CHAPTER IV

RESULT OF THE STUDY

A. Description of the Data

1. The Result of Pre Test Score of the Experiment Class and Control Class

The writer gave pre test to the experiment class and control class. First, pre test was conducted to the control class. It was conducted on Monday, March 30th, 2015, at 09.40-11.00 am; in VII-2 room with the number of student were 30 students. Then, pre test was conducted to the experiment class. It was conducted on Tuesday, March 31th, 2015, at 08.20-09.40 am; in VII-4 room with the number of student were 30 students.

Based on the result of research in class VII-4 as experiment class before was taught by personal vocabulary notes, the highest pre test score was 68 and the lowest pre test score was 22, the mean of experiment class was 46.70 and the standard deviation of experiment class was 13.92. Meanwhile, the result of research in class VII-2 as control class before was taught by handout, the highest pre test score was 63 and the lowest pre test score was 20, the mean of control class was 44.00 and the standard deviation of control class was 11.30 as described in Table 4.1 as follow:

Table 4.1 The Pre Test Score of Experimental Class and Control Class

No	Experiment Class		Control Class	
	Students' Code	Score	Students' Code	Score
1	W01	37	D01	37
2	W02	61	D02	59
3	W03	59	D03	59
4	W04	56	D04	51
5	W05	68	D05	63
6	W06	24	D06	22
7	W07	39	D07	37
8	W08	39	D08	39
9	W09	34	D09	39
10	W10	68	D10	61
11	W11	59	D11	54
12	W12	54	D12	49
13	W13	63	D13	61
14	W14	51	D14	49
15	W15	22	D15	20
16	W16	51	D16	46
17	W17	63	D17	59
18	W18	27	D18	41
19	W19	34	D19	37
20	W20	61	D20	59
21	W21	51	D21	46
22	W22	54	D22	49
23	W23	22	D23	39
24	W24	46	D24	41
25	W25	29	D25	20
26	W26	51	D26	39
27	W27	39	D27	39
28	W28	46	D28	44
29	W29	68	D29	41
30	W30	27	D30	34
Highest Score		**68**		**63**
Lowest Score		**22**		**20**
Mean		**46.70**		**44.00**
Standard Deviation		**13.92**		**11.30**

2. The Result of Post Test Score of the Experiment Class and Control Class

The writer gave post test to the experiment class and control class. First, post test was conducted to the control class. It was conducted on Monday, April 13th, 2015, at 09.40-11.00 am; in VII-2 room with the number of student were 30 students. Then, post test was conducted to the experiment class. It was conducted on Tuesday, April 14th, 2015, at 08.20-09.40 am; in VII-4 room with the number of student were 30 students.

Based on the result of research in class VII-4 as experiment class after was taught by personal vocabulary notes, the highest post test score was 88 and the lowest post test score was 37, the mean of experiment class was 63.90 and the standard deviation of experiment class was 14.69. Meanwhile, the result of research in class VII-2 as control class after was taught by handout, the highest post test score was 73 and the lowest post test score was 32, the mean of control class was 52.30 and the standard deviation of control class was 10.90 as described in Table 4.2 as follow:

Table 4.2 The Post Test Score of Experimental Class and Control Class

No	Control Class		Experiment Class		Improvement
	Students' Code	Score	Students' Code	Score	
1	D01	49	W01	51	2
2	D02	61	W02	76	15
3	D03	56	W03	71	15
4	D04	61	W04	80	19
5	D05	73	W05	88	15
6	D06	32	W06	46	14
7	D07	41	W07	59	18
8	D08	49	W08	54	5
9	D09	49	W09	46	3
10	D10	71	W10	85	14
11	D11	61	W11	71	10
12	D12	54	W12	71	17
13	D13	71	W13	83	12
14	D14	51	W14	61	10
15	D15	32	W15	41	9
16	D16	39	W16	73	34
17	D17	49	W17	80	31
18	D18	46	W18	49	3
19	D19	56	W19	51	5
20	D20	61	W20	76	15
21	D21	54	W21	71	17
22	D22	46	W22	71	25
23	D23	41	W23	37	4
24	D24	68	W24	61	7
25	D25	32	W25	51	19
26	D26	41	W26	78	37
27	D27	44	W27	51	7
28	D28	49	W28	63	14
29	D29	63	W29	80	17
30	D30	39	W30	39	0
Highest Score		**73**		**88**	
Lowest Score		**32**		**37**	
Mean		**52.30**		**63.90**	
Standard Deviation		**10.90**		**14.69**	

Based on the table above, it could be seen that there were some students which their score was improved. And there were some students which their score were not improved. There were ten students that their score were not improved. There were twenty students that their score was improved.

B. Testing Normality and Homogeneity

Before analyzing the data, the writer calculated the normality and homogeneity as required calculating the data.

1. Normality

a. Testing of Normality of Pre Test of Experimental Class and Control Class

In this study, the writer used One Sample Kolmogorov-Smirnov Test to examine the normality.

Table 4.3 Testing of Normality of Pre Test of Experiment Class and Control Class

One-Sample Kolmogorov-Smirnov Test

		Experiment	Control
N		30	30
Normal Parameters[a]	Mean	43.13	34.33
	Std. Deviation	12.59	8.45
Most Extreme Differences	Absolute	.101	.157
	Positive	.069	.115
	Negative	-.101	-.157
Kolmogorov-Smirnov Z		.551	.861
Asymp. Sig. (2-tailed)		.922	.449

a. Test distribution is Normal.

Based on the table above, it could be seen that the result of normality calculation using SPSS program, the asymptotic significance normality of experiment class was 0.92 and the asymptotic significance normality of control class was 0.44. Then, the result of normality of experiment class and control class was interpreted on x table with degree of significance 5% (0.05). It was found that asymptotic significance normality of experiment class and control class was higher than x table at 5% significance level (0.92 > 0.05, 0.44 > 0.05). It meant the data was in normal distribution as required.

b. Testing of Normality of Post Test of Experimental Class and Control Class

In this study, the writer used One Sample Kolmogorov-Smirnov Test to examine the normality.

Table 4.4 Testing of Normality of Post Test of Experiment Class and Control Class

One-Sample Kolmogorov-Smirnov Test

		Experiment	Control
N		30	30
Normal Parameters[a]	Mean	63.80	45.76
	Std. Deviation	15.00	1.17
Most Extreme Differences	Absolute	.184	.075
	Positive	.136	.058
	Negative	-.184	-.075
Kolmogorov-Smirnov Z		1.010	.412
Asymp. Sig. (2-tailed)		.260	.996

a. Test distribution is Normal.

Based on the table above, it could be seen that the result of normality calculation using SPSS program, the asymptotic significance normality of experiment class was 0.26 and the asymptotic significance normality of control class was 0.99. Then, the result of normality of experiment class and control class was interpreted on x table with degree of significance 5% (0.05). It was found that asymptotic significance normality of experiment class and control class was higher than x table at 5% significance level (0.26 > 0.05, 0.99 > 0.05). It meant the data was in normal distribution as required.

2. Homogeneity

In this study, the writer used Levene Statistic to examine the homogeneity as can be seen in Table 4.5.

Table 4.5 Testing of Homogeneity

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
4.53	1	58	.038

Based on the table above, it could be seen that the result of homogeneity calculation using SPSS program was 0.03. Then, the result of homogeneity was interpreted on f table with level of significance 5% (0.05). It was found

that f value was higher than f table at 5% significance level (0.03 > 0.05). It meant both of variances were homogeneity as required.

C. The Result of Data Analysis

1. Testing Hypothesis Using Manual Calculation

The writer used t test formula to examine hypothesis, before the writer examined hypothesis, the writer tabulated the score of standard deviation and standard error into table as follows:

Table 4.6 The Standard Deviation and the Standard Error of Experiment Class and Control Class

Group	Standard Deviation	Standard Error
Experiment	14.69	2.72
Control	10.90	2.02

Based on the table above, it could be seen that the result of the standard deviation calculation of experiment class was 14.69 and the result of the standard error calculation of experiment class was 2.72. Meanwhile, the result of the standard deviation calculation of control class was 10.90 and the result of the standard error calculation of control class was 2.02. Before, the writer examined the hypothesis; the writer calculated the standard error of mean of difference. The writer used the formula as follow:

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

$$= \sqrt{2.72^2 + 2.02^2}$$

$$= \sqrt{7.3984 + 4.0804}$$

$$= \sqrt{11.4788}$$

$$= 3.3880377802 = 3.39$$

Then, to examine the hypothesis, the writer used the formula as follow:

$$to = \frac{M1 - M2}{SEm1 - SEm2}$$

$$= \frac{63.90 - 52.30}{3.39}$$

$$= \frac{11.6}{3.39}$$

$$= 3.42$$

Next, the writer accounted degree of freedom (df) with the formula as follow:

$$df = (N1 + N2 - 2)$$

$$= (30 + 30 - 2)$$

$$= 58$$

After that, the writer interpreted the result of t test. To know the hypothesis was accepted or rejected, the writer used the criterion as follow:

If t-test $\geq t_{table}$, it meant Ha was accepted and Ho was rejected.

If t-test $\leq t_{table}$, it meant Ha was rejected and Ho was accepted.

The next step, the writer tabulated the result of the t test calculation into table 4.7 as follows:

Table 4.7 The Result of T Test Using Manual Calculation

T Observed	T table		Df
	5%	1%	
3.42	2.00	2.65	58

Based on the table above, it could be seen that the result of t test using manual calculation was 3.41 and the result of degree of freedom (df) calculation was 58. Then the result of t test was interpreted on the result of degree of freedom to get value of the $t_{table.}$ It was found that $t_{observed}$ was higher than t_{table} at 5% and 1% significance level ($2.00 < 3.42 > 2.65$). It meant H_a was accepted and H_o was rejected. It showed that teaching vocabulary using personal vocabulary notes gave effect on vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya.

2. Testing Hypothesis Using SPSS 17.0 Program

The writer also used SPSS 17.0 Program to examine the hypothesis. The result of t test using SPSS 17.0 Program was used to support the result of t test using manual calculation. The result of t test using SPSS 17.0 Program could be seen in table 4.8 as follow:

Table 4.8 The Calculation of T Test Using SPSS 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	4.324	.042	3.598	58	.001	12.50000	3.47455	5.54492	19.45508
	Equal variances not assumed			3.598	54.751	.001	12.50000	3.47455	5.53613	19.46387

Based on the table above, it could be seen that the result of t test using SPSS 17.0 Program was 3.59. The result of t test using SPSS 17.0 Program was interpreted on the result of degree of freedom to get value of the t_{table}. It was found that $t_{observed}$ was higher than the t_{table} at 5% and 1% significance level (2.00 < 3.59 > 2.65). It meant H_a was accepted and H_o was rejected.

Based on the result of the research, the writer interpreted that Ha stating that personal vocabulary notes was effective for the students' vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya was accepted and Ho stating that personal vocabulary notes was not effective for the students'

vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya was rejected. It meant that teaching vocabulary using personal vocabulary notes gave effect on vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya.

D. Discussion

The result of analysis showed that using personal vocabulary notes gave effect on vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya. It could be seen from the students who were taught using personal vocabulary notes got higher score than the students who were taught without using personal vocabulary notes (handout). It proved by the students' post test result in which most of their scores were improved. (It could be seen at appendix 6, for the detail explanation of students' scores). The finding was suitable with Priska A. N. F on her research stated that personal vocabulary notes technique had significance influence on students' vocabulary understanding, the students were enthusiastic, fun and also enjoy while learning vocabulary, (Chapter II, on page 11).[1]

After the data was calculated using manual calculation with t test formula, it was found that $t_{observed}$ was higher than t_{table} at 5% and 1% significance level ($2.00 < 3.42 > 2.65$). It meant H_a was accepted and H_o was rejected. This finding indicated that the alternative hypothesis (Ha) stating that using personal

[1]Priska Aprillianty N. F, *The Effectiveness of Personal Vocabulary Notes on students' vocabulary understanding*, Jakarta: Syarif Hidayatullah State Islamic University, 2014.

vocabulary notes gave effect to students' vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangksa Raya was accepted. In other words, the null hypothesis (Ho) stating that using personal vocabulary notes did not gave effect to students' vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya was rejected.

There were some reasons why using personal vocabulary notes gave effect on vocabulary knowledge at the seventh grade students at SMP Muhammadiyah Palangka Raya.

First, personal vocabulary notes increased the students' score. It could be seen from score of mean between pre test and post test of experiment class. The score of mean in post test was higher than the score of mean in pre test (Post test = 63.9 > pre test = 46.7). (It could be seen at appendix 7, for the detail explanation of calculating the data). It also could be seen from the students' score in pre test and post test of experiment class. (It could be seen at appendix 6). In the post test of experiment class, there were some students got good score, although there were also some students got less score. For example, Windi D F with code was W28, she got score was 46 in pre test and she got score was 63 in post test. It indicated that the students' score increased after was conducted treatment. It supported the previous study by Timotius, Eusabinus Bunau, and Dewi Novita stated that using

personal vocabulary notes could improve the students' vocabulary achievement when it was used frequently in classroom, (Chapter II, on page 10).[2]

Second, through personal vocabulary notes, the students could record their memory in their personal vocabulary notes, so the students could find words that the students forget and need. It supported by Joshua Kurzweil stated that personal vocabulary notes address individual student needs by encouraging students to find the vocabulary they need to communicate and talk about their experiences, (Chapter II, on page 27).[3]

Third, through personal vocabulary notes, the students could know some word well (the students could write new and difficult words not only for meaning but also word form). For example, the students with code W28, before was conducted treatment, she felt difficult to answer the question in pre test, because she did not know the meaning of each word from the answer choices and she still confuse in identifying word form and synonym of word. It could be seen from her answer that she is wrong in choosing the answer choice (Items number 6, 9, 12, 14, 15, 20, 22, 34, 36, and 38) from 17 items test of word form and synonym. After was conducted treatment, in post test she could choose the answer choice correctly (Items number 6, 9, 12, 14, 15, 20, 22, 34, 36, 38). It indicated that personal vocabulary notes gave positive influence to the students. It supported by Joshua Kurzweil stated that personal vocabulary notes gave students a much

[2] Timotius, *Improving Students Ability' In Vocabulary Mastery Through Personal Vocabulary Notes*, Pontianak: Tangjungpura University, 2013.

[3] Joshua Kurzweil, *Personal Vocabulary Notes*, TESL Journal Vol. VIII No. 6, Japan: Kansai University, 2002.

deeper sense of what it is to learn vocabulary and know a word as they got contextualized feedback on words they are using, (Chapter II, on page 28).[4]

Fourth, personal vocabulary notes could motivate the students in remembering vocabulary. It supported by Joshua Kurzweil stated that students are usually much more motivated to remember their personal vocabulary notes than they are a set of vocabulary items they have received from a textbook or teacher, (Chapter II, on page 27).[5]

[4] *Ibid*

[5] *Ibid*