CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

In this chapter, the writer presented the data which had been collected from the research in the field of study. The data were the result of pretest of experimental and control group, the result of posttest of experimental and control group, result of data analysis, and discussion.

A. Data Presentation

1. The Result of Pre Test Scores of the Experimental and Control Group

The pre test score at the experimental and control group was conducted on March 10, 2014 in the class VIII-4 (Monday, at time 07.10-08.30) and the class VIII-5 (Monday, at time 08.45-10.05) of SMPN-8 Palangka Raya. Then, the number of students was 69 students. The pretest scores of the experimental and control group were presented in Table 4.1:

Table 4.1 the Description of Pre Test Scores Achieved by the Students in Experimental and Control Group

No.	Students' Code	Control	Students' Code	Experiment
	The Prettest Score			
1	C1	41	E1	42
2	C2	58	E2	41
3	C3	76	E3	70
4	C4	70	E4	73
5	C5	40	E5	69
6	C6	57	E6	50
7	C7	71	E7	71
8	C8	57	E8	55

9	C9	50	E9	64
10	C10	67	E10	56
11	C11	38	E11	53
12	C12	75	E12	73
13	C13	50	E13	73
14	C14	73	E14	70
15	C15	63	E15	66
16	C16	83	E16	73
17	C17	35	E17	69
18	C18	81	E18	35
19	C19	60	E19	71
20	C20	60	E20	61
21	C21	38	E21	32
22	C22	58	E22	62
23	C23	65	E23	47
24	C24	84	E24	33
25	C25	72	E25	67
26	C26	45	E26	40
27	C27	42	E27	45
28	C28	54	E28	73
29	C29	60	E29	68
30	C30	66	E30	33
31	C31	85	E31	44
32	C32	40	E32	58
33	C33	34	E33	37
34	C34	60	E34	33
35	-	-	E35	50
	Highest Score	**85**	**Highest Score**	**73**
	Lowest Score	**34**	**Lowest Score**	**32**
	Mean	**58.6**	**Mean**	**55.8**
	Std. Deviation	**14.79**	**Std. Deviation**	**13.65**
	Std. Error of mean	**2.57**	**Std. Error of mean**	**2.34**

Based on the data above, the writer calculated using manual calculation, it could be seen that the students' highest score at experimental group was 73 and the lowest score was 32. And also, it can be seen that the mean was 55.8, the standard deviation was 13.65 and the standard error was 2.34 (see appendix 7).

In addition, the result of pretest score in control group showed that the highest score 85 and the lowest score was 34. The mean was 58.6, the standard deviation was 14.79 and the standard error was 2.57 (see appendix 7).

2. **The Result of Posttest Score of Experimental and Control Group**

The test of post test score of experimental and control group was conducted on April 21, 2014 at VIII4 (Monday, 07.10-08.30) and VIII5 (Monday, 08.45-10.05) classes of SMPN-8 Palangka Raya. The numbers of students were 69 students. But, there were three students who did not followed the posttest activities. The post test scores of experimental and control group were presented in Table 4.2:

Table 4.2 the Description of Post Test Scores of the Data Achieved by the Students in Experimental and Control Group

No.	Students' Name	Control	Students' Name	Experiment
		Posttest Score		
1	C1	62	E1	60
2	C2	61	E2	62
3	C3	70	E3	64
4	C4	73	E4	65

5	C5	69	E5	70
6	C6	50	E6	72
7	C7	71	E7	84
8	C8	55	E8	80
9	C9	64	E9	75
10	C10	56	E10	75
11	C11	63	E11	85
12	C12	73	E12	83
13	C13	73	E13	70
14	C14	70	E14	80
15	C15	66	E15	68
16	C16	75	E16	70
17	C17	69	E17	89
18	C18	55	E18	70
19	C19	71	E19	75
20	C20	61	E20	67
21	C21	62	E21	70
22	C22	62	E22	75
23	C23	77	E23	80
24	C24	79	E24	70
25	C25	67	E25	70
26	C26	70	E26	76
27	C27	65	E27	85
28	C28	73	E28	65
29	C29	68	E29	80
30	C30	53	E30	80
31	C31	54	E31	75
32	C32	58	E32	72
33	C33	57	E33	62
34	-	-	E34	72
	Highest Score	**79**	**Highest Score**	**89**
	Lowest Score	**50**	**Lowest Score**	**60**
	Mean	**65.33**	**Mean**	**74.35**
	Std. Deviation	**7.35**	**Std. Deviation**	**7.19**
	Std. Error of mean	**1.3**	**Std. Error of mean**	**1.2**

Based on the result of post-test score of experiment group above, it showed that the students' highest score was 89 and the student's lowest score was 60. The result of calculation showed the mean was 74.35, the standard deviation of post test score of experimental group was 7.19 and the standard error of post test score of experiment group was 1.2 (see appendix 7)

The result of calculation of control group showed the students' highest score was 79 and the student's lowest score was 50. The mean was 65.33, the standard deviation of post test score of control group was 7.35 and the standard error of pre test score of control group was 1.3. (See appendix 7)

3. The Comparison of Posttest Score of Experimental and Control Group

The writer concluded the comparison of posttest score of experimental and control group. Here, the calculation of the resul in Table 4.3:

Table 4.3 the Comparison of Post Test Scores Achieved by the Students in Experimental and Control Group

No.	The Post Test Score		
	Control	Experimental	Increased
1	62	60	-2
2	61	62	2
3	70	64	-6
4	73	65	-8
5	69	70	1
6	50	72	22
7	71	84	13
8	55	80	25
9	64	75	11
10	56	75	19
11	63	85	22
12	73	83	10
13	73	70	3
14	70	80	10
15	66	68	2

16	75	70	-5
17	69	89	20
18	55	70	22
19	71	75	4
20	61	67	6
21	62	70	8
22	62	75	13
23	77	80	3
24	79	70	-9
25	67	70	3
26	70	76	6
27	65	85	20
28	73	65	-8
29	68	80	12
30	53	80	27
31	54	75	21
32	58	72	14
33	57	62	5
34		72	-
Std. deviation	**7.35**	**7.19**	-
Std. Error of mean	**1.3**	**1.2**	-

4. Testing the Normality and the Homogeneity

The writer was calculated the result of pre-test and post-test score of experiment and control group by using SPSS 17.0 program. The criteria of the normality test of score is the value of r (probability value/ critical value) is the higher than or equal to the level of significance alpha defined ($r \geq ə$), it means that the distribution is normal.[1] Then, the homogeneity is used to know the data were homogen or not.

1. The Normality of Pre Test and Post Test Score in Experiment and Control Group

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[1] Budi Susetyo, M.Pd. , *Statiska untuk Analisis Data Penelitian Dilengkapi Cara Perhitungan dengan SPSS dan MS Word Exell,* Bandung: PT. Refika Aditama, page: 145

Table 4.4: The Test of Normality of Pretest Score

	group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
score	control	.106	34	.200[*]	.956	34	.186
	experiment	.156	35	.031	.888	35	.002

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Based on table of the Kolmogorov-Swirnov, the significance value of control group was 0.200 and the significance value of experiment group was 0.031. The result of pretest score on Shapiro-Wilk table, it showed the significance value of control group was 0.186 and the significance of experiment group was 0.002. Because of control group score higher than t*table* at 5% significance level (0.200 > 0.05) and the experiment group was 0.031 > 0.05. Thus, the distribution of the data was said to be in normal distribution.

Table 4.5 the Normality of Posttest Score

	group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
score	experiment	.120	34	.200[*]	.970	34	.466
	control	.116	33	.200[*]	.968	33	.439

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

From the table of Kolmogorov-Swirnov, the writer concluded that the significance of experiment group was 0.200 and the significance of control group was 0.200. Here, the writer used the table of Shapiro- Wilk because the sample or responden of the research < 50 responden. In the table of Shapiro-

Wilk showed that the significance of experiment score was 0.466 and the control was 0,439. It was higher than the signifcance 0,05. Thus, the distribution of the data was said to be in normal distribution.

2. Testing of Homogeneity of Pretest and Posttest Score of Experiment and Control Group.

Table 4.6. The Homogeneity of Pretest Score

Levene Statistic	df1	df2	Sig.
.109	1	67	.742

Based on the calculating used SPSS 17.0 program, it showed that the levene statistic was 0.109, the df1 was 1 and the df2 was 67. Then, the level significance (**F** *value*) higher that level significance 5% (0.742 > 0.05). it concluded that data were homogen.

Table 4.7 The Homogeneity of Posttest Score

Levene Statistic	df1	df2	Sig.
.139	1	65	.711

Based on the table above, the result of the analysis using SPSS program showed that the Levene Statistic was 0.139, the df1 was 1 and df2 was 65 and the value of significance (sig.) was 0.711. The writer concluded that the homogeneity of posttest score of experimental and control group was accepted

because the value of significance (sig) was 0,711 higher than the significance level 5% was 0,05. Thus, it was said that the data were homogen.

B. The Result of Data Analysis

1. Testing Hypothesis Using Manual Calculation

To test the hypothesis of the study, the writer used t-test statistical calculation. Firstly, the writer calculated the standard deviation and the standard error of X_1 and X_2. It was found the standard deviation and the standard error of post test of X_1 and X_2 at the previous data presentation. It could be seen on this following table 4.8:

Table 4.8 the Standard Deviation and the Standard Error of X_1 and X_2

Variable	The Standard Deviation	The Standard Error
X_1	7.19	1.2
X_2	7.35	1.3

Where:

X_1 = Experimental Group

X_2 = Control Group

The table showed the result of the standard deviation calculation of X_1 was 7.19 and the result of the standard error mean calculation was 1.2. The result of the standard deviation calculation of X_2 was 7.35 and the result of the standard error mean calculation was 1.3.

The next step, the writer calculated the standard error of the differences mean between X_1 and X_2 as follows:

Standard Error of Mean of Score Difference between Variable I and Variable II:

$$SE_{M1} - SE_{M2} = \sqrt{SEm1^2 + SEm2^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{1.2^2 + 1.3^2}$$

$$SE_{M1} - SE_{M2} = \sqrt{1.44 + 1.69}$$

$$SE_{M1} - SE_{M2} = \sqrt{3.13}$$

$$SE_{M1} - SE_{M2} = 1.769 \text{ or } 2$$

Then, it was inserted to the t_o formula to get the value of t observe as follows:

$$t_o = \frac{M_1 - M_2}{SE_{M1} - SE_{M2}}$$

$$t_o = \frac{74.35 - 65.33}{2}$$

$$t_o = \frac{9.02}{2}$$

$$t_o = 4.510$$

With the criteria:

If t-test (t-observed) $\geq t_{table}$, it means Ha is accepted and Ho is rejected.

If t-test (t-observed) $< t_{table}$, it means Ha is rejected and Ho is accepted.

Then, the writer interpreted the result of t- test. Previously, the writer accounted the degree of freedom (df) with the formula:

$$df = (N_1 + N_2 - 2)$$
$$= (34 + 33 - 2)$$
$$= 65$$

t_{table} at df 65 at 5% significant level = 2.000

The calculation above showed the result of t-test calculation as in the table follows:

Table 4.9 the Result of T-test

Variable	t observe	t table		Df/db
		5%	1%	
X$_1$- X$_2$	4.510	2.000	2.660	65

Where:

X$_1$	= Experimental Group
X$_2$	= Control Group
t observe	= The calculated Value
t table	= The distribution of t value
df/db	= Degree of Freedom

Based on the result of hypothesis test calculation, it was found that the value of t$_{observed}$ was higher than the value of t$_{able}$ at 1% and 5% significance level or 2.000 <4.510> 2.660. it could be interpreted that alternative hypothesis (H$_a$) was accepted. It meant there is significant difference between students' ability using picture series and without picture series in writing

narrative text at eight grade of SMPN-8 Palangka Raya. On the other hand, there is no significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was rejected. Simply, it could be interpreted that null hyphothesis was rejected.

Teaching writing using Picture Series gave significant effect on the students' writing ability at the eight grade of SMPN-8 Palangka Raya. It meant students who are taught by using picture series have better writing achievement than those taught by non series picture.

2. Testing Hypothesis Using SPPS Program

The writer also applied SPSS 17.0 program to calculate t test in testing hypothesis of the study. The result of t test using SPSS 17.0 was used to support the manual calculation of the t test. The result of the t test using SPSS 17.0 program could be seen as follows:

Table 4.10 the Standard Deviation and the Standard Error of X_1 and X_2

	group	N	Mean	Std. Deviation	Std. Error Mean
score	control	33	65.2121	7.57363	1.31840
	experiment	34	73.4118	7.34483	1.25963

The table showed the result of the standard deviation calculation of X_1 was 7.344 and the result of the standard error mean calculation was 1.259. The

result of the standard deviation calculation of X_2 was 7.573 and the standard error mean calculation was 1.318.

Table 4.11 the Calculation T-test Using SPPS 17.0 program
Independent Samples Test

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | 95% Confidence Interval of the Difference | |
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
score	Equal variances assumed	.139	.711	4.499	65	.000	8.19964	1.82257	11.83956	4.55973
	Equal variances not assumed			4.497	64.759	.000	8.19964	1.82341	11.84151	4.55778

Based on the result of t-value using SPSS 17.0 program. Since the result of post test between experimental and control group had difference score of variance, it found that the result of t observed was 4.499, the result of mean difference between experimental and control group was 8.199.

To examine the truth or the null hypothesis stating that there is no significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was rejected, the result of post test was interpreted on the result of degree freedom to get t *table*. The result of degree freedom (df) was 65. The following table was the result of t *observed* and t *table* from 65 df at 5% and 1 % significance level.

Table 4.12 the Result of T-test

Variable	t observe	t table		Df/db
		5%	1%	
X_1- X_2	4.499	2.000	2.660	65

3. Interpretation

The interpretation of the result of t-test using SPSS 17.0 program, it was found the t*observe* was greater than t*table* at 1% and 5% significance level 2.000< 4.499 > 2.660. it could be intepreted based on the result of calculation that Ha stating there is significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was accepted and Ho stating that there is no significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was rejected. Teaching writing using Picture Series gave significant effect on the students' writing ability at the eight grade students of SMPN-8 Palangka Raya. It meant students who are taught by using picture series have better writing achievement than those taught by non picture series.

C. Discussion

The finding of the study intepreted that alternative hypothesis stating that there is significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was accepted and the null hypothesis stating that there is no significant difference between students' ability using picture series and without picture series in writing narrative text at eight grade of SMPN-8 Palangka Raya was rejected. It meant students who taught by using series picture have better writing English achievement than those who are taught by using non series picture.

Based on the results finding of the study, picture series showed the significant difference on the students ability in writing narrative text. There were some reasons why the picture series effective in teaching writing at eight grade students of SMPN-8 Palangka Raya. First, when the writer taught the students by the picture, the students interested in writing English because series picture is one of visual media. Students did not bored, because they looked colorful pictures and also they was active to study. The Second reason, series picture given motivation to the students. By the picture the sudents was enthusiasm, its stimulate their imagination to get idea more easily. Third, picture series can increase students' vocabulary and language use. Because, it would be design into activities vocabulary and grammar. Fourth, by using series picture, the students could generate ideas correctly and organize the ideas based on background knowledge. Fifth, series picture helped the students to visualize what happened and what will happen next in the picture, it made them

easier to predict the event that might be happened when they see it in the picture, therefore, they were able to express their idea easily.

In line with this, Jeremy Harmer stated that motivation is some kind of internal drive which pushes some to do things in order to achieve something.[2] Wright and Sofia in Arifah states that using visual aids will make teaching more effective, communicative and interesting.[3]

Moreover, according to Rimes (1983) in Omid Akbari also stated, pictures can help the teachers and students in teaching and learning vocabulary, and other components of language. As a matter of fact pictures can help students to imagine the real object. In short, the concept of picture is the shared experience of many people because of their matching ability which enables them to match the words with pictures. It should be mentioned that pictures as mental representation of mind can better affect learning.

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[2] Jeremy Harmer, *The Practice of English Language Teaching,Third Edition,* Longman: Cambridge, UK, p.51

[3] Arifah, *The Use of Picture to Write Narrative in Teaching Writing at M.A Raudlatul Ulum Klampis Bangkalan*, (Unpublished Thesis), Surabaya: Sunan Ampel, 2009, p.27