $H_a$: $t_{observation} > t_{table}$ = It means there is a significant effectiveness of

SQ3R strategy toward student's reading comprehension of narrative text.

b. Ho: $t_{observation} < t_{table}$ = It means there is no significant effectiveness of SQ3R strategy toward students reading comprehension of narrative text.

According to the data, the value of $t_{observation}$ is bigger than $t_{table}$. $t_{observation}$ = 4.62> $t_{table}$ = 1.67 (5%) or $t_{observation}$ = 4.62> $t_{table}$ = 2,39 (1%), so $H_o$ is rejected and $H_a$ is accepted.

From the result above, the writer give conclusion that it means there is a significant effectiveness of SQ3R strategy toward

student's reading comprehension of narrative text. It can be seen that the student got better score by SQ3R strategy. This could be seen after comparing the score of pre-test (before SQ3R strategy) and post-test (after using SQ3R strategy).

Based on the data obtained from control and experimental class among the average scores, and t observation, the writer summarizes that teaching narrative text through SQ3R strategy has significant effectiveness toward students' reading comprehension. It has proved that SQ3R strategy could increase students reading comprehension of narrative text.

SQ3R strategy provides elements of story that make students be easier to read the story in narrative text. Hence, when the students were given the treatment in three meetings, they could be easy to read the narrative text in using SQ3R. Because they were familiar with the story grammar elements, when they had reading post-test, they could be easy to read the passage and answer it. The students' reading achievement improved in post-test. It can be seen in the main score which has been mentioned before. Moreover, in applying SQ3R in the classroom, the writer felt that the students could enjoy reading. They could actively involve in teaching and learning activity since the students could use their creativity and imaginary. The result of

the research shows that the experimental class (the students who are taught using SQ3R strategy) has the mean value (75), meanwhile the control class (the students who are not taught SQ3R strategy) has the mean value (64). It can be said that the achievement score of experimental class is higher than control class. So, it could be concluded that SQ3R strategy is effective to facilitate students' reading comprehension on narrative Text in experimental group. It can be seen at mean value of both groups. There is significant difference in the students' writing achievement between experimental and control group.