

## **CHAPTER IV**

### **THE RESULT OF THE STUDY**

#### **A. Description of Data**

In this chapter, the writer would like to present the description of data obtained. As the writer stated at the previous chapter that the population of the student MTS AL-FATH Cilegon and the subject of this research are the second grade students. In this research, the writer divided them into two classes, 20 students are experiment class, its from class VIII B, and 20 students as control class, it is from class VIII C.

To find the effectiveness of story mapping strategy, the writer identified some result, they are : the score of students before treatment, the score students after treatment.

To know the effectiveness of story mapping strategy (SMS) in teaching reading comprehension on narrative text, the writer gave the test to students as the sample both at the experimental class and at the control class. The test used in this research divided in two types, there are pre-test and post test. The pre-test is the test that giving before treatment and the post test is given after giving the treatment. The maximum score of main idea was 25, the maximum score of vocabulary was 5, the maximum score of purpose was 20, the maximum score of explicit question was 25 and the maximum score of implicit question was 25. The highest of total score all criteria was 100.

The writer described the result of pre-test and post-test at experimental class by the table bellows:

Table 4.1

The students score of pre test at experimental class

NO	NAME	ASPECT					TOTAL
		MI	V	P	EQ	IQ	
1.	AW	10	3	10	10	17	50
2.	ANA	5	4	10	10	11	40
3.	DAH	10	4	16	10	10	50
4.	DF	10	4	10	10	16	50
5.	ESK	10	4	6	5	5	30
6.	FJ	5	4	5	11	5	30
7.	IY	16	4	15	10	15	60
8.	IS	10	5	10	20	20	65
9.	KR	10	5	5	10	10	40
10.	MNP	10	4	16	10	10	50
11.	MNM	10	5	15	20	10	60
12.	MM	16	4	10	20	20	70
13.	MJ	6	4	10	5	5	30
14.	MJP	15	5	15	20	15	70
15.	NA	10	5	5	10	10	40
16.	NH	7	3	10	10	10	40
17.	RA	12	3	10	10	15	50
18.	SQA	10	4	10	16	10	50
19.	SHP	10	3	5	5	7	30
20.	TSL	5	4	6	5	10	30
	<b>N=20</b>						<b><math>\Sigma=915</math></b>
<b>Average</b>							<b>45,75</b>

The table 4.1 above showed that the result of the students pre-test score on the criteria reading narrative text at the experimental class. That the data showed the maximum score was 70, and the minimum score was 30. Two students who got the maximum and five students who got the minimum score. The average pre test was 45,75.

Table 4.2

The students score of post test at experimental class

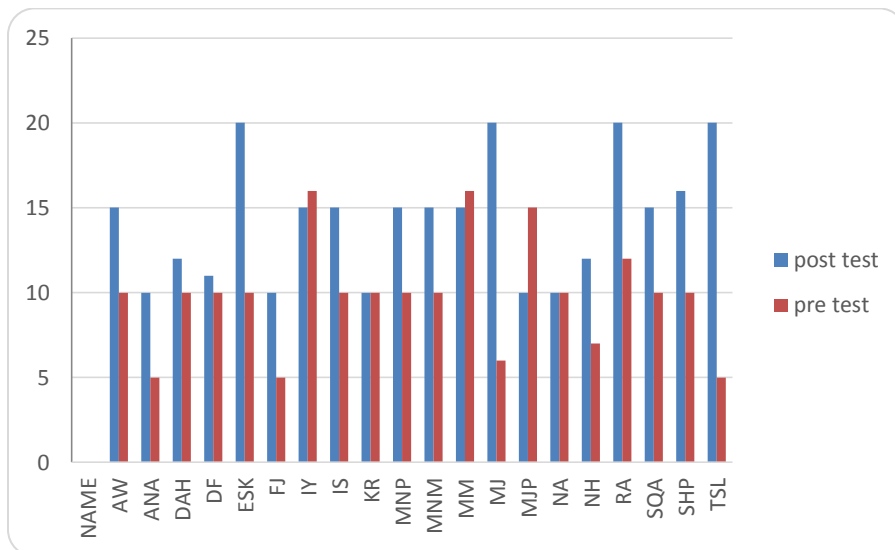
NO	NAME	ASPECT					TOTAL
		MI	V	P	EQ	IQ	
1.	AW	17	3	10	12	18	60
2.	ANA	20	5	15	10	15	65
3.	DAH	20	5	15	23	25	88
4.	DF	11	4	10	20	20	65
5.	ESK	10	5	15	10	20	60
6.	FJ	13	5	12	20	10	60
7.	IY	15	5	10	10	10	50
8.	IS	17	5	20	20	20	82
9.	KR	10	5	15	15	12	57
10.	MNP	15	5	15	10	15	60
11.	MNM	20	5	15	10	20	70
12.	MM	15	5	20	15	20	75
13.	MJ	20	5	10	25	25	85
14.	MJP	20	5	20	23	15	83
15.	NA	15	5	10	15	15	60
16.	NH	10	4	16	18	20	68
17.	RA	20	5	10	15	17	67
18.	SQA	10	5	15	20	15	65
19.	SHP	15	5	15	15	16	66
20.	TSL	20	4	16	15	15	70
	<b>N=20</b>						<b>∑=1356</b>
<b>Average</b>							<b>67,8</b>

The table 4.2 above showed that the result of the students post test score on the criteria reading narrative text at the experimental class. That the data showed the maximum score was 88, and the minimum score was 50. One student who got the maximum and one student who got the minimum score. The average pre test was 67,8.

Based on the explanation above, it showed the result of post test at experimental class got the significant improvement after giving treatment, it seen from the average of post test was better than the average of pree test, that  $45,75 < 67,8$ .

Graphic 4.1

The comparison of main idea in pre test and post test at the experimental class



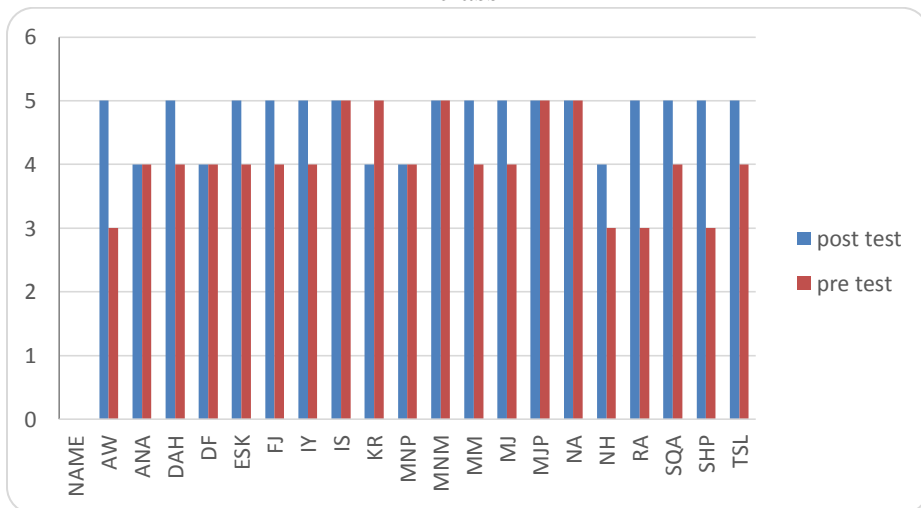
From the graphic above, the writer concluded that the students score in main idea of reading assessment was lack in pre-test. Most of students had can identify Sentence but does not tell the main idea, but does have some detail from the passage. But in post

test, there was improvement in the main idea of narrative text. Most of the main idea was can identify Sentence tells the main idea, but uses no detail from passage.

The maximum score in main idea of reading assessment was 25 and the inimum score in main ide of reading assessment was 1. The maximum score have gotten by students in pre test was 16 with criteria in perfect very good and the maximum sore have gotten by students in post test was 20 with the criteria in perfect very good. The minimum score have gotten by students in the pre test was 5 with the criteria lack and the minimum score in post test was 10 with the criteria good enough.

Graphic 4.2

The comparison of vocabularie in pre-test and post test in experimental class



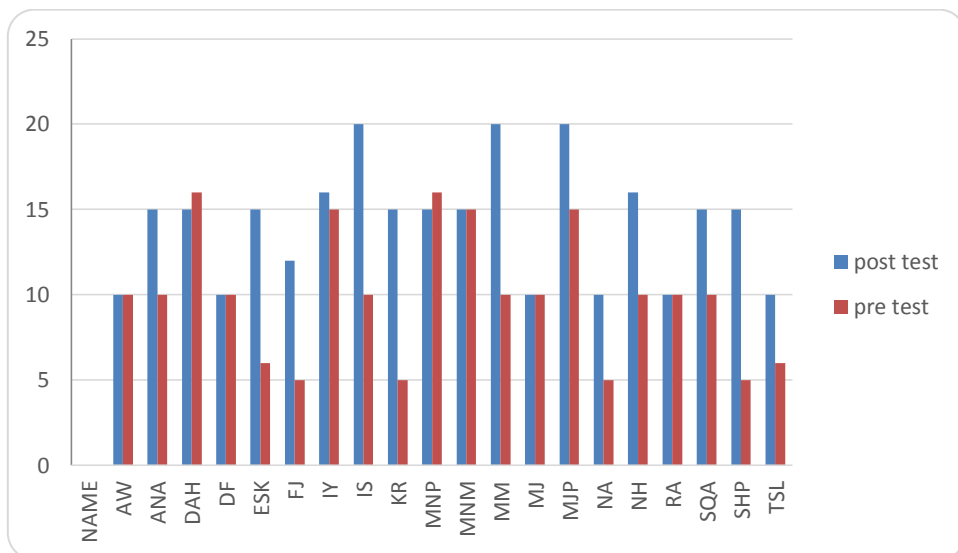
From the graphic above, the writer concluded that the students score in main idea of reading assessment was lack in pre-test. Most of students had unable to identify the meaning of words and its used based on the context. But in post test, there was

improvement in the vocabulary of narrative text. Most of students had can identify the meaning of words and its use according to the context with fairly precise and accurate.

The maximum score in vocabulary of reading assessment was 5 and the inimum score in main ide of reading assessment was 3. The maximum score have gotten by students in pre test was 5 with criteria in perfect very good and the maximum sore have gotten by students in post test was 5 with the criteria in perfect very good. The minimum score have gotten by students in the pre test was 3 with the criteria lack and the minimum score in post test was 4 with the criteria good enough.

Graphic 4.3

The comparison of purpose in pre-test and post test at experimental class



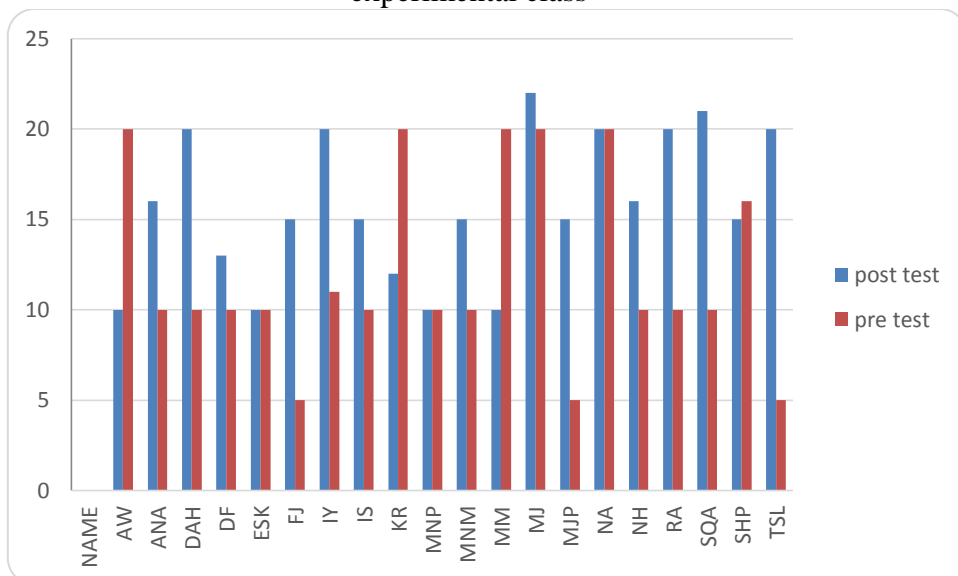
From the graphic above, the writer concluded that the students score in main idea of reading assessment was lack in pre-test. Most of students had can't identify the style and the author's

intent in presenting ideas in written discourse. But in post test, there was improvement in the purpose of narrative text. Most of students had can identify the style and the author's intent in presenting ideas in written discourse with precise and accurate enough.

The maximum score in vocabulary of reading assessment was 20 and the inimum score in main ide of reading assessment was 5. The maximum score have gotten by students in pre test was 16 with criteria in perfect very good and the maximum sore have gotten by students in post test was 20 with the criteria in perfect very good. The minimum score have gotten by students in the pre test was 5 with the criteria lack and the minimum score in post test was 10 with the criteria good enough.

Graphic 4.4

The comparison of Explicit Question in pre-test and post test at experimental class



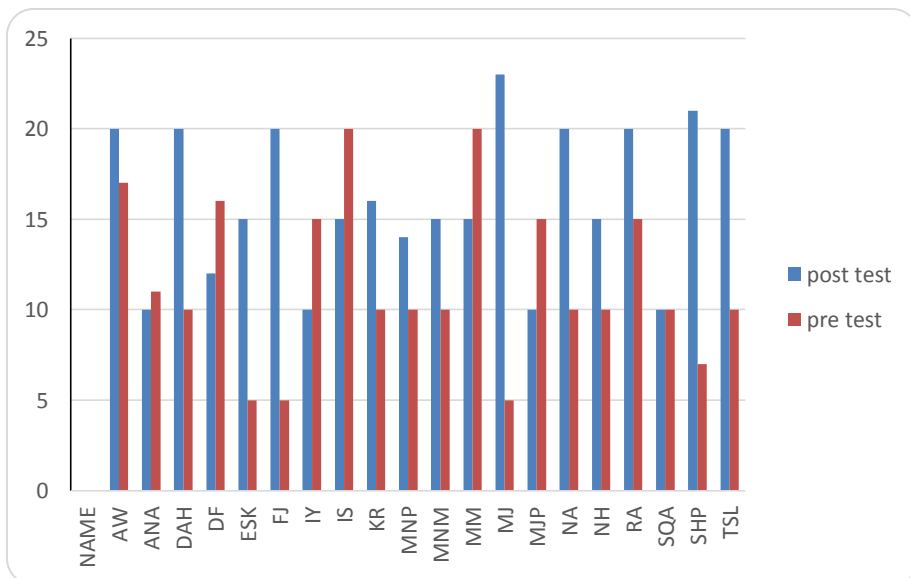
From the graphic above, the writer concluded that the students score in explicit question of reading assessment was lack

in pre-test. Most of students had can't identify the specific information that is stated in the passage. But in post test, there was improvement in the purpose of narrative text. Most of students had can identify the specific information that is stated in the passage with very precise and accurate

The maximum score in explicit question of reading assessment was 25 and the inimum score in main ide of reading assessment was 5. The maximum score have gotten by students in pre test was 20 with criteria in perfect very good and the maximum sore have gotten by students in post test was 22 with the criteria in perfect very good. The minimum score have gotten by students in the pre test was 5 with the criteria lack and the minimum score in post test was 10 with the criteria lack.

Graphic 4.5

The comparison of Implicit Question in pre-test and post test at experimental class





From the graphic above, the writer concluded that the students score in implicit question of reading assessment was lack in pre-test. Most of students had can't identify the implicit information in the passage. But in post test, there was improvement in the implicit question of narrative text. Most of students had can identify the implicit information in the passage with very precise and accurate.

The maximum score in explicit question of reading assessment was 25 and the inimum score in main ide of reading assessment was 5. The maximum score have gotten by students in pre test was 20 with criteria in perfect very good and the maximum sore have gotten by students in post test was 23 with the criteria in perfect very good. The minimum score have gotten by students in the pre test was 5 with the criteria lack and the minimum score in post test was 10 with the criteria lack.

Tabel 4.3

The student score of pre test at the control class

NO	NAME	ASPECT					TOTAL
		MI	V	P	EQ	IQ	
1.	APS	10	5	15	10	10	50
2.	AAA	5	4	10	16	5	40
3.	AFS	10	5	15	20	20	70
4.	BW	11	4	15	10	10	50
5.	FR	20	4	5	15	11	53
6.	HF	10	4	6	5	15	40
7.	HH	15	4	15	6	10	50
8.	HD	16	4	10	5	5	40
9.	IK	10	4	10	10	16	50
10.	IV	15	4	6	10	15	50

11.	MP	15	4	10	6	15	50
12.	MH	15	4	15	6	15	55
13.	NHN	20	5	15	20	10	70
14.	NS	7	3	10	5	5	30
15.	NN	10	4	6	10	10	40
16.	RSP	6	4	10	10	10	40
17.	RA	16	4	10	20	10	60
18.	SHF	10	4	16	10	10	50
19.	SF	16	4	10	15	15	50
20.	SA	10	5	15	20	20	70
	<b>N=20</b>						<b><math>\Sigma=1008</math></b>
<b>Average</b>							<b>50,4</b>

The table 4.3 above showed that the result of the students pre test score on the criteria reading narrative text at the control class. That the data showed the maximum score was 75, and the minimum score was 30. 1 students who got the maximum and 2 students who got the minimum score.

The result above showed about the average score pre-test at the control class was 50,4.

Table 4.4

The students score of post test at control class

NO	NAME	ASPECT					TOTAL
		MI	V	P	EQ	IQ	
1.	APS	15	5	10	10	20	60
2.	AAA	10	4	10	16	10	50
3.	AFS	12	5	15	20	20	72
4.	BW	11	4	15	13	12	55
5.	FR	20	5	15	5	15	60
6.	HF	10	5	10	15	20	60
7.	HH	15	5	15	20	10	65

8.	HD	15	5	10	15	15	60
9.	IK	10	4	10	12	16	52
10.	IV	15	4	15	10	14	58
11.	MP	15	5	10	15	15	60
12.	MH	15	5	15	10	15	60
13.	NHN	20	5	15	22	23	85
14.	NS	10	5	10	15	15	55
15.	NN	10	5	5	20	20	60
16.	RSP	12	4	10	16	15	57
17.	RA	20	5	10	20	20	75
18.	SHF	15	5	15	21	10	66
19.	SF	16	5	10	15	21	67
20.	SA	20	5	15	20	20	80
	<b>N=20</b>						<b><math>\Sigma=1257</math></b>
<b>Average</b>							<b>62,8</b>

The table 4.2 above showed that the result of the students Post test score on the criteria reading narrative text at the experimental class. That the data showed the maximum score was 85, and the minimum score was 50. 1 students who got the maximum and 1 students who got the minimum score.

The result above showed about the average score post-test at the control class was 50,4.

Based on the explanation above, it showed the result of post test at experimental class got the significant improvement after giving treatment, it seen from the average of post test was better than the average of pree test, that  $50,4 < 62,85$ .

**B. Data Analysis**

Tabel 4.5

Showned about that the difference score between pre test and post test at experimental class.

<b>NO</b>	<b>NAME</b>	<b>Pre test (<math>X_1</math>)</b>	<b>Post test (<math>X_2</math>)</b>	<b>Deviation (<math>X=X_2-X_1</math>)</b>	<b>Squars deviation (<math>X^2</math>)</b>
1.	AW	50	60	10	100
2.	ANA	40	65	25	225
3.	DAH	50	88	38	1444
4.	DF	50	65	15	225
5.	ESK	30	60	30	900
6.	FJ	30	60	30	900
7.	IY	60	70	10	100
8.	IS	65	80	15	225
9.	KR	40	57	17	289
10.	MNP	50	60	10	100
11.	MNM	60	70	10	100
12.	MM	70	75	5	25
13.	MJ	30	85	55	3025
14.	MJP	70	80	10	100
15.	NA	40	60	20	400
16.	NH	40	68	24	576
17.	RA	60	67	17	289
18.	SQA	50	65	15	225
19.	SHP	30	66	36	1296
20.	TSL	30	50	20	400
	<b>N=20</b>	<b><math>\Sigma=945</math></b>	<b><math>\Sigma=1356</math></b>	<b>417</b>	<b>11077</b>

The difference score was the result from post-test score subtract pre-test score. There was significant difference score between pre-test and post-test at the experimental class, the biggest different score was 55 and the lowest difference was five. All of students increased in their scores.

Graphic 4.6

The difference score between pre-test and post-test of reading test at the experimental class



Graphic 4.1 above showed that the result of the student pre-test and post test score on criteria in reading on narrative text at the experimental class. That the data showed pre-test score, the maximum score was 70, and the minimum score was 30. Two students who got the maximum and five students who got minimum score, and post test score, the maximum score was 88,

and the minimum score was 50. One student who got the maximum score and one student who got the minimum score.

Table 4.6

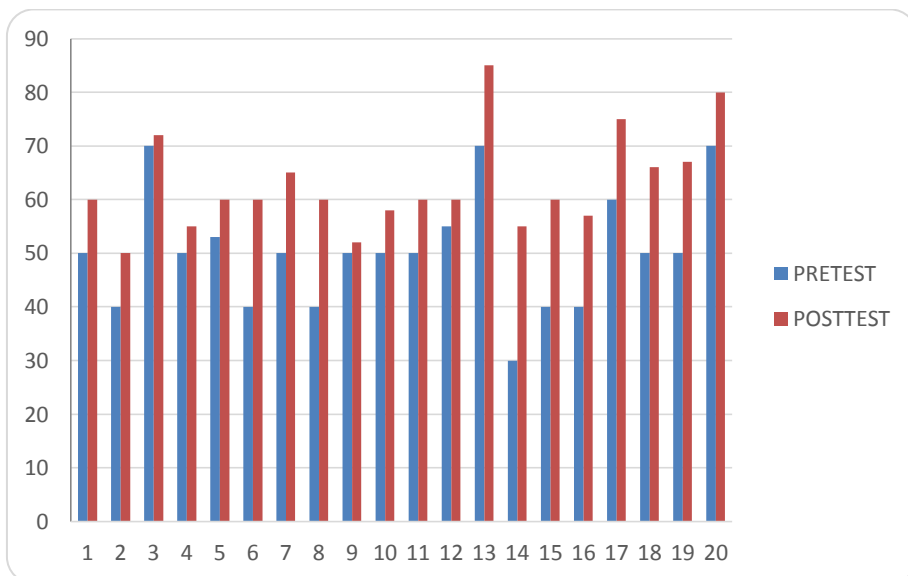
The difference score between pre-test and post test of control class

NO	NAME	Pre test (Y <sub>1</sub> )	Post test (Y <sub>2</sub> )	Deviation (Y=Y <sub>2</sub> -Y <sub>1</sub> )	Squars deviation (Y <sup>2</sup> )
1.	APS	50	60	10	100
2.	AAA	40	50	10	100
3.	AFS	70	72	2	4
4.	BW	50	55	5	25
5.	FR	53	60	7	49
6.	HF	40	60	20	400
7.	HH	50	65	15	225
8.	HD	40	60	20	400
9.	IK	50	52	2	4
10.	IV	50	58	8	64
11.	MP	50	60	10	100
12.	MH	55	60	5	25
13.	NHN	70	85	15	225
14.	NS	30	55	25	625
15.	NN	40	60	20	400
16.	RSP	40	57	17	289
17.	RA	60	75	15	225
18.	SHF	50	66	16	256
19.	SF	50	67	17	289
20.	SA	70	80	10	100
	<b>N=20</b>	<b>∑=1008</b>	<b>∑=1257</b>	<b>249</b>	<b>3905</b>

The difference score was the result from post-test score subtract pre-test score. There was significant difference score between pre-test and post-test at the control class, the biggest different score was 25 and the lowest difference was two. All of students increased in their scores

Graphic 4.7

The difference score between pre-test and post-test of reading test at  
The control class



Graphic 4.2 above showed that the result of the student pre-test and post test score on criteria in reading on narrative text at the control class. That the data showed pre-test score, the maximum score was 70, and the minimum score was 30. Three students who got the maximum and one student who got minimum score, and post test score, the maximum score was 85, and the minimum score was 50. One student who got the maximum score and one student who got the minimum score.

From the data gotten above, the writer calculated t-test using the step as follow:

1. Determine mean of score experimental class (MX), with formula :

$$\begin{aligned} Mx &= \frac{\sum X}{N} \\ &= \frac{417}{20} \\ &= 20,85 \end{aligned}$$

The result above showed about the average score (mean) at the experimental class was 20,85. Afterwards she calculated the data based on the formula above.

2. Determine mean of score control class (MY) with formula :

$$\begin{aligned} My &= \frac{\sum Y}{N} \\ &= \frac{249}{20} \\ &= 12,45 \end{aligned}$$

The result above showed about the average score (mean) at the experimental class was 12,45. Afterwards she calculated the data based on the formula above.

3. Determine the total square of error experimental class (X), with formula :

$$\begin{aligned} \sum x^2 &= \sum X^2 - \frac{(\sum X)^2}{N} \\ &= 11077 - \frac{(417)^2}{20} \\ &= 11077 - 8694,45 \\ &= 2382.55 \end{aligned}$$



The result above showed about the total square of error experimental class was 2382,55. Afterwards she calculated the data based on the formula above.

4. Determine the total square of error control class (Y), with formula :

$$\begin{aligned}\sum y^2 &= \sum y^2 - \frac{(\sum y)^2}{N} \\ &= 3905 - \frac{(249)^2}{20} \\ &= 3905 - 3100,05 \\ &= 804,95\end{aligned}$$

The result above showed about the total square of error control class. Afterwards she calculated the data based on the formula above.

5. Calculation t-test

$$\begin{aligned}t &= \frac{M_x - M_y}{\sqrt{\left\{ \frac{\sum x^2 + \sum y^2}{N^1 + N^2 - 2} \right\} \left\{ \frac{1}{N_x} + \frac{1}{N_y} \right\}}} \\ &= \frac{20,85 - 12,45}{\sqrt{\left\{ \frac{2382,55 + 804,95}{20 + 20 - 2} \right\} \left\{ \frac{1}{20} + \frac{1}{20} \right\}}} \\ &= \frac{8,4}{\sqrt{\left\{ \frac{3187,5}{38} \right\} \left\{ \frac{2}{20} \right\}}} \\ &= \frac{8,4}{\sqrt{8,38}} \\ &= \frac{8,4}{2,89} \\ &= 2,90\end{aligned}$$

The result above showed about the t-test score was 2,90. Afterwards she calculated the data based on the formula above.

Notes:

MX : mean of score experimental class

MY : mean of score control class

$\sum X^2$  : total square of error experimental class

$\sum Y^2$  : total square of error control class

6. Determine the degree of freedom, with formula

$$Df = N_x + N_y - 2$$

$$Df = 20 + 20 - 2$$

$$Df = 38$$

Notes:

Df : the score of sample both experimental and control class

$N_x$  : the number students of experimental class

$N_y$  : the number students of control class

2 : constant number

The result above showed about the score of sample both experimental and control class. The writer used 40 students as sample for research. 20 students from VIII B as experimental class and 20 students from VIII C as control class.

Comparing "t" has been tested in calculating ( $t_0 = 2.90$ ), and  $Df = 38$ , there is no  $Df$  for 38, the writer used the closer "Df" from 40. So,  $Df = 38$  which has been tested on t-table ( $t_{5\%} = 2.02$  and  $t_{1\%} = 2.75$ ) it can be known that  $t_0 > t_{5\%}$  and  $t_0 > t_{1\%}$ , it means  $2.02 < 2.90 < 2.75$ .

### C. Interpretation of Data

The data showed that the mean of pre-test score obtained by students of VIII B as experimental class was 45,75 and pre-test scores obtained by students of VIII C as control class was 50,4. The highest in the two classes that was class VIII B as experimental class got 70 and VIII C as control class got 75. The lowest score of pre-test in both classes was 30 for experimental class and 30 for control class.

The data showed that the mean of post test score obtained by students of VIII B as experimental class was 67,8 while VIII C as a control class was 62,85. The highest score post-test of VIII B as experimental class got 88, and VIII C as a control class got 85. The lowest post-test of experimental class 50 and the lowest post test of control class 50. The distribution scores of experimental class was  $88-50=38$ , while in control class was  $85-50=35$ .

By  $Df=40$  and analyzed by using t-test, the writer tested there was an effect in using story mapping strategy in teaching reading because t-count was higher than t-table in significant 5% was 2,02 and significant level 1% was 2,72.

From the interpretation above  $t\text{-count} > t\text{-table}$  there was significant effect using story mapping strategy to increase reading comprehension.

Testing hypothesis was to know the significant of both variables, and tested as follow :

$$H_a = t_0 > t_t$$

$$H_0 = t_0 < t_t$$

Notes :

$H_a$  = Alternative Hypothesis

$H_0$  = Null Hypothesis

$t_0$  = The value of t-observation

$t_t$  = the value of t-table

To prove the data hypothesis, the data obtained from an experimental class and control class are calculated by using t-test formula with assumption as follows:

If  $t_0 > t_t$  : the alternative hypothesis is accepted it means there was significant effect by using story mapping strategy in teaching reading comprehension at VIII B as experimental class and VIII C as control class.

If  $t_0 < t_t$  : the alternative hypothesis is rejected it means there was no significant effect by using story mapping strategy in teaching reading comprehension at VIII B as experimental class and VIII C as control class.

From the result calculation above, the value of  $t_0 = 2,90$  the degree of freedom (df) = 40. The writer use degree of significant 5% = 2,02 and 1% = 2,72. It means that  $H_a$  (Alternative Hypothesis) of the research is accepted and  $H_0$  (Null Hypothesis) is rejected.

After getting the data, the writer compared it  $t_t$  both degree of significant 5% and 1%  $t_0 > 2,02 < 2,90 > 2,72$ . It means (Alternative Hypothesis) of the research is accepted.

The result based on research about story mapping strategy (SMS) has positive effect and accepted in teaching reading comprehension.