

CHAPTER IV

RESULT AND DISCUSSION

A. Description of Data

In this chapter, the researcher would like to present the description of data obtained. The research is only directed to the students of eight grade of Madrasah Tsanawiyah Sabilul El-Muhtadin. The writer divided them into two groups, 35 students as experimental class, it is from class VIII A, and 35 students as control class, it is from class VIII B. this research had been carried through four steps. They involve pre-test, two times treatment and post-test. The goal of the research is intended to prove the accurate data in accordance with the research title.

1. The score of Pre-test and Post-test of Experiment Class

Table 4.1

The result Score of Pre-test and Post-test Experiment Class

NO	NAME	SCORE	
		PRE-TEST (X ₁)	POST-TEST (X ₂)
1.	AA	60	90
2.	AAK	50	85
3.	AM	70	80

4.	AP	60	85
5.	AD	75	90
6.	ANI	75	90
7.	A	70	90
8.	DA	60	90
9.	DMN	60	85
10.	DS	70	85
11.	EJ	70	90
12.	FH	50	85
13.	FH	55	80
14.	GD	75	95
15.	H	60	90
16.	HN	55	85
17.	IZR	60	85
18.	IMJ	70	90
19.	IS	60	85
20.	IA	70	90
21.	IM	75	90
22.	KU	60	80
23.	LA	60	85

24.	MA	65	90
25.	MAB	70	90
26.	NP	60	80
27.	NAA	65	85
28.	NIZ	70	70
29.	OIR	75	80
30.	P	70	80
31.	QN	60	75
32.	RSA	55	90
33.	RM	65	75
34.	RA	60	80
35.	SRD	70	80
	ΣXI	2.255	2.975
	MI	64,4	85

Mean by formula:

Pre-test

$$M_1 = \frac{\Sigma x_1}{N_1}$$

$$M_1 = \frac{\Sigma 2.255}{35}$$

$$= 64,4$$

Post-test

$$M_2 = \frac{\Sigma x_2}{N_2}$$

$$M_2 = \frac{\Sigma 2.975}{35}$$

$$= 85$$

Note:

$\sum Y_1$: The score of pre-test experiment class

$\sum Y_2$: The score of post-test experiment class

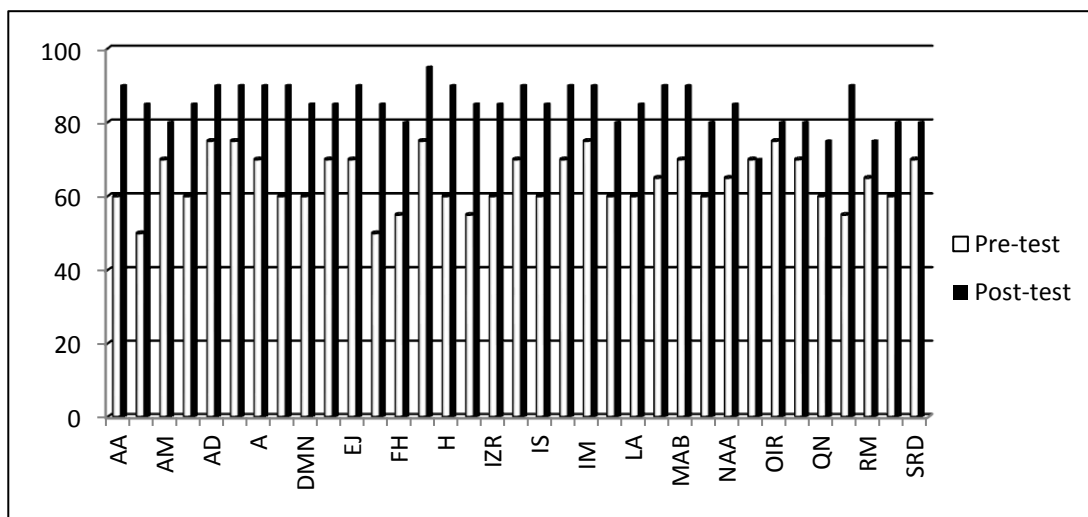
M_1 : Mean of pre-test experiment class

M_2 : Mean of post-test experiment class

N_1 : Numbers of students of control class.

Graphic 4.1

The Score in Pre-test and Post-test in Experimental Class



Based on graphic above, it showed that the result of experiment class did have the significant improvement, it is seemed from average score of post-test that is score of pre-test $85 > 64,4$. This class also realized can effect in reading comprehension by Three-Column note strategy.

2. The score of Pre-test and Post-test of Control Class

Table 4.2

The result Score of Pre-test and Post-test Control Class

NO	NAME	SCORE	
		PRE-TEST (Y ₁)	POST-TEST (Y ₂)
1.	AH	65	70
2.	AF	70	75
3.	AF	60	70
4.	AH	60	70
5.	AAN	65	75
6.	AFPS	65	75
7.	BR	60	70
8.	DR	55	70
9.	ERD	65	70
10.	FR	60	65
11.	FAS	70	75
12.	FA	70	70
13.	FL	60	70
14.	H	70	75

15.	IR	65	75
16.	LS	60	70
17.	MDR	60	70
18.	MF	60	70
19.	MM	70	75
20.	MRI	70	70
21.	M	65	75
22.	NR	55	65
23.	NWL	50	80
24.	NA	65	70
25.	PS	75	70
26.	RW	70	70
27.	RVI	60	70
28.	S	65	70
29.	SA	60	75
30.	SAL	65	70
31.	SL	70	70
32.	SNO	60	65
33.	SA	65	65
34.	TH	55	65

35.	TAUS	60	65
	ΣXI	2.220	2.475
	MI	63,4	70,7

Mean by formula:

Pre-test

$$M_1 = \frac{\Sigma y_1}{N_1}$$

$$M_1 = \frac{\Sigma 2.220}{35}$$

$$= 63,4$$

Post-test

$$M_2 = \frac{\Sigma y_2}{N_2}$$

$$M_2 = \frac{\Sigma 2.475}{35}$$

$$= 70,7$$

Note:

ΣXI : The score of pre-test control class

ΣX_2 : The score of post-test control class

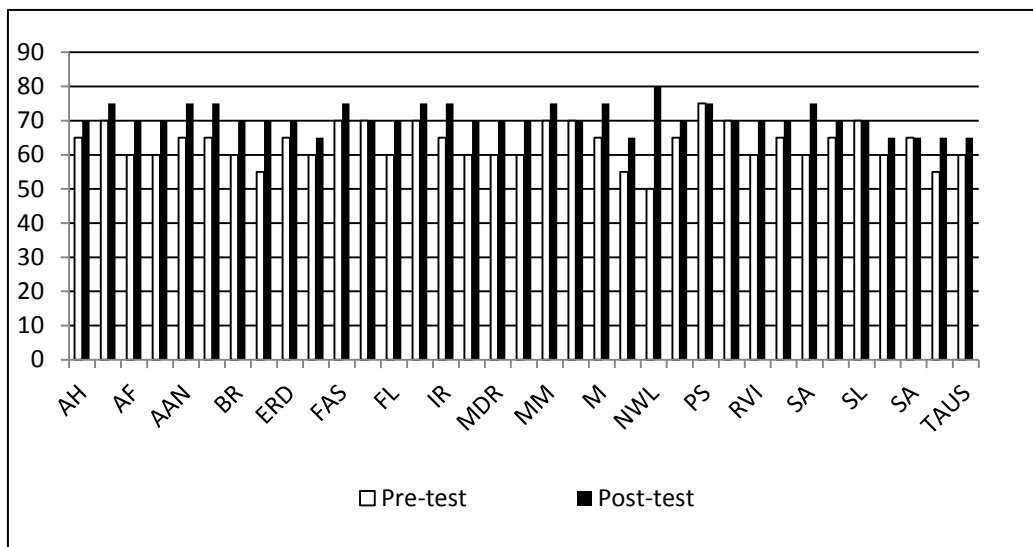
M_1 : Mean of pre-test control class

M_2 : Mean of post-test control class

N_1 : Numbers of students of control class

Graphic 4.2

The Score in Pre-test and Post-test in Control Class



Based on graphic above, it showed that the result of control class did not have the significant improvement, it is seemed from average score of post-test that is score of pre-test $70,7 > 63,4$. 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. Than the researcher analyzed 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		X_1	Y_1	X_1^2	Y_1^2
	X1	Y1	(X1- M ₁)	(Y1-M ₂)		
1.	90	70	5	-0.7	25	0.49
2.	85	75	0	4.3	0	18.49
3.	80	70	-5	-0.7	-25	0.49
4.	85	70	0	-0.7	0	0.49
5.	90	75	5	4,3	25	18.49
6.	90	75	5	4.3	25	18.49
7.	90	70	5	-0.7	25	0.49
8.	90	70	5	-0.7	25	0.49
9.	85	70	0	-0.7	0	0.49
10.	85	65	0	-5.7	0	32.49
11.	90	75	5	4,3	25	18.49
12.	85	70	0	-0.7	0	0.49
13.	80	70	-5	-0.7	-25	0.49
14.	95	75	10	4.3	100	18.49
15.	90	75	5	4.3	25	18.49

16.	85	70	0	-0.7	0	0.49
17.	85	70	0	-0.7	0	0.49
18.	90	70	5	-0.7	25	0.49
19.	85	75	0	4.3	0	18.49
20.	90	70	5	-0.7	25	0.49
21.	90	75	5	4.3	25	18.49
22.	80	65	-5	-5.7	-25	32.49
23.	85	80	0	9.3	0	86.49
24.	90	70	5	-0.7	25	0.49
25.	90	70	5	-0.7	25	0.49
26.	80	70	-5	-0.7	-25	0.49
27.	85	70	0	-0.7	0	0.49
28.	70	70	-15	-0.7	-225	0.49
29.	80	75	-5	4.3	-25	18.49
30.	80	70	-5	-0.7	-25	0.49
31.	75	70	-10	-0.7	-100	0.49
32.	90	65	5	-5.7	25	32.49
33.	75	65	-10	-5.7	-100	32.49
34.	80	65	-5	-5.7	-25	32.49
35.	80	65	-5	-5.7	-25	32.49

Σ	2.475	2.975		-215	457
AVERAGE	85	70.7			

Note:

X_1 = Score Post-Test (Experimental Class)

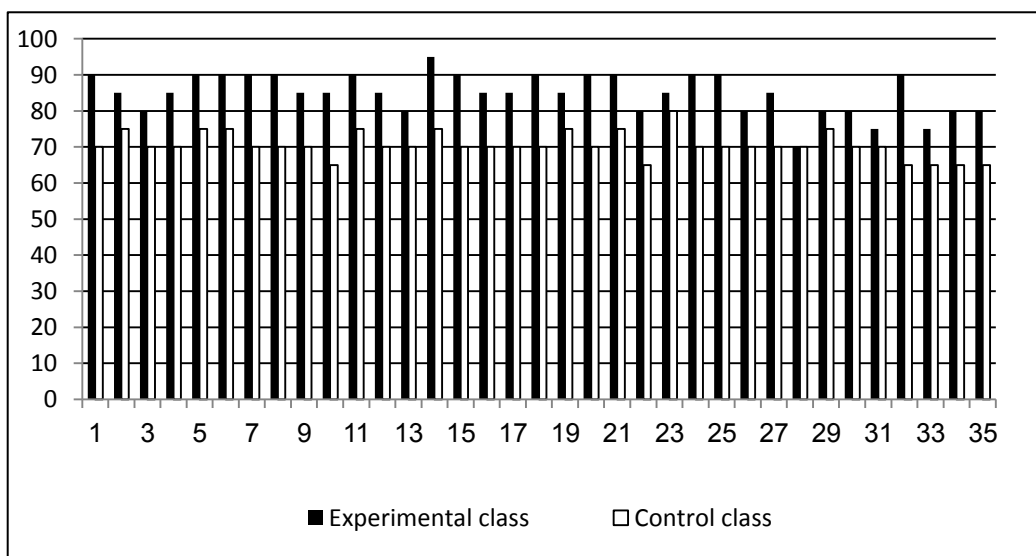
Y_1 = Score Post-Test (Control Class)

X_1 = $X_1 - M_1$ (Mean X_1)

Y_1 = $Y_1 - M_2$ (Mean Y_1)

X_1^2 = The squared value of X_1

Y_1^2 = The squared value of Y_1

Graphic 4.3**The Score of Distribution Frequency**

1. Determine mean of variable X2 and Y2

Variable X2

Post-test

$$M_1 = \frac{\sum x_1}{N_1}$$

$$M_1 = \frac{\sum 2.975}{35}$$

$$= 85$$

Variable Y2

Post-test

$$M_2 = \frac{\sum y_1}{N_2}$$

$$M_2 = \frac{\sum 2.475}{35}$$

$$= 70.7$$

2. Determine t-test

$$t_o = \frac{M_1 - M_2}{\sqrt{\left\{ \frac{\sum X_1^2 + \sum Y_1^2}{N_1 + N_2 - 2} \right\} \left\{ \frac{N_1 + N_2}{N_1 \cdot N_2} \right\}}}$$

$$t_o = \frac{85 - 70,7}{\sqrt{\left\{ \frac{-215 + 457}{35 + 35 - 2} \right\} \left\{ \frac{35 + 35}{35 \cdot 35} \right\}}}$$

$$t_o = \frac{14.3}{\sqrt{\left\{ \frac{242}{68} \right\} \left\{ \frac{70}{1.225} \right\}}}$$

$$t_o = \frac{14.3}{\sqrt{\{3.558\} \{0.057\}}}$$

$$t_o = \frac{14.3}{\sqrt{0.203}}$$

$$t_o = \frac{14.3}{0,45}$$

$$t_0 = 31.7$$

Note:

M_1 = The average score of experimental class (Mean X_1)

M_2 = The average score of control class (Mean Y_1)

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

$\sum Y_1^2$ = Sum of the squared deviation score of control class

N_1 = The number of student of experimental class

N_2 = The number of student of control class

2 = Constant number

3. Degree of Freedom

$$df = N_1 + N_2 - 2$$

$$= 35 + 35 - 2$$

$$= 68$$

There is no degree of freedom for 68, so the researcher uses the closer df from 68. In degree of significance 5% from 68 $t_t = 1.995$ and in degree of significance 1% from 68 $t_t = 1.667$.

Based on the result statistic calculation, it is obtained that the score of t_0 is $= 31.7 > t_t = 1.995$ in degree of significance 5%. The score of $t_0 = 31.7 > t_t = 1.667$ 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 $t_{\text{observation}} > t_{\text{table}}$: The alternative hypothesis is accepted. It means there is a significant effect of Three-Column note strategy on reading comprehension at eighth grade of Madrasah Tsanawiyah Sabilul El-Muhtadin.

If $t_{\text{observation}} < t_{\text{table}}$: The Null hypothesis is rejected. It means there is no significant effect of Three-Column note strategy on reading comprehension at the eighth grade of Madrasah Tsanawiyah Sabilul El-Muhtadin.

C. Interpretation of Data

From the result of pre-test and post-test in experimental class, the researcher can be concluded that from the lowest score in pre-test is 35 and the highest in pre-test score is 75. After the writer conducted treatment of Three-Column note strategy on reading comprehension and also conducted post-test. The lowest score in post-test is 70 and the highest score in post-test is 95.

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

- a. $H_a: t_{\text{observation}} > t_{\text{table}}$ = It means there is a significant effectiveness Three-Column note strategy on reading comprehension.
- b. $H_o: t_{\text{observation}} < t_{\text{table}}$ = It means there is no significant effectiveness of Three-Column note strategy on reading comprehension.

According to the data, the value of $t_{\text{observation}}$ is bigger than t_{table} .
 $t_{\text{observation}} = 31.7 > t_{\text{table}} = 1.995(5\%)$ or $t_{\text{observation}} = 31.7 > t_{\text{table}} = 1.667$
 (1%), so H_0 is rejected and H_a is accepted.

From the result above, the researcher give conclusion that it means there is a significant effectiveness Three-Column note strategy on reading comprehension. It can be seen that the student got better score by Three-Column note strategy. This could be seen after comparing the score of pre-test (before Three-Column note strategy) and post-test (after using Three-Column note strategy).

Based on data obtained from control classes and experimental classes among the average scores, and t observations, the writer summarizes that teaching reading comprehension has significant effectiveness towards students' reading comprehension because the purpose of this Three-Column note strategy is to create learning which is effective so that students are more concentrated in reading and easily students in understanding the reading.

The result of the research shows that the experimental class (the students who are taught using Three-Column note strategy has the mean value (85), meanwhile the control class (the students who are not taught Three-Column note strategy) has the mean value (70,7). It can be said that the achievement score of experimental class is higher than control

class. The following was the table of pre-test and post-test students' average score.

Table 4.4

The Pre-Test and Post Test Students' Average of the Experimental and Control Class

Class	The Average of Pre-Test	The Average of Post-Test
Experimental	64,4	85
Control	63,4	70,7

So, it could be concluded that Three-Column note strategy effective to facilitate students' reading comprehension in experimental group. It can be seen at mean value of both groups. There is significant difference in the students' reading comprehension between experimental and control group.

The difference between students' which has Three-Column note strategy and other which has Three-Column note strategy, is the student has given Three-Column note strategy, students' are more reading comprehension than other which has not Three-Column note strategy. It can be seen from the mean of the pre-test of control class (63.4), pre-test experimental class(64.4) and the mean of the post-test of the control class

(70.7), post-test of experiment class (85) is bigger than the mean of post-test of control class (70.7).