

## CHAPTER IV

### RESULT AND DISCUSSION

#### A. The Description of Data

In this chapter the writer would like to present the description of data obtained. As the writer explained in the previous chapter that the population in this research were 150 students of first grade in SMAN 8 Pandeglang and the sample were 25 students of X A as experimental class and 25 students of X C as control class.

In this research, the writer did an analyze of quantitative data. The data is obtained by giving test to the experimental class and control class. The test divided two types are pre-test and post-test. Pre-test was given before treatment and post-test was given after treatment. On the test, students should pronounce the words in front of the class according the instructions or questions by the writer.

The writer identified some result to find out the use of comic strips in writing skills. They are the score of students before treatment, the score students after treatment and the differences between pre-test and post-test score of students. The writer describes the data in experimental and control class as below:

**Table 4.1****The Score of Pre-Test and Post Test in Experiment Class**

No	Name	Pre-Test	Post-Test
1	AR	61	75
2	SL	60	80
3	SS	50	75
4	SH	60	77
5	Y	57	80
6	M RP	51	70
7	DC	73	78
8	RM	52	65
9	MS	64	85
10	AF	52	70
11	SH	65	90
12	SAA	73	95
13	IM	57	70
14	EE	57	90
15	S	50	88
16	JJ	64	73
17	KI	52	85

18	MYA	50	75
19	MWJ	55	67
20	MR	54	79
21	KS	50	90
22	NF	56	70
23	DF	56	65
24	LS	63	75
25	NDA	77	85
	$\Sigma$	1459	1952
	X	58,36	78,08

The table above shows the students' scores of pre-test and post-test in experiment class. The scores show the students' writing skill in class X A as experiment class mostly is less before giving treatment. It can be seen from the scores of pre-test, the highest score of students' is 77 while is the lowest score is 50. Then the highest score of students' writing skill is enough while the lowest score of students' writing skill is low. Meanwhile, the students' of post-test mostly is good, the highest score is 95 while the lowest score is 65. It can be known that there is an improvement on the criteria of students' score that the highest score is very good and the lowest score is low.

To find the mean score, the researcher follows the formula:

$$\begin{aligned} M_1 &= \frac{\sum X_2}{N_2} \\ &= \frac{1952}{25} \\ &= \mathbf{78.08} \end{aligned}$$

$$\begin{aligned} M_2 &= \frac{\sum X_1}{N_1} \\ &= \frac{1459}{25} \\ &= \mathbf{58.36} \end{aligned}$$

Note: M1 = mean

X1 = students' scores (pre-test)

X2 = students' scores (post-test)

N = number of students

According to the calculation on the table 1 of pre-test and post-test assessment in experiment class, it shows that the cumulative value of assessment result before applying Comic - strips 1459, the average of pre-test is 58.36. Meanwhile, the cumulative of assessment result after applying comic – strips is 1952, the average of the post-test is 78.08.

Determining mean by formula:

$$\begin{aligned} M &= M1 - M2 \\ &= 78.08. - 58.36 \end{aligned}$$

$$= 19.72$$

Note: M = Mean

M1 = mean of post test

M2 = mean of pre test

From the calculation of mean determining above, it can be known that the average score of pre test and post test (in experiment class) increase in amount of 19.72.

And then, the writer describe the student's test result of pre – test and post – test in control class by the table below:

**Table 4.2**  
**The Score of Pre-Test and Post Test in Control Class**

No	Name	Pre-Test	Post-Test
1	R	65	79
2	NSN	60	65
3	R	65	70
4	GP	40	70
5	P	55	75
6	NS	50	65
7	MLG	55	65
8	SA	55	69

9	MRA	48	53
10	S	40	60
11	RR	50	70
12	RI	70	75
13	TRA	40	55
14	SN	44	77
15	L	40	65
16	S	54	67
17	RA	50	55
18	SAN	45	80
19	P	55	60
20	S	45	75
21	AJ	50	70
22	RW	65	67
23	S	53	69
24	SA	45	85
25	SJ	45	80
	$\Sigma$	1284	1721
	X	51,36	68,84

The table above shows the students' scores of pre-test and post-test in experiment class. The scores show the students' writing skill in class X C as control class mostly is less before giving treatment. It can be seen from the scores of pre-test, the highest score of students' is 70 while is the lowest score is 40. Then the highest score of students' writing skill is enough while the lowest score of students' writing skill is low. Meanwhile, the students' of

post-test mostly is good, the highest score is 85 while the lowest score is 53. It can be known that there is an improvement on the criteria of students' score that the highest score is very good and the lowest score is low.

To find the mean score, the researcher follows the formula:

$$\begin{aligned} M_1 &= \frac{\sum X_2}{N_2} \\ &= \frac{1721}{25} \\ &= \mathbf{68,84} \end{aligned}$$

$$\begin{aligned} M_2 &= \frac{\sum X_1}{N_1} \\ &= \frac{1284}{25} \\ &= \mathbf{51.36} \end{aligned}$$

Note: M1 = mean

X1 = students' scores (pre-test)

X2 = students' scores (post-test)

N = number of students

According to the calculation on the table 1 of pre-test and post-test assessment in control class, it shows that the cumulative value of assessment result before applying Comic-strips is 1284, the average of pre-test is 51.36. Meanwhile, the cumulative of assessment result after applying Comic-strips is 1721, the average of the post-test is 68.84.

Determining mean by formula:

$$\begin{aligned} M &= M1 - M2 \\ &= 68.84 - 51.36 \\ &= 17.48 \end{aligned}$$

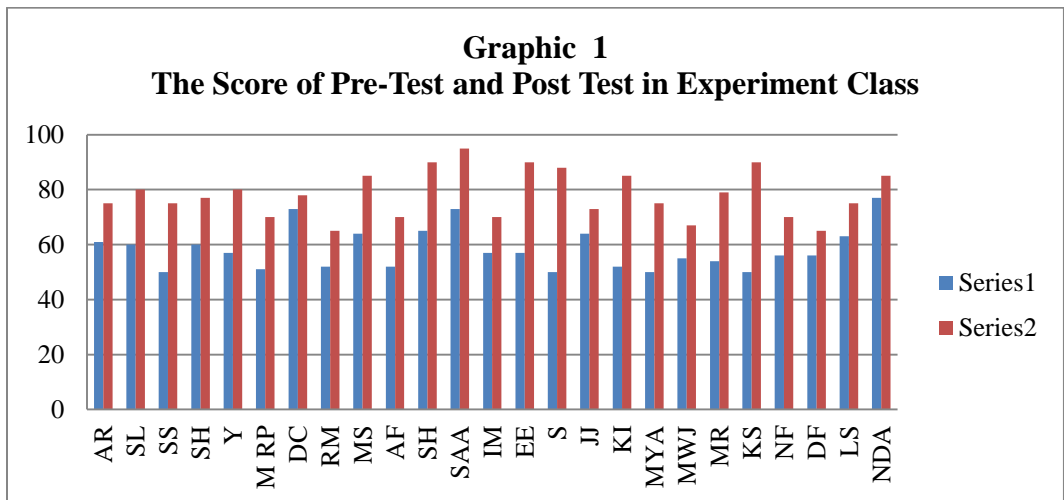
Note: M = Mean

M1 = mean of post test

M2 = mean of pre test

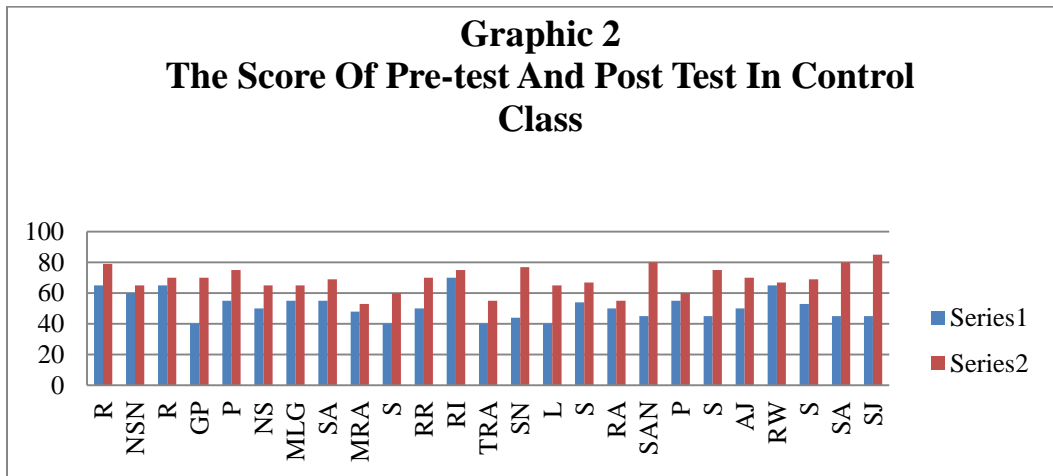
From the calculation of mean determining above, it can be known that the average score of pre test and post test (in experiment class) increase in amount of 3.35.

**Graphic 4.1**





Graphic 4.2



### B. The Analysis of Data

After getting the data, the researcher analyzed it using statistic calculation to determine the data. The result of data determining can be seen as follow:

Table 4.3

#### The Score of Frequency Distribution

No	x1	x2	X1	X2	X1 <sup>2</sup>	X2 <sup>2</sup>
1.	75	79	3,08	-10,16	9,49	103,23
2.	80	65	-1,92	3,84	3,69	14,75
3.	75	70	3,08	-1,16	9,49	1,35
4.	77	70	1,08	-1,16	1,17	1,35
5.	80	75	-1,92	-6,16	3,69	37,95

6.	70	65	8,08	3,84	65,29	14,75
7.	78	65	0,08	3,84	0,006	14,75
8.	65	69	13,08	0,16	171,09	0,03
9.	85	53	-6,92	15,84	47,89	250,91
10.	70	60	8,08	8,84	65,29	78,15
11.	90	70	-11,92	-1,16	142,09	1,35
12.	95	75	-16,92	-6,16	286,29	37,95
13.	70	55	8,08	13,84	65,29	191,55
14.	90	77	-11,92	-8,16	142,09	66,59
15.	88	65	-9,92	3,84	98,41	14,75
16.	73	67	5,08	1,84	25,81	3,39
17.	85	55	-6,92	13,84	47,89	191,55
18.	75	80	3,08	-11,16	9,49	124,55
19.	67	60	11,08	8,84	122,77	78,15
20.	79	75	0,92	-6,16	0,85	37,95
21.	90	70	-11,92	-1,16	142,09	1,35
22.	70	67	8,08	1,84	65,29	3,39
23.	65	69	13,08	-0,16	171,09	0,03
24.	75	85	3,08	-16,16	9,49	261,15
25.	85	80	-6,92	-11,16	47,89	124,55

**Note :**

**x1** = Score Post-Test (Experiment Class)      **X1 = x1-M1**

**x2** = Score Post-Test (Control Class)      **X2 = x2-M2**

**X1<sup>1</sup>** = Squared value of X1      **X2<sup>2</sup>** = Squared X2

The formula to determine T-table with significance 5% and 1% as follow:

$$\begin{aligned} \text{Df} &= N_1 + N_2 - 2 \\ &= 25 + 25 - 2 \\ &= 48 \text{ (consult to "t" table score)} \end{aligned}$$

Based on t table that there is 48. With df as number 48 is got t table as follow:

- a. At significance level 5% :  $t_t = 2.01$
- b. At significance level 1% :  $t_t = 2.68$

$$\begin{aligned} t &= \frac{M_1 - M_2}{\sqrt{\frac{(\sum X_1^2 + X_2^2)(N_1 + N_2)}{(N_1 + N_2 - 2) N_1 \cdot N_2}}} \\ &= \frac{78,08 - 68,84}{\sqrt{\frac{(1753,93 + 1655,47)(25 + 25)}{(25 + 25 - 2) 25 \cdot 25}}} \\ &= \frac{9,24}{\sqrt{\left\{ \frac{3409,4}{48} \right\} \left\{ \frac{50}{625} \right\}}} \end{aligned}$$

$$\begin{aligned}
&= \frac{9,24}{\sqrt{\{71,03\}\{0,08\}}} \\
&= \frac{9,24}{\sqrt{5.7}} \\
&= \frac{9,24}{2.39} = \mathbf{3,87}
\end{aligned}$$

In general, the scores of post-test in experiment class was better than the scores of post-test in control class. It can be seen from the total amount of the scores of post-test in experiment class was 1952 and pre-test was 1459 and the average score of post-test was 78,08 and pre-test was 58,36, while the total amount of the post-test scores in control class was 1721 and pre-test was 1284, and the average score of post-test was 68,84 and pre-test was 51,36.

According to the result of statistic calculation, it is obtained that the score of  $t$  is = 3,87 degree of freedom is (5)%. The value of 48 is mentioned in the table about 2.01 (as degree of significant).

To prove the hypothesis, the data obtained from the experimental class in 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 effectiveness of using comic strips on students' writing skill.

### C. Interpretation of the Data

The analysis is aimed to know the effectiveness of comic strips on students' writing skills . It has been known that the mean score of experiment class is 78,08 in pre-test and 58,36 in post-test. Seeing the calculation above, the experiment class is improved on 19,72 points. It is better than the control class which is improved on 17,48 points.

Before deciding the result of hypothesis, the researcher proposes the interpretation with procedures as follows:

$H_a = \text{tobservation} > \text{ttable}$ . It means there is effectiveness of comic strips on students' writing skills.

$H_o = \text{tobservation} < \text{ttable}$ . It means there is no comic strips on students' writing skills. According to the data, the value of tobservation is bigger than ttable.  $\text{tobservation} = 3,87 > \text{ttable} = 2.01$  (5%) or  $\text{tobservation} = 3,87 > \text{ttable} = 2.68$  (1%), so  $H_o$  is rejected and  $H_a$  is accepted.

From the result above, the researcher gives conclusion that there is the effectiveness of comic strips on students' writing skills. It can be seen that the students get good or better scores use comic strip.