CHAPTER III

PRESENTATION AND ANALYSIS OF THE DATA

III.1 Presentation of the Data

The results of reading strategies questionnaires and reading test are presented as follows. Students' reading strategies choice can be classified from their scores on reading strategies questionnaires. There are six strategies: Cognitive strategies, Memory strategies, Compensation strategies, Metacognitive strategies, Affective strategies, and Social strategies. So there are six parts of questionnaires. The response for each statement is scored based on 5 point scale to get the individual attitude score. The score of reading strategies choice can be counted by adding up each part of questionnaires and then divided by the number of statements in each part. The frequency of strategies used, are categorized into five ranks: always or almost always used (4.5 to 5.0), Generally used (3.5 to 4.4). Sometimes used (2.5 to 3.4), Generally not used (1.5 to 2.4), Never or almost never used (1.0 to 1.4). Always or almost always used and generally used are categorized into high frequency, Sometimes use is categorized into medium, Generally not used and never or almost never used are categorized into low

The result of reading tests can be seen in Table 3.2. The reading test that is based on the TOEFL Model Test consists of 50 questions. All of the questions are of multiple choice type. The total score is 50.

26

Table 3.1. The Result of Reading Strategies Questionnaires

Respondents	Cog	Mem	Comp	Meta	Affect	Social	$\overline{X}$
1	3.50	3.00	3.0	3.20	3.30	3.25	3.20
2	3.50	3.00	3.0	3.40	2.30	2.25	2.90
3	3.61	2.57	4.0	3.54	3.16	2.25	3.18
4	2.92	2.14	5.0	4.00	3.33	3.25	3.44
5	2.30	2.42	3.0	3.09	2.83	2.50	2.69
6	3.00	4.42	2.5	3.20	2.83	2.25	3.03
7	3.15	2.85	3.5	3.36	3.33	3.25	3.24
8	2.69	1.71	3.5	3.09	3.00	2.75	2.79
9	3.38	2.85	5.0	3.45	3.33	4.00	3.66
10	2.92	2.42	4.0	3.18	3.33	2.00	2.97
11	3.30	2.14	4.5	4.00	2.33	2.25	3.08
12	3.53	2.85	3.0	3.63	3.33	3.00	3.22
13	2.92	3.14	4.5	3.18	3.16	3.75	3.44
14	3.92	3.00	4.5	4.18	3.83	3.75	3.86
15	2.69	1.57	3.5	4.00	2.16	1.00	2.48
16	2.61	3.00	3.0	3.45	3.16	3.00	3.03
17	3.30	3.71	2.5	3.18	4.33	4.00	3.50
18	3.61	2.14	3.5	4.00	2.30	2.50	3.00
19	3.45	2.14	4.0	3.2	2.30	3.00	3.01
20	4.23	3.00	3.5	4.00	2.83	2.00	3.26
21	2.92	2.85	3.5	4.00	2.33	1.25	2.80
22	3.38	1.42	3.0	3.18	2.16	3.00	2.69
23	2.76	2.57	2.5	3.63	4.00	2.25	2.95
24	2.92	2.28	3.0	3.80	3.50	2.25	2.95
25	3.15	3.00	4.0	3.18	3.50	2.75	3.26
26	3.61	2.42	3.0	3.81	3.00	3.00	3.14
27	3.20	2.14	4.0	3.18	3.10	3.00	3.10

28	2.92	2.57	2.5	3.20	<u>4.00</u>	2.25	2.90
29	3.20	3.00	3.0	3.18	<u>3.50</u>	2.75	3.10
30	<u>3.60</u>	3.00	3.5	2.63	3.00	3.00	3.12

Cog : Cognitive Strategies   Affect : Affective Strategies

Mem : Memory Strategies   Social : Social Strategies

Comp : Compensation Strategies $\overline{X}$: Mean of Reading

Meta : Metacognitive Strategies   Strategies Score

The table represents students' reading strategies. In the table 3.1, the highest score of each respondent is underlined. The students who get score between 2.5 to 3.4 are 3 students (10%). 22 students (73.4%) get the score between 3.5 to 4.4. The last, 5 students (16.6%) get the scores between 4.5 to 5; the distributions are 2 students obtaining 5 and 3 students obtaining 4.5.

The mean of reading strategies scores ($\overline{X}$) shows the frequency of strategies used by the respondents. Only 3 students (10%) generally use the reading strategies; they can be categorized in the high frequency. 27 students (90%) can be categorized in medium frequency. No student has the low frequency of reading strategies.

Table 3.2 The Score of Reading Test

Respondents	Reading Score (Y)
1	44
2	39
3	40
4	43
5	39
6	38
7	41
8	42
9	41
10	45
11	41
12	42
13	39
14	42
15	35
16	43
17	47
18	36
19	44
20	40
21	38
22	35
23	37
24	34
25	42
26	44
27	42
28	41

29	45
30	42

From the table above, we can see that the highest score of reading test is 47. It means that the student who gets the highest score can answer 47 out of 50 items. The lowest score is 34, meaning that he/she could answer 34 correctly out of 50 items.

Score 42 is frequently got by the students. It means that they could answer correctly 42 items. There are 6 students (20%) who get this score.

III.2 Analysis of the Data of Reading Strategies Choice

Table 3.3 The Reading Strategies Used by the Students

Reading Strategies	Frequency	%
Cognitive	5	16.7
Memory	1	3.3
Compensation	12	40
Metacognitive	8	26.7
Affective	4	13.3
Social	-	-
Total	30	100

The reading strategy are used by most students (12) is Compensation Strategies. The second place is Metacognitive Strategies, which are used by 8 respondents. No student has the highest score on Social Strategies, 5 respondents have the highest score on Cognitive Strategies and only 1 respondent has the

highest score on Memory Strategies. Finally, 4 respondents have the highest score on Affective Strategies.

Compensation Strategy is the strategy, which is mostly used by the respondents. It means that this strategy is usually and always used by the students. Compensation strategies enable respondents to comprehend a reading passage despite limitation in knowledge. By using these strategies, the respondents are able to make up for inadequate repertoire of grammar and vocabulary. The way used by the respondents in using compensation strategies is guessing. By guessing, the respondents can actually understand the passage. It involves using linguistics clues and using other clues.

The respondents are using linguistic clues and non language clues, so they are able to seek and use language, based on the clues in order to guess meaning of what is read in the target language, in the absence of complete knowledge of vocabulary and grammar.

Metacognitive Strategies are in the second place of dominant strategies that are used by the students. Metacognitive strategies are used by the respondents to plan, arrange, and evaluate their own reading. There are three ways used by the respondents in using metacognitive strategies. They are centering, planning, and evaluating. Centering such as over viewing and linking with already known material means previewing the reading passage to get a complete general idea of what it is about, how it is organized, and how it relates to what the students already know. The respondents also try to focus on the reading passage.

The respondents make plans for their reading, such as finding out how to be a better reader of English, creating good environment for the reading activities, making a clear goal for improving the reading, because students' goals for improving reading are very important. By planning the reading activity, the students have prepared an upcoming reading task.

In evaluating their reading, the respondents also do self monitoring and self evaluating. Self monitoring is noticing and correcting their own error in reading. Self evaluating involves the general progress they have made in English reading.

Cognitive Strategies are in the third place of dominant strategies that are used by the respondents. There are four ways of Cognitive Strategies: practicing, receiving and sending messages, analyzing and reasoning, and creating structure for input and output. The respondents practice their reading by reading a passage several times until they understand a passage and also identifying pattern of sentences.

Receiving and sending massages are other ways of Cognitive Strategies. Skimming, scanning, and also using resources for receiving and sending messages can do these ways. The respondents use skimming in order to get the idea quickly, and then use scanning in order to search for specific details. Reference materials such as glossaries and dictionaries are also used by the respondents, when they

think that a word is vital to their overall comprehension of the text or the students do not have a general sense of its meaning.

In analyzing and reasoning, ways used by the respondents are analyzing expressions and translating. Analyzing an expression that is breaking down a new word, phrase, sentence, or even paragraph into parts, which can be understood by the students. The respondents are also translating the target language into Indonesian language in order to comprehend the passage.

Creating structure for input and output, especially underlining and highlighting through color are used by the respondents. Underlining and highlighting through color are used to emphasize the major points in the passage.

Some respondents use Affective Strategies as dominant reading strategies. These strategies include lowering anxiety and self-encouraging. Listening to the music is one way of lowering anxiety, but only some of the respondents use this way. Sometimes they encourage themselves by making positive statement.

Social Strategies are used by the students of English department, but the use of these strategies are not in the dominant strategies. Since the students, as human being always make relationship among others, of course on reading activity the respondents need to cooperate with others, especially in clarifies his/her reading achievement.

III. 3 Quantitative Analysis

Statistical measures have been used to quantify the degree of relationship between variables. Pearson derived a measure of relationship, the Product Moment Coefficient of Correlation, signified by r (Glass & Hopkins, 1987:70). If we talk about correlation, we can not avoid involving regression because correlation and regression have very close relationship. Regression is used to determine the constant value of regression line and find the percentage of independent variable's contribution to dependent variable (Hickey, 1986:286).

There are two variables in this study. Independent variable is reading strategies score (X). Dependent variable is reading test score (Y).

The formula of the Pearson Product Moment Correlation Coefficient, r, can be shown below:

$$r = \frac{\sum X_i Y_i - n\overline{XY}}{\sqrt{(\sum X_i^2 - n\overline{X}^2)(\sum Y_i^2 - n\overline{Y}^2)}}$$

Whereas:

r = Pearson Product Moment Correlation Coefficient

n = the total amount of the data

X_i = The score of independent variable at respondent –i

Y_i = The score of dependent variable at respondent -i

$\overline{X}$ = Mean of Reading Strategies Score

$\overline{Y}$ = Mean of Reading Proficiency Score

By using statistical computation (SPSS program), the value of correlation coefficient can be obtained. In this study, the value of correlation between reading

strategies score and reading test score is equal to 0.479. In the correlation studies, if the correlation exists, it is important to know the exact evidence that shows whether there is a positive or negative correlation. Positive correlation means that the increasing value of dependent variable (Y) will follow the increasing value of independent variable (X). Negative correlation means that the higher value of independent variables (X) tends to decline with dependent variable (Y).

Calculation of a correlation coefficient between two variables result in a value that ranges from −1.00 to +1.00. A correlation coefficient of 1.00 indicates a perfect positive correlation, and the midpoint of the range, 0, indicates no relationship at all. A correlation coefficient near −1.00 or +1.00, indicates a high degree of relationship.

$$0$$

-1	moderate		moderate	+1
high		low		high
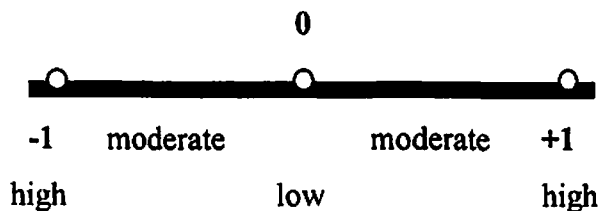
According to Sugiyono (2002:216), approximation of the degrees of correlation is interpreted in the following way:

0.00 − 0.199 very low

0.20 − 0.399 low

0.40 − 0.599 moderate

0.60 − 0.799 high

0.80 − 1.00 very high

The value of correlation is equal to 0.479. It indicates positive correlation, therefore the increasing value of X will be followed by the increasing value of Y. The higher score in the reading strategy, the better score the English proficiency is achieved.

0.479 means that the correlation between two variables in the moderate level is not strong enough.

The statistical hypothesis is:

Ho : there is no correlation between reading strategy choice and reading

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H1 : there is correlation between reading strategy choice and reading

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In order to test whether the correlation is significant or not, t-test is used to prove the correlation and to decide if there is enough evidence to reject the null hypothesis.
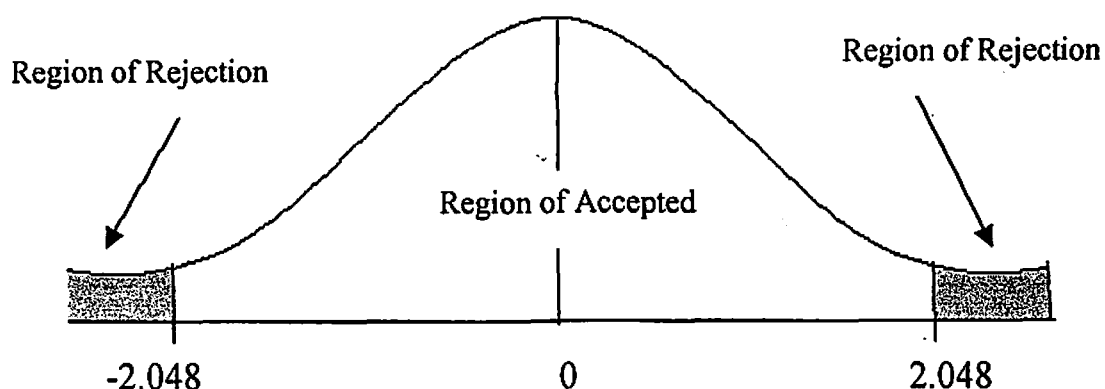
Ho : r = 0

H1 : r ≠ 0

$$t = r\sqrt{\frac{n-2}{1-r^2}}$$

Where r is the correlation coefficient calculated from the data

n is the sample size

Reject Ho if $|t| > t_{\alpha/2; df=n-2}$

Figure 3.1 Critical Area of t-test

Region of Rejection   Region of Rejection

Region of Accepted

-2.048   0   2.048

t-table gives a critical t of 2.048 for $\alpha/2 = 0.025$ and degree of freedom (df) = 28. From the computation, t=2.88, the null hypothesis is rejected with α = 0.05. It means that there is a significant correlation between reading strategies and reading proficiency.

By using regression, the value of determination coefficient $\left|r^2\right|$ can be decided. From the statistical computation, r^2 is equal to 0.229. It can be stated that 22.9% of the value of reading proficiency is influenced by the reading strategies choice and the remaining 77.1% is determined by other factors. Although the number of determination coefficient is quite low, only 0.229 but reading strategies choice significantly affects the reading proficiency. Nevertheless, it is not a dominant factor in the achievement of reading proficiency. Cohen (1990:84) explains the reason for this achievement. He says that reading strategies depend on the text, at what point in the text, under what

circumstances, and what purpose in mind. In other words, a strategy may work well for a reader on a certain text, and not work well for that same reader with a different text.

Cohen's opinion is also supported by Anderson (Singhal, 2001). He argued that reading strategies are not only a matter of knowing which strategies to use, but also in addition, the reader must know how to apply strategies successfully.

This phenomenon may result from the student's unconsciousness or lack of knowledge, especially about reading strategies. If the students have the awareness of reading strategies, they are able to apply appropriate strategies in order to achieve comprehension.

Hosenfeld as cited in Diggest (1999) suggests two important factors that influence students' achievement in reading proficiency: reader variables (interest level in the text, purpose for reading the text, knowledge of the topic, foreign language abilities, awareness of the reading process, and level of willingness to take risks) and text variables (text type, structure, syntax, and vocabulary).

From all the opinions above, Masters, Mori, & Mori (Diggest, 1999) conclude that the achievement of reading proficiency appears to account for the four variables: text, the aspects of the material to be read which will determine the memorization, and later retrieval (e.g. vocabulary difficulty, sentence structure, writing style); task, the reason for reading (e.g. for fun, an examination, to answer questions at the end of a chapter); Strategies, any mental operations that the individual uses; and characteristics of the reader, (knowledge, interest,

motivation). It means that the remaining factors (77.1%) are text, task, and characteristics of the reader.

The relationship between reading strategies choice and reading proficiency is linear. The general linear equation is

Y = a + bX.

Whereas:

Y = vertical axis (dependent variable)

X = horizontal axis (independent variable)

a = the intercept, the point at which the line intersects the y axis

b = the slope of the line, the rate of increase or decrease in Y as a function

of a unit change in X

a and b are also the coefficients regression. The formula for b can be found:

$$b = \frac{\sum XY - n\overline{XY}}{\sqrt{(\sum X^2 - n\overline{X}^2)}}$$

The formula for a:

$$a = \overline{Y} - b\overline{X}$$

By using statistical computation (SPSS Program), the function equation can be obtained. The function equation is Y = 24.3 + 0.882 X. From the statistical computation, the significance value of this data equals to 0.007. It means that the regression coefficient is significant at the 95% level of confidence. The equation

of regression means that per unit increase in X will be followed by the increase of

Y, the increase is 0.882 point.

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Figure 3.2 Regression Plot
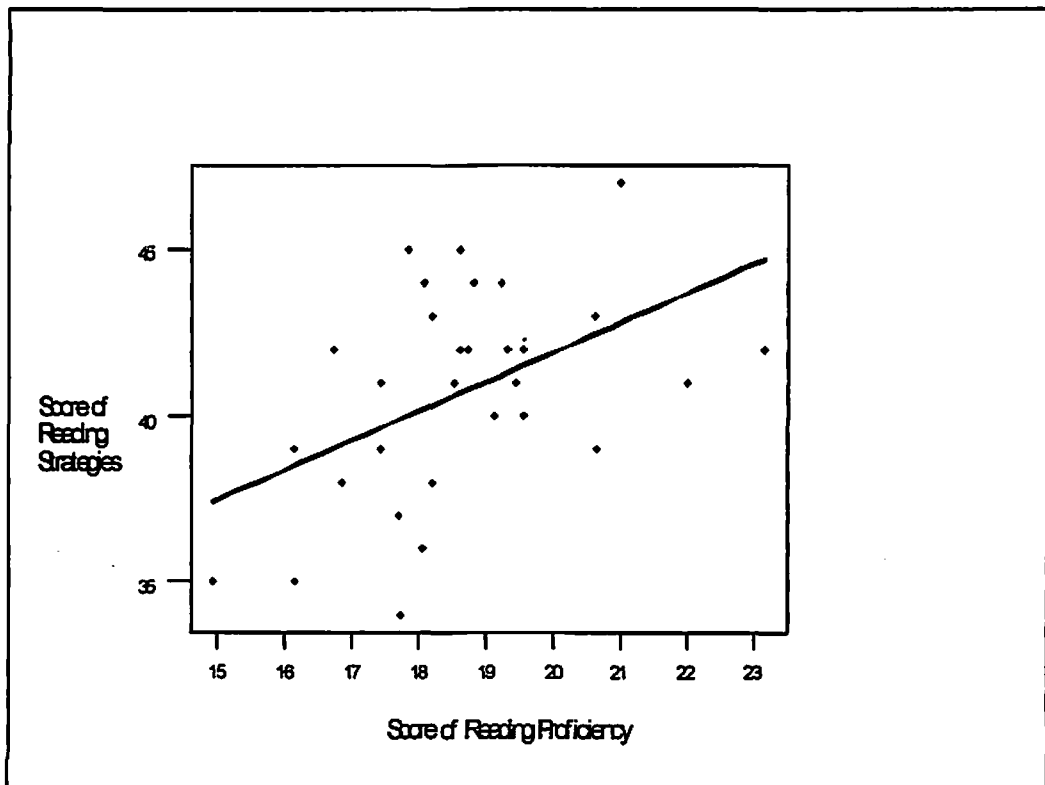
CHAPTER IV

CONCLUSION AND SUGGESTIONS