

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter describes about research findings and discussion that includes about the description of data, normality testing, hypothesis testing and discussion.

A. Description of Data

In this section, the researcher presented the data of students' vocabulary mastery before and after being taught by using Vocabulary Self-Collection Strategy. In this research, the purpose of the researcher wanted to know the effectiveness of using Vocabulary Self-Collection Strategy toward students' vocabulary mastery of the seventh grade of SMPN 1 Sumbergempol in academic year 2018/2019. The researcher did pre experimental research design by using one group pre-test and post-test with quantitative research approach. Besides, the researcher involved VII D class which consisted of 35 students, 19 males and 16 female students as experiment and control class because the researcher was conducted pre-experimental study so researcher only used one class. Then, the researcher administered test as research instrument to get the data. The test items that had given to the students were 30 items, multiple choices and matching test.

In this research, the researcher was conducted in four meetings. First meeting was administering pre-test, second and third were giving treatment by using Vocabulary Self-Collection Strategy to teach vocabulary, and the

last was administering post-test. From pre-test and post-test the researcher got a score from the students. The students' score then computed by using SPSS 25.0 versions. Then, the presentation of data was as follows:

1. The Students' Vocabulary Mastery Before Being Taught By Using Vocabulary Self-Collection Strategy

Pre-test in this research had been done before treatment. The pre-test was held on March, 25th 2019. The instrument of this research was vocabulary test that consisted of 30 items, 25 questions of multiple choice and 5 questions of matching test. There were 35 students as subjects of the research. The test allocated 60 minutes and it was done before treatment process using Vocabulary Self-Collection Strategy. This test was intended to know the basic competence of students' vocabulary mastery before giving treatment. The data of pre-test could be seen as follows:

Table 4.1 Students' Score before Being Taught by Using Vocabulary Self-Collection Strategy

No	Students' Name	Pre-test Score
1	A.P	70
2	A.N.S	70
3	A.I.F	77
4	A.R.Z	70
5	A.N.Z	88
6	A.E	70
7	B.H.S	65

8	B.R.R	80
9	C.B.S	82
10	E.S	70
11	F.V.P	82
12	G.R.S	75
13	H.S.P	77
14	I.N.A	67
15	L.D.P	80
16	L.A	75
17	L.A.P	66
18	M.F.A	60
19	M.W.D	60
20	M.W.P	88
21	M.A.F	77
22	M.E.R	70
23	M.F.A	73
24	M.R.F	82
25	M.S.N	88
26	N.A.P	91
27	N.R.R	77
28	P.Y.A	80
29	R.A.F	75
30	R.M	60
31	R.F	66
32	R.N.P	60
33	S.O	80
34	S.K.K	70
35	Y.P.A	90
N=35/Total Score		Σ 2.611
Mean		74.60

Table 4.1 presents the pre-test score list of 35 students seventh grade of SMPN 1 Sumbergempol as the respondents or subjects of the research. The students' pre-test score was distributed in the next table in order to analyze the students' vocabulary mastery score before the treatment is

given. Then, it was presented the statistical data of pre-test in the table below.

Table 4.2 The Statistical data of Pre-test Score

Statistics		
Pret-est		
N	Valid	35
	Missing	0
Mean		74,60
Std. Error of Mean		1,492
Median		75,00
Mode		70
Std. Deviation		8,829
Variance		77,953
Range		31
Minimum		60
Maximum		91
Sum		2611

Based on table 4.2 above, showed descriptive statistic of pre-test score, it showed the mean score of 36 students in pre-test was 74.60. The median in the pre-test was 75.00. It meant the middle score of pre-test was 70. The mode in pre-test was 70. It meant the most frequently appeared score was 70. The standard deviation of pre-test 8.829. The range was 31. Meanwhile, the minimum score in the pre-test was 60. The maximum score in the pre-test was 91. The summary of the pre-test was 2611. In addition, the researcher organized the percentage and the frequency of the test. It can be seen in the table 4.3.

Table 4.3 The Frequency of Students' Score in Pre-test

		Pre-test			Cumulative Percent
		Frequency	Percent	Valid Percent	
Valid	60	4	11,4	11,4	11,4
	65	1	2,9	2,9	14,3
	66	2	5,7	5,7	20,0
	67	1	2,9	2,9	22,9
	70	7	20,0	20,0	42,9
	73	1	2,9	2,9	45,7
	75	3	8,6	8,6	54,3
	77	4	11,4	11,4	65,7
	80	4	11,4	11,4	77,1
	82	3	8,6	8,6	85,7
	88	3	8,6	8,6	94,3
	90	1	2,9	2,9	97,1
	91	1	2,9	2,9	100,0
	Total	35	100,0	100,0	

Based on the table 4.3, the table frequency of pre-test after being distributed showed based on the categorizing of scoring rubric:

- a. There were 15 students who got score 60-70, which means that the students' score in vocabulary mastery was average.
- b. There were 15 students who got score between 71-84, which means that the students' score in vocabulary mastery was good.
- c. There were 5 students who got score between 85-100, which means that the students' score in vocabulary mastery was excellent.

The researcher also presented a histogram based on the data on students' score in pre-test to make data were clear. The histogram of the result of pre-test score presented in figure 4.2 as below:

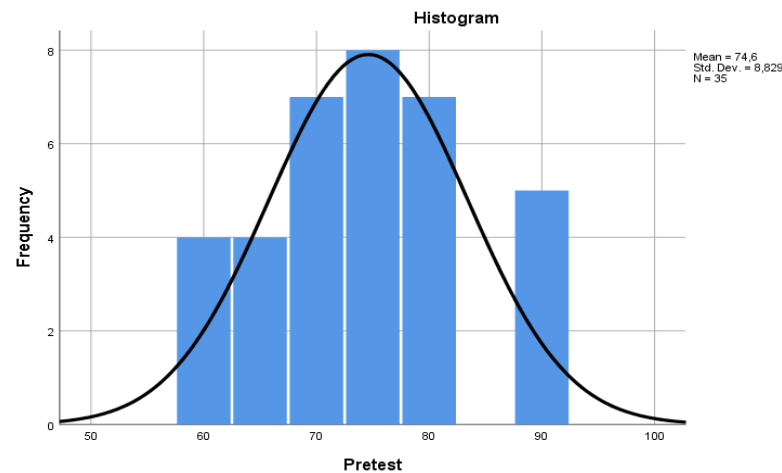


Figure 4.2 The Histogram of Students' Score in Pre-test

Based on the students' score in pre-test, the researcher qualified their ability in to 5 categories; excellent, good, average, poor and very poor. The categorization can be seen in the table 4.4 as below:

Table 4.4 The Qualification in Pre-test

No	Grade	Qualification	Range of Score	Frequency
1	A	Excellent	85-100	5
2	B	Good	71-84	15
3	C	Average	60-70	15
4	D	Poor	40-59	0
5	E	Very poor	0-39	0

Based on the table 4.4 above, the result of categorization showed which 15 students who got score between 60-70, it meant that the students in average vocabulary mastery and 15 students who got score between 71-84, it meant that the students in good vocabulary mastery and 5 students who got score between 85-100, it meant that the students in excellent vocabulary mastery. The result above showed that the students had good

vocabulary mastery, but some of them still in average ability. It could be concluded that the students had to increase their vocabulary mastery.

2. Students' Vocabulary Mastery After Being Taught By Using Vocabulary Self-Collection Strategy

Post-test in this research had been done after treatment. The pre-test was held on April, 22nd 2019. The instrument of this research was vocabulary test that consisted of 30 items, 25 questions of multiple choice and 5 questions of matching test. There were also 35 students as subjects of the research. The researcher allocated 60 minutes for conducting post-test. This test was intended to know the basic competence of students' vocabulary mastery after giving treatment. The data of post-test can be seen as follows:

Table 4.5 Students' Score after Being Taught by Using Vocabulary Self-Collection Strategy

No	Students' Name	Post-test Score
1	A.P	95
2	A.N.S	94
3	A.I.F	90
4	A.R.Z	95
5	A.N.Z	100
6	A.E	90
7	B.H.S	85
8	B.R.R	95
9	C.B.S	90
10	E.S	90
11	F.V.P	97
12	G.R.S	90

13	H.S.P	97
14	I.N.A	85
15	L.D.P	100
16	L.A	92
17	L.A.P	80
18	M.F.A	75
19	M.W.D	80
20	M.W.P	100
21	M.A.F	97
22	M.E.R	80
23	M.F.A	88
24	M.R.F	100
25	M.S.N	100
26	N.A.P	100
27	N.R.R	90
28	P.Y.A	100
29	R.A.F	82
30	R.M	77
31	R.F	90
32	R.N.P	88
33	S.O	97
34	S.K.K	85
35	Y.P.A	100
N=35/Total Score		Σ 3.194
Mean		91.26

Table 4.1 presents the post-test score list of 35 students seventh grade of SMPN 1 Sumbergempol as the respondents or subjects of the research. The students' pre-test score was distributed in the next table in order to analyze the students' vocabulary mastery score before the treatment is given. Then, it was presented the statistical data of post-test in the table below.

Table 4.6 The Statistical data of Post-test Score

Statistics		
Post-test		
N	Valid	35
	Missing	0
Mean		91,26
Std. Error of Mean		1,256
Median		90,00
Mode		100
Std. Deviation		7,429
Variance		55,197
Range		25
Minimum		75
Maximum		100
Sum		3194

Based on table 4.6 above, showed descriptive statistic of post-test score, it showed the mean score of 36 students in post-test was 91.26. The median in the pre-test was 90.00. It meant the middle score of post-test was 90. The mode in post-test was 100. It meant the most frequently appeared score was 100. The standard deviation of post-test 7.429. The range was 25. Meanwhile, the minimum score in the pre-test was 75. The maximum score in the post-test was 100. The summary of the post-test was 3194. In addition, the researcher organized the percentage and the frequency of the test. It can be seen in the table 4.7.

Table 4.7 Frequency of Post-test Score

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	75	1	2,9	2,9	2,9
	77	1	2,9	2,9	5,7
	80	3	8,6	8,6	14,3
	82	1	2,9	2,9	17,1
	85	3	8,6	8,6	25,7
	88	2	5,7	5,7	31,4
	90	7	20,0	20,0	51,4
	92	1	2,9	2,9	54,3
	94	1	2,9	2,9	57,1
	95	3	8,6	8,6	65,7
	97	4	11,4	11,4	77,1
	100	8	22,9	22,9	100,0
	Total	35	100,0	100,0	

Based on the table 4.7 above, the table frequency of post-test after being distributed showed based on the categorizing of scoring rubric:

- a) There were 6 students who got score between 71-84, which means that the students' score in vocabulary mastery was good.
- b) There were 29 students who got score between 85-100, which means that the students' score in vocabulary mastery was excellent.

The researcher also presented a histogram based on the data of students' score in post-test to make data were clear. The histogram of the result of pre-test score presented in figure 4.6 as below:

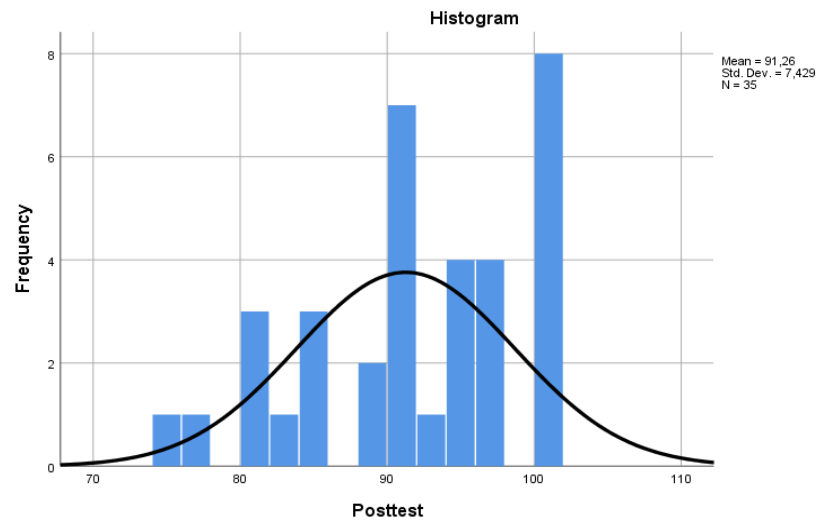


Figure 4.6 The Histogram of Students' Score in Post-test

Based on the students' score in post-test, the researcher qualified their ability in to 5 categories; excellent, good, average, poor and very poor. The categorization can be seen in the table 4.8 as below:

Table 4.8 The Qualification in Post-test

No	Grade	Qualification	Range of Score	Frequency
1	A	Excellent	85-100	29
2	B	Good	71-84	6
3	C	Average	60-70	0
4	D	Poor	40-59	0
5	E	Very poor	0-39	0

Based on the table 4.8 above, the result of categorization showed which 6 students who got score between 71-84, it meant that the students in good vocabulary mastery and 29 students who got score between 85-100, it meant that the students in excellent vocabulary mastery. The result above showed that students' vocabulary mastery was increase from average vocabulary mastery to good vocabulary mastery and also to

excellent vocabulary mastery after being taught by using Vocabulary Self-Collection Strategy.

B. Normality Testing

Normality testing is used to determine whether the distribution of responses has a normal distribution or not. Normality test is intended to show that the sample data come from a normally distributed population . To test the normality of the data the reseracher used the *One Sample Kolmogrov-Smirnov* test with the provision that if $Asymp. Sig < 0.05$, so the data distribution is normal. The researcher used students' scores of pre-test and post-test of seven D class of SMPN 1 Sumbergempol in normality testing and calculated used *SPSS 25.0 for windows* by significant level (0.05). The data presented on the table 4.9. The hypothesis of normality testing as follows:

- a. H_0 : Data is in normal distribution
- b. H_a : Data is not in normal distribution

After determining the hypothesis, the researcher used the rule of $Asymp. Sig (2\text{ tailed})$ to measure the normality testing. This rule was used to know the test distribution was normal or not. The interpretation of normality testing as follows:

- a) If $Asymp. Sig (2\text{ tailed}) > 0.05$, so the data distribution is normal.
- b) If $Asymp. Sig (2\text{ tailed}) < 0.05$, so the data distribution is not normal.

Table 4.9 The Students' Score of Pre-test and Post-test

No	Students' Name	Pre-test Score	Post-test Score
1	A.P	70	95
2	A.N.S	70	94
3	A.I.F	77	90
4	A.R.Z	70	95
5	A.N.Z	88	100
6	A.E	70	90
7	B.H.S	65	85
8	B.R.R	80	95
9	C.B.S	82	90
10	E.S	70	90
11	F.V.P	82	97
12	G.R.S	75	90
13	H.S.P	77	97
14	I.N.A	67	85
15	L.D.P	80	100
16	L.A	75	92
17	L.A.P	66	80
18	M.F.A	60	75
19	M.W.D	60	80
20	M.W.P	88	100
21	M.A.F	77	97
22	M.E.R	70	80
23	M.F.A	73	88
24	M.R.F	82	100
25	M.S.N	88	100
26	N.A.P	91	100
27	N.R.R	77	90
28	P.Y.A	80	100
29	R.A.F	75	82
30	R.M	60	77
31	R.F	66	90
32	R.N.P	60	88
33	S.O	80	97
34	S.K.K	70	85
35	Y.P.A	90	100
N=35/Total Score		Σ 2.611	Σ 3.194
Mean		74.60	91.26

Based on the table above, it showed that the total score of pre-test was 2.611. The mean of students' score of pre-test was 74.60. After post-test the total score showed was 3.194. The mean of students' score of post-test was 91.26. It meant that there were difference score from both of pre-test and post-test. It could be concluded that students' vocabulary mastery increased after was given treatment. To know the normality of the test, the result was shown as below:

The 4.10 The Normality Result of The Data

One-Sample Kolmogorov-Smirnov Test

		Pre-test	Post-test
N		35	35
Normal Parameters ^{a,b}	Mean	74,60	91,26
	Std. Deviation	8,829	7,429
Most Extreme Differences	Absolute	,127	,123
	Positive	,127	,120
	Negative	-,078	-,123
Test Statistic		,127	,123
Asymp. Sig. (2-tailed)		,163 ^c	,199 ^c

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.

From the hypothesis for normality testing, the null hypothesis (H_0) is rejected when the significance value is lower than 0.05 ($\alpha = 5\%$). Based on the analysis of the output of normality testing by using *One-Sample Kolmogorov-Smirnov* shows that the value of Asymp. Sig (2 tailed) of pre-test was 0.163 and it was higher than 0.05 ($0.163 > 0.05$), so the test distribution is normal. Then, value of Asymp. Sig (2 tailed) of post-test was 0.199 and it was higher than 0.05 ($0.199 > 0.05$), so the test distribution is

normal. It indicates that the H_0 rejected and H_a is accepted, the data is in normal distribution. It can be concluded that the data of post-test and post-test is in normal distribution.

C. Hypothesis Testing

The hypothesis testing of this research examined the effectiveness of before and after by using Vocabulary Self-Collection Strategy toward students vocabulary mastery at the seventh grade of SMPN 1 Sumbergempol in academic year 2018/2019. The hypothesis which is examined in this research as follows:

1. $H_0: \mu_1 \leq \mu_2$ or the mean of post-test was smaller than or equal to the mean of the pre-test.

The null hypothesis (H_0) states that the students' vocabulary mastery after being taught using Vocabulary Self-Collection strategy is less than or equal to their vocabulary mastery before being taught using Vocabulary Self-Collection strategy.

2. $H_a: \mu_1 > \mu_2$ or the mean of post-test was higher than the mean of the pre-test.

The alternative hypothesis (H_a) states the students' vocabulary mastery after being taught using Vocabulary Self-Collection strategy is higher than their vocabulary mastery before being taught using Vocabulary Self-Collection strategy.

The computation used to know the effectiveness of Vocabulary Self-Collection in vocabulary mastery. However, to know whether there was significant different score of the students before the students were taught by using Vocabulary Self-Collection and after the students were taught by using Vocabulary Self-Collection. These subjects were referred as paired because they are drawn from the same subject. The researcher used statistical test by using paired sample t-test on SPSS 25.0 to analyze the data. The result is as follow:

Table 4.11 Paired Sample Statistics

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-test	74,60	35	8,829	1,492
	Post-test	91,26	35	7,429	1,256

Based on the table 4.11, the data presented students' score which were taught before and after by using Vocabulary self-Collection strategy in vocabulary mastery. The output of paired samples statistics as descriptive statistic showed that the mean score of pre-test was 74.60 and the mean score of post-test was 91.26. The number of sample both of pre-test and post-test was 35. The standard deviation is to measure how much the variance of the sample. The standard deviation of pre-test was (8.829<74.60) and the standard deviation of post-test was (7.429<91.26). In other words, if the standard deviation was getting higher than the mean, it meant that the students' score of pre-test was heterogeny and if the standard deviation was getting smaller

than the mean, it meant that the students' score of post-test was homogeny. It could be concluded that the standard deviation of pre-test and post-test was homogeny because there were difference value of standard deviation between pre-test and post-test. The standard error mean of pre-test was 1.492 and the standard error mean of post-test was 1.256. It cloud be concluded that the mean or average score of the students in pre-test and post-test was different, the mean score of pre-test was less than the mean of post-test ($74.60 < 91.26$). Thus, there was increasing score from pre-test to post-test, so there was significant different score after the students being taught by using Vocabulary Self-Collection strategy.

Table 4.12 Paired Sample Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		T	Df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre-test - Post-test	-16,657	5,145	,870	-18,424	-14,890	-19,155	34	,000

Based on table 4.12, the output of paired samples test showed that the difference of the mean score between pre-test and post-test was -16.657. The standard deviation was 5.145. Standard error mean was 0.870. There are two values in confidence interval of the difference, for the lower difference was -18.424 and the upper difference was -14.890. The result of t was -19.155 with degree of freedom (df) was 34 and the Sig. (2-tailed) was 0.000.

In this research, the P-value (Sig.) is 0.000 and the significance level is 0.05, so the P-value (Sig.) is smaller than significance level ($0.000 < 0.05$). It indicated that the null hypothesis (H_0) is rejected. In other words, the hypothesis states that the mean of post-test is smaller than or equal to the mean of pre-test, while the alternative hypothesis (H_a) is accepted. It means that the mean of post-test is higher than the mean of pre-test, so that there is any significance difference of students' score before and after being taught by using Vocabulary Self-Collection Strategy. It can be concluded that Vocabulary Self-Collection Strategy is effective strategy for teaching vocabulary mastery at the seventh grade of SMPN 1 Sumbergempol.

D. Discussion

In this research, a researcher conducted the research in one class during teaching and learning. The subject of this research was seven D which consisted of 35 students. The objectives were to find out the score of vocabulary especially students' vocabulary mastery at the seventh grade of SMPN 1 Sumbergempol in academic year of 2018/2019 before and after being taught by using Vocabulary Self-Collection Strategy and to find out whether there was significant different scores of students' vocabulary mastery before and after being taught by using Vocabulary Self-Collection Strategy.

In teaching and learning process during research, the researcher was divided into three steps. First step was administering pre-test (vocabulary test). It was used to know the students' vocabulary mastery before being taught by using Vocabulary Self-Collection Strategy. Then, the researcher

gave treatment to the students, and the treatment was Vocabulary Self-Collection Strategy. After students got treatment they were more active and enthusiastic to learn vocabulary. The third step was giving post-test after being taught by using Vocabulary Self-Collection Strategy in four meeting in the class.

The researcher got the data from the score of pre-test and post-test. Then, the data analyzed by using paired sample t-test on SPSS 25.0 version for windows. From the data output of paired sample statistic presented that the mean of pre-test was 74.60 and the mean of post-test was 91.26. If compared differences both of the value was 16.66. It indicated that there were significant differences in students' vocabulary mastery because the mean of post-test was higher than the mean of pre-test. It could be concluded that teaching Vocabulary Self-Collection Strategy was effective for teaching vocabulary mastery.

Furthermore, the data computation of T-test showed that the score of *P-value* (Sig.) was 0.000, and it was less than 0.05 ($0.000 < 0.05$) which meant the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. In other words, the null hypothesis states that the mean of post-test was smaller than or equal to the mean of pre-test, it meant that was rejected. Then, the alternative hypothesis states that the mean of post-test was higher than the mean of the pre-test, automatically the alternative hypothesis was accepted. It showed that there was significant difference score on students' vocabulary mastery of the seventh grade students at SMPN 1 Sumbergempol

in academic year 2018/2019 before and after being taught by using Vocabulary Self-Collection Strategy. In other words, Vocabulary Self-Collection Strategy was effective to be used in teaching vocabulary.

Based on the result, it could be concluded that Vocabulary Self-Collection Strategy was effective strategy especially for the seventh grade students of SMPN 1 Sumbergempol, because it helps students to increase students' vocabulary knowledge and students' internal motivation in learning the English language. Here, the students can choose the difficult and interest words that they do not know the meaning from the text, after that they can discuss with their friends in small group. According to Rudell (2005:166) promotes that Vocabulary Self-Collection Strategy is a strategy for teaching that can be implemented as pre-reading or post-reading activity in which the students can choose the words based on their interest and then they can define the words based on the context of the text.

According to Martin (2002:88), Vocabulary Self-Collection Strategy is an interactive-learning instructional strategy that promotes word awareness, activeness of students are needed in identifying important words from their reading to share with members of their class. The purpose of implementing this strategy is to make the students understand with the new words, promote their interest to the new words and provide a strategy to learn the new words. In addition, it motivates and makes students more active in learning vocabulary knowledge.

This finding was related with the previous study written by Putri (2012) conducted Vocabulary Self-Collection Strategy in terms of reading achievement. It was an experimental research, which be conducted in two classes; the experimental group (VI B) and control group (VI B) at the sixth grade of elementary school. The researcher used test as instrument; pre-test and post-test to gathering the data. The result of the scores found as follows: first, the mean score for the experimental class was 81.89 and the mean score for the control class that was 72.96. Second, the researcher found that the standard deviation for both classes were 10.11 and the result of t-test was 2.94, then t-calculated (2.94) was higher than t-table (2.01). Therefore, it could be concluded that there was a significant effect of using Vocabulary Selfcollection Strategy toward students' reading comprehension. In other words, Students that was taught by using Vocabulary Selfcollection Strategy had higher achievement in reading comprehension than students that were taught without this strategy

The other previous study, Fatonah (2015) conducted Classroom Action Research study (CAR), to improve students' reading comprehension by implementing Vocabulary Self-Collection Strategy at the seventh grade of SMPN 4 Kalasan. From the test result in cycle II, the mean of the students' score in pre-test was 58.93, and the mean of the students' score in post-test here was an 78.09. It meant that there was improvement on the mean score of the test. Moreover, the P-value of the test was 0.00 (< 0.05). So, the use of Vocabulary Self-Collection Strategy can improve students' vocabulary. It

could be concluded that there was significant difference between both scores and also make students motivate in reading comprehension and they do not get bored.

The last, Al Maghfuri (2017) conducted a research entitled “Improving Vocabulary mastery Vocabulary Self-Collection Strategy at the Eight Grade Students of MTS Hidayatul Muna Ponorogo (Classroom action research). This research had two cycles and the result showed that it could improve students’ vocabulary mastery. In the first cycle, the mean of the students’ score was 62.5% and improved to 93.75% in the second cycle. Teaching vocabulary by using this strategy made students more active to collect and find the meaning of unfamiliar words from the text. It could be concluded that the strategy can improve students’ vocabulary mastery.

Based on the explanation above, Vocabulary Self-Collection Strategy is the strategy that has purposes to increase the internal motivation on vocabulary acquisition and development. It is an easy and simple strategy that teacher can use for teaching English especially in teaching vocabulary. Besides, the students are more active and enjoy when they find the unfamiliar words from text that they have read.

In summary, the use of Vocabulary Self-Collection Strategy gave the positive effect towards students’ vocabulary mastery especially for the seventh grade students of SMPN 1 Sumbergempol. From the result of data analysis, there was any significant difference on students’ score of vocabulary mastery at the seven D class before and after being taught by using

Vocabulary Self-Collection Strategy. Thus, the use of Vocabulary Self-Collection Strategy is effective to increase students' vocabulary mastery and create an enthusiastic learning process to the students of SMPN 1 Sumbergempol in academic year 2018/2019.