

CHAPTER IV
FINDINGS AND DISCUSSION

A. Findings

1. Students' Learning Strategies

The data of this research was collected from questionnaire. It was distributed to all eleventh grade students students at MA Muhammadiyah 2 Al-Furqan Banjarmasin. There were consisted of 20 students.

In order to know students' learning strategies in learning second language especially for eleventh grade students at MA Muhammadiyah 2 Al-Furqan Banjarmasin. The writer distributed the questionnaire about students' learning strategies. From the questionnaire, it is then knows some strategies that the students did as seen in the following table.

Table 4.1. Score of the Students' Learning Strategies

Averages Score	Strategy frequency						Interpretation
	1	2	3	4	5	6	
4.5 to 5.0	-						Always or almost always used.
3.5 to 4.4	-		2	7	6	3	Usually used.
2.5 to 3.4	6	15	7	8	6	12	Sometimes used.
1.5 to 2.4	11	5	11	4	7	5	Seldom
1.0 to 1.4	3			1	1		Almost never used or never
Total	20	20	20	20	20	20	

Notes: 1= Memory, 2= Cognitive, 3= Compensation, 4= Metacognitive, 5= Affective, 6= Social

From the table above, it can be known that strategies used by students are various. There are six strategies promoted by Oxford consisted of memory, cognitive, compensation, metacognitive, affective, and social strategy.

First is memory strategy. There are 6 students that sometimes use memory strategy, 11 students that seldom use this strategy, and 3 students that almost never or never use this strategy. Thus, most of the students seldom use memory strategy.

Second is cognitive strategy. There are 15 students that sometimes use cognitive strategy, and 5 students that seldom use this strategy. Thus, most of the students use cognitive strategy but sometimes.

Third is compensation strategy. There are 2 students that usually use compensation strategy, 7 students that sometimes use this strategy, and 11 students that seldom use this strategy. Thus, most of the students seldom use compensation strategy.

Fourth is metacognitive strategy. There are 7 students that usually use metacognitive strategy, 8 students that sometimes use this strategy, 4 students that seldom this strategy, and 1 student that almost never or never use this strategy. Thus, most of the students use metacognitive strategy but sometimes.

Fifth is affective strategy. There are 6 students that usually use affective strategy, 6 students that sometime use this strategy, 7 students that generally not use this strategy, and 1 student that almost never use or never this strategy. Thus, most of the students seldom use affective strategy.

Sixth is social strategy. There are 3 students that usually use social strategy, 12 students that sometimes use this strategy, and 5 students that seldom use this strategy. Thus, most of the students use social strategy but sometimes.

From the explanation above, it can be concluded that cognitive strategy is most used but sometimes.

a. Memory Strategies

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.2. Memory Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
1	1	1	9	5	4
2	0	2	6	7	5
3	0	6	7	5	2
4	0	3	7	5	5
5	0	3	6	4	7
6	0	2	3	2	13
7	0	2	3	4	11
8	1	1	7	8	3
9	3	2	8	2	5

It can be concluded that from the table above the question number 3 is the strategy that most used by students. This is proved with 6 students use this strategy. This means that most of them use flashcard to remember new words in English. (see appendix 2)

b. Cognitive Strategies

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.3. Cognitive Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
10	1	5	10	2	2
11	3	4	5	4	4
12	8	4	6	2	0
13	2	4	8	2	4
14	4	3	6	2	5
15	2	9	4	4	1
16	0	3	3	8	6
17	0	1	6	6	7
18	0	2	4	5	9
19	1	4	1	9	5
20	1	0	6	6	7
21	2	3	5	7	3
22	7	5	2	4	2
23	0	1	5	11	3

Based on the table above that cognitive strategies are in high category cognitive strategies. It can be seen from the questions number 12 and 22. They have same results are amount 12 students. It means that mostly students practice the sounds of English and do not try to translate word-for-word. (see appendix 2)

c. Compensation Strategies

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.4. Compensation Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
24	2	5	7	5	1
25		3	4	7	6
26		2	2	7	9
27		6	3	3	8
28		5	7	2	6
29		1	5	7	7

It can be concluded that from the table above, the question number 24 is there are 7 students use this strategy. This means that mostly they make guesses when to try understand unfamiliar words in English. (see appendix 2)

d. Metacognitive Strategy

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.5. Metacognitive Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
30	2	6	6	4	2
31	2	6	7	2	4
32	1	8	5	1	3
33	1	5	6	3	3
34	0	2	10		7
35	2	3	5	4	6
36	1	2	8	5	3
37	3	7	3	4	3
38	6	6	2	3	3

It can be seen from the table above, at question number 38 amount 12 students use it. It means that mostly students think about their progress in learning English. (see appendix 2)

e. Affective Strategy

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.6. Affective Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
39	3	10	2	3	
40	6	4	6	1	3
41	2	1	6	1	10
42	3	2	3	5	4
43	1	1	6	2	10
44	1	3	2	2	6

It can be concluded that from the table above the question number 39 is the strategy most used by students. This is proved by 13 students use this strategy. This means that mostly they make guesses when they try to relax whenever they feel afraid while using English. (see appendix 2)

f. Social Strategy

In order to know one by one strategy, the writer analyzes the questionnaire that had distributed to students with Likert scale, that can be seen in the following table.

4.7. Social Strategies

Number Questions	Always (5)	Often (4)	Sometimes (3)	Seldom (2)	Never (1)
45	1	8	1	6	4
46	2	2	4	6	6
47	4	4	6	2	4
48	1	3	7	3	6
49	1	6	6	2	5
50	2	3	5	6	4

It can be concluded that from the table above, the question number 45 is the strategy most used by students. This is proved by, 9 students use this strategy. It means that mostly if learners do not understand something in English language, they ask other to slow down or repeat it again. (see appendix 2)

2. Students' Vocabulary Mastery

Before doing the research on the real subject that is eleventh grade students at MA Muhammadiyah 2 Al-Furqan Banjarmasin, first of all, the writer did the try out. It is done to the students at XI IPA in SMAN 1 Mekarsari in regency Barito Koala for amount 25 students. The calculation of the try out is used by SPSS 16,0 program that can be seen in appendix.

The writer also selected the item to be tested to the real subject in this research. It is used to examine validity. This is done to measure the accuracy of the items in test, whether items that will be used in a research accurate or not. The calculation is done by correlation item score and total of the items score.

This validity test used Bivariate Pearson (Product Moment Pearson) correlation. Based on the output, it is known the correlation value between item score and total of item score. Then, the value is compared with r Table in 95% confident interval by examining two tailed and the total of students are $(n) = 25$, so r Table should be amount 0,396. The instrument of research is a multiple choice test that consist of 40 questions.

Based on the try out, it is known that 35 item that is valid and 5 items are not valid. The items are in question number 8, 18, 21,31 and 39. (see appendix 6). Writer corrects the items until valid and then examine the real subject of research that is, eleventh grade students at MA Muhammadiyah 2 Al-Furqan Banjarmasin.

In addition, the writer sees the reliability test of instrument used to know that whether the test is suitable or not be the instrument of the research. The data used is the same data as from subject at try out of instrument.

This test uses Cronbach's Alpha method. The index number interpretation of the result of reliability test can be seen on the category below.

0,800 - 1,000: Very high

0,600 - 0,799: High

0,400 - 0,500: Fair

0,200 - 0,399: Low

> 0,200 : Very low

Based on the calculation by using SPSS 16,0, it is known as follow

4.8. Reliability Statistics Test

Cronbach's Alpha	N of Items
.641	41

Based on the table above, it can be seen that reliability Cronbach's Alpha is good and suitable to use it because the result is amount 0,641.

The vocabulary mastery of eleventh grade students at MA Muhammadiyah 2 Al-Furqan Banjarmasin is good that can be seen in the following table below.

Table 4.9. Students' Vocabulary Mastery Score

No	Score	Frequency	Total
1	45	1	45
2	50	3	150
3	60	4	240
4	70	10	700
5	80	2	160
Total		20	1295

Based on the test that has been conducted, the highest score is 80 and the lowest score is 45. The accumulated score is 1295 and the mean of score is that in the following table formula can be calculated as follows

$$M = \frac{\sum X}{N}$$

$$M = \frac{1295}{20}$$

$$M = 64,75$$

Thus, the mean of students' vocabulary achievement is 64,75 or in fair category.

In order to clarify the result and to find the students' mastery in vocabulary test, the writer classified the data into five categorizes namely excellent, good, fair, low and very low, the standard score of the test that can be seen below.

4.10. The Categories of Students' Vocabulary Mastery Score

No.	Score	Frequency	Percentage
1.	80 – 100 (Excellent)	2	10%
2.	70 - < 80 (Good)	9	45%

3.	60 - < 70 (Fair)	5	25 %
4.	50 - < 60 (Low)	2	10%
5.	0 - < 50 (Very Low)	2	10%
		20	100%

The table has shown that there are 2 students or 10 % who get score 80-100 (excellent). There are 9 or 45% students who get score 70 - < 80 (good). There are 5 or 25 % students who get score 60 - < 70 (fair). There are 2 students who get score 50- < 60 (low). There are 2 students who get 0 - < 50 (Very low).

So, it can be concluded that students' mastery vocabulary of eleventh grade students at MA Muhammadiyah 2 Al-Furqan Banjarmasin is in fair category.

3. Correlation between Learning Strategies and Vocabulary Mastery of Eleventh Grade Students at MA Muhammadiyah 2 Al-Furqan Banjarmasin
 - a. Memory Strategy and Vocabulary Mastery

In order to calculate the correlation between memory strategy and vocabulary mastery, it is needed to make work table. (see appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - (\sum X) (\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.27080) - (418.1295)}{\sqrt{20.9218 - (418)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{541600 - 541310}{\sqrt{(184360 - 174724) \times (1714500 - 1677025)}} \\
 &= \frac{290}{\sqrt{9633 \times 37475}}
 \end{aligned}$$

$$\begin{aligned}
 &= \frac{290}{\sqrt{360996675}} \\
 &= \frac{290}{18999,5} = 0,015
 \end{aligned}$$

b. Cognitive Strategy and Vocabulary Mastery

In order to calculate the correlation between cognitive strategy and vocabulary mastery, it is needed to make work table. (seen appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.49485) - (763.1295)}{\sqrt{20.30011 - (763)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{989700 - 988085}{\sqrt{(600220 - 582169) \times (1714500 - 1677025)}} \\
 &= \frac{1615}{\sqrt{18051 \times 37475}} \\
 &= \frac{1651}{\sqrt{676461225}} \\
 &= \frac{1651}{26008,9} = 0,06
 \end{aligned}$$

c. Compensation Strategy and Vocabulary Mastery

In order to calculate the correlation between compensation strategy and vocabulary mastery, it is also needed to make work table. (see appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.18225) - (281.1295)}{\sqrt{20.4255 - (281)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{364500 - 363895}{\sqrt{(85100 - 78961) \times (1714500 - 1677025)}} \\
 &= \frac{605}{\sqrt{6139 \times 37475}} \\
 &= \frac{605}{\sqrt{230059025}} \\
 &= \frac{605}{15167,7} = 0,04
 \end{aligned}$$

d. Metacognitive Strategy and Vocabulary Mastery

In order to calculate the correlation between metacognitive strategy and vocabulary mastery, the writer needs to make work table. (see appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.34555) - (531.1295)}{\sqrt{20.14933 - (531)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{691100 - 687645}{\sqrt{(298660 - 281961) \times (1714500 - 1677025)}} \\
 &= \frac{3455}{\sqrt{16699 \times 37475}} \\
 &= \frac{3455}{\sqrt{625795025}} \\
 &= \frac{3455}{25015,9} = 0,14
 \end{aligned}$$

e. Affective Strategy and Vocabulary Mastery

In order to calculate the correlation between affective strategy and vocabulary mastery, it is also needed to make work table. (see appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.21385) - (325.1295)}{\sqrt{20.5665 - (325)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{427700 - 420875}{\sqrt{(113300 - 105625) \times (1714500 - 1677025)}} \\
 &= \frac{6825}{\sqrt{7675 \times 37475}} \\
 &= \frac{6825}{\sqrt{287620625}} \\
 &= \frac{6825}{16959,4} = 0,40
 \end{aligned}$$

f. Social Strategy and Vocabulary Mastery

In order to calculate the correlation between social strategy and vocabulary mastery, the writer made work table. (see appendix 8) Then, the writer counts the correlation with formula that can be seen as follow.

$$\begin{aligned}
 r_{xy} &= \frac{N \sum XY - \sum X \sum Y}{\sqrt{[N \sum X^2 - (\sum X)^2] [N \sum Y^2 - (\sum Y)^2]}} \\
 &= \frac{(20.21335) - (327.1295)}{\sqrt{20.5663 - (327)^2 \times 20.85725 - (1295)^2}} \\
 &= \frac{426700 - 423465}{\sqrt{(113260 - 106929) \times (1714500 - 1677025)}}
 \end{aligned}$$

$$\begin{aligned}
&= \frac{3235}{\sqrt{6331 \times 37475}} \\
&= \frac{3235}{\sqrt{237254225}} \\
&= \frac{3235}{15403,1} = 0,21
\end{aligned}$$

B. Discussion

1. Memory strategy and Vocabulary Mastery

In chapter II, according to Oxford (as cited in Tabanlıoğlu's thesis, 2003) emphasizes that memory strategies are particularly said to be useful in vocabulary learning which is "the most seizable and unmanageable component in the learning of any language". Although, Oxford only mention memory strategies but it indicate there is a correlation between learning strategies and vocabulary especially memory strategies.

Based on the result of the calculation in the findings, it is known that r_{xy} of memory learning strategy and vocabulary mastery is 0,015. To know whether there is a significant correlation or not, it is important to test the hypothesis of research. There are two steps that the writer has performed. First, writer consults r table of product moment (see appendix 7). Because the subject are 20 students, so it is found out that "r" value for N=20 is of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. Thus, the result of hypothesis test is:

- $r_{xy}=0,015 < r_{t=0,444}$
- $r_{xy}=0,015 < r_{t=0,561}$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between memory strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on that table, it is revealed that there is not any correlation between memory strategy and vocabulary mastery, because the result is 0,015.

So, based on the hypothesis test and interpretation of r_{xy} correlation degree, it can be concluded that there is no correlation between memory learning strategy and vocabulary mastery

2. Cognitive Strategy and Vocabulary Mastery

Based on the result of the calculation in the findings it is known that r_{xy} of cognitive learning strategies and vocabulary mastery is 0,06. To know whether there is a significant correlation or not, it is important to test hypothesis of the research. There are two steps that the writer has performed. First, writer consults to r table of product moment (see appendix 7). Because the total subject are 20 students, so it is found out that “r” value for N=20 of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. So, the result of hypothesis test is:

- $r_{xy}=0,06 < r_t=0,444$
- $r_{xy}=0,06 < r_t=0,561$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between cognitive strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on that table, it is revealed that there is not any correlation between cognitive strategy and vocabulary mastery, because the result is 0,06.

So, based on the hypothesis test and interpretation of r_{xy} correlation degree, it can be concluded that there is no correlation between cognitive learning strategy and vocabulary mastery.

3. Compensation Strategy and Vocabulary Mastery

Based on the result of the calculation in the findings it is known that r_{xy} of cognitive learning strategies and vocabulary mastery is 0,04. To know whether there is a significant correlation or not, so it is important to test hypothesis of the research. There are two steps that the writer has performed. First, writer consults to r table of product moment (see appendix 7). Because the total data are 20 students, so it is found out that “r” value for N=20 of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. So, the result of hypothesis test is:

- $r_{xy}=0,04 < r_{t=0,444}$
- $r_{xy}=0,04 < r_{t=0,561}$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between cognitive strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on that table, is revealed that there is not any correlation between cognitive strategy and vocabulary mastery, because the result is 0,04.

So, based on the hypothesis test and interpretation of r_{xy} correlation degree, it can be concluded that there is no correlation between cognitive learning strategy and vocabulary mastery.

4. Metacognitive and Vocabulary Mastery

Based on the result of the calculation in the findings it is known that r_{xy} of metacognitive learning strategies and vocabulary mastery is 0,14. To know whether there is a significant correlation or not, so it is important to test hypothesis of the research. There are two steps that the writer has performed. First, writer consults to r table of product moment (see appendix 7). Because the total subject are 20 students, so it is found out that “r” value for N= 20 of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. So, the result of hypothesis test is:

- $r_{xy}=0,14 < r_{t=0,444}$
- $r_{xy}=0,14 < r_{t=0,561}$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between metacognitive strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on

that table, it is revealed that there is not any correlation between metacognitive strategy and vocabulary mastery, because the result is 0,14.

So, based on the hypothesis test and interpretation of r_{xy} correlation degree, it can be concluded that there is no correlation between metacognitive learning strategy and vocabulary mastery.

5. Affective Strategy and Vocabulary Mastery

Based on the result of the calculation in the findings it is known that r_{xy} of affective learning strategies and vocabulary mastery is 0,40. To know whether there is a significant correlation or not, so it is important to test hypothesis of the research. There are two steps that the writer has performed. First, writer consults to r table of product moment (see appendix 7). Because the total subject are 20 students, so it is found out that “r” value for N=20 of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. So, the result of hypothesis test is:

- $r_{xy}=0,40 < r_{t=0,444}$
- $r_{xy}=0,40 < r_{t=0,561}$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between affective strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on that table, it is revealed that there is a medium correlation between affective strategy and vocabulary mastery.

Affective strategy is strategy that they use in learning by managing their feeling. It means that they master vocabulary with talking about their feeling in learning vocabulary, identifying feeling other students like mood and anxiety in learning vocab, etc.

While, according the table of r_{xy} interpretation there is a medium correlation between affective strategy and vocabulary mastery, but in the result of hypothesis test tells that no significant correlation between affective strategy and vocabulary mastery. So, it can be concluded that although there is a medium correlation between affective strategy and vocabulary mastery, but the use of this strategy cannot improve the students' mastery in vocabulary.

6. Social Strategy and Vocabulary Mastery

Based on the result of the calculation in the findings it is known that r_{xy} of social learning strategies and vocabulary mastery is 0,21. To know whether there is a significant correlation or not, so it is important to test hypothesis of the research. There are two steps that the writer has performed. First, writer consults to r table of product moment (see appendix 7). Because the total data are 20 students, so it is found out that "r" value for N=20 of 95% confident interval is 0,444 and for 99 % confident interval is 0, 561. So, the result of hypothesis test is:

- $r_{xy}=0,21 < r_t=0,444$
- $r_{xy}=0,21 < r_t=0,561$

It means that $r_{xy} < r_t$, so H_0 is accepted and H_a is denied. It is showed that there is no significant correlation between social strategy and vocabulary mastery.

Secondly, in order to confirm the first step, the writer consults to the table standard classification of correlation degree (see Chapter III). Based on that table is revealed that there is a medium correlation between social strategy and vocabulary mastery.

Social strategy more like in learning with other. So, for mastering vocabulary students will asking about the translate the word in English to Indonesian or Indonesian to English, to get clarification whether or right not the vocab that they use, asking other students for helping in doing language task, ask native speaker for helping to mastering vocab, explore the culture and social the native speaker, help each other to understand the target language, etc.

While, according the table of r_{xy} interpretation there is a correlation between affective strategy and vocabulary mastery, but in the result of hypothesis test tells that no significant correlation between social strategy and vocabulary mastery. So, it can be concluded that although there is a correlation between social strategy and vocabulary mastery, but the use of this strategy cannot improve the students' mastery in vocabulary.