CHAPTER III

PRESENTATION AND DATA ANALYSIS

Chapter three consists of three subchapters. They are: presentation of the data, quantitative analysis of the data, and interpretation of the result. Here, the data are presented in tables that show the respondents' competence in doing English reading tasks at school and their performance in reading English. The data from those two variables then are analyzed using Pearson product-moment correlation in the quantitative analysis of the data. In interpretation of the result, the writer talks about factors influencing the respondents' performance in reading English.

III.1 Presentation of The Data

The first data is about the respondents' competence in doing English reading tasks at school. In order to discover the competence of the respondents, the writer takes the outcome of English Final Test administered at the end of the Second Trimester of School Year 2001-2002. The data are written in order based on the respondents' numbers of presence list at school

Table 2

The Result of Competence in Doing English Reading Tasks at School

RESPONDENT	SCORE
1	62
2	62

3	92
4	92
5	96
6	62
7	72
8	96
9	98
10	86
11	94
12	84
13	96
14	86
15	72
16	92
17	92
18	74
19	62
20	86
21	82
22	96
23	82
24	72
25	66
26	86
27	86
28	76
29	92
30	86
31	86
32	62

33	94

Table 2 represents the result of the respondents' competence in doing reading tasks at school. It can be seen from the data that all of the respondents have the score above 60. About twenty-three respondents or 69.70 % have the score above 75. In fact, twelve of twenty-three respondents have the score above 90. It indicates that the competence of the respondents in doing reading tasks is good. It is also proved that only ten respondents or 30.30 % have the score less than 75. The highest score is 98 and the lowest score is 62. The mean value is 82.49.

Table 3

The Result of Reading Performance Tests

RESPONDENT	READING PERFORMANCE TESTS			MEAN VALUE OF TOTAL SCORES OF READING PERFORMANCE TESTS
	COMPREHENSION TEST	VOCABULARY TEST	RATE OF READING TEST	
1	40	57	29	42
2	53	63	49	55
3	70	86	80	78.67
4	80	86	74	80
5	80	89	77	82
6	47	54	43	48
7	47	74	51	57.33
8	83	94	74	83.67
9	70	80	54	68

10	63	86	66	71.67
11	80	89	80	83
12	70	57	57	61.33
13	63	77	63	67.67
14	73	77	66	67.67
15	63	63	43	56.33
16	70	97	89	85.33
17	67	83	69	73
18	67	69	49	61.67
19	53	86	60	66.33
20	60	80	40	60
21	60	54	54	56
22	70	83	63	72
23	37	57	46	46.67
24	60	57	57	58
25	60	77	57	64.67
26	47	74	57	59.33
27	83	74	71	76
28	67	63	43	57.67
29	47	63	57	55.67
30	67	54	66	62.33
31	73	89	63	75
32	60	60	80	66.67
33	77	74	46	65.67

Table 3 represents the result of the respondents' performance in reading English. Previously, the writer has been described that the respondents' reading performance in English is assessed by three tests. Table 2 represents the result of the respondents in doing the three tests of reading performance in English. Table 2

also shows the mean value of total scores of reading performance tests done by each respondent.

The second column of Table 3 represents the respondents' performance in comprehending English passages. The data show that about twenty-three respondents or 69.70 % have the score above 60. Only two respondents or 6.06 % have the score which is equal to 60 and about eight respondents or 24.24 % have the score which is less than 60. The respondents' scores which are more than 60 indicate their ability in comprehending English passages as shown by their ability to do English Comprehension tests by using cloze procedures. The respondents who belong to the average level know how to comprehend English passages as shown by their ability to do English Comprehension Tests by using cloze procedures although they get some difficulties in finding the right words to fill in the deletions. The respondents who have the score less than 60 show that their ability in comprehending English passages is considered low. The highest score in comprehension test is 83 and the lowest score is 37. The lowest score {37} indicates bad ability of reading English passages which shows that the respondent may have very little or no understanding of English words and passages. This condition can happen because of some factors from the respondent himself especially his mastery of English. The mean value of comprehension test is 64.64.

The third column in Table 3 shows the respondents' performance in understanding English vocabularies. Twenty-five of thirty-three respondents or 75.76 % get the score above 60. These respondents are considered having good abilities in understanding English vocabularies. They can answer more than half

of the items correctly. Only one respondent or 3.03 % belongs to the average level with the score 60. He can understand the English vocabulary given in the test but he still finds some difficulties. The remaining seven respondents or 21.21 % get the score which is less than 60. These seven respondents have poor understanding of English vocabularies. This can happen because they have very little knowledge of English vocabularies. They almost never read passages in English so that their ability in understanding English words and vocabularies is considered low. The highest score of vocabulary test is 97 and the lowest score is 54. The mean value of this test is 73.48.

The fourth column in Table 3 represents the respondents' performance on their rate of reading. About fourteen respondents or 42.42 % obtain the score which is more than 60. Their speed of reading is quite good. It can be seen from the number of items which were answered correctly. They have been familiar with the content. Only one respondent or 3.03 % obtains the score 60. He has been familiar with the content but he still finds a little problem in understanding it. More than half of the respondents or eighteen respondents or 54.55 % obtain the score below 60. They still find some difficulties on their rate of reading. The rate of reading test is a kind of test which is still new for the respondents. They have never done the English exercises with limited time. Although they have learned and been familiar with the content, they still cannot do the rate of reading test especially because of limited time and environmental situation while doing the test. The highest score is 89. The lowest score is 29. The mean value of the rate of reading test is 59.75.

The last or the fifth column in Table 3 shows the mean value of the total scores of reading performance tests of each respondent. In this presentation of the data, the writer considered the mean value of the total scores of reading performance tests as the respondents' performance in reading English. The data shows that there are fifteen respondents or 45.46 % who get the scores between 60.00 and 75.00. There are only seven respondents or 21.21 % who get the score above 75.00. The rests of the respondents or eleven respondents or 33.33 % get the score less than 60.00. So, it can be concluded that most of the respondents are in the average level, but the number is not half of the total respondents. Also, the number of the respondents in the low level is more than those who are in the high level. It indicates that the respondents still have a poor performance in reading English, especially when the form of the test is different from what they usually get from their English teacher, though the materials are the same. The highest score of reading performance in English is {85.33}, while the lowest score is {46.67}. The mean value of English reading performance tests is {65.72}.

Meanwhile, among the reading performance tests, most respondents get better scores on the vocabulary test. It can happen because while doing the test, the writer reads the items carefully so that the respondents really understand each of the items and answer them correctly. The mean value of the vocabulary test {73.48} is the highest among the reading performance tests.

III.2 Quantitative Analysis of The Data

The quantitative analysis of the data use The Product-Moment Correlation Coefficient devised by Pearson to determine the strength and direction of a relationship between two variables and linear regression to develop the regression equation $\tilde{Y} = a + bX$ with which values of Y can be predicted from known values of X. The values of a and b, the basic components of the regression equation, are determined from a set of sample data where scores for both X and Y are available. Both a and b are best understood by referring to the regression line formed when the regression equation is plotted on graph. Furthermore, the writer also computes the standard error of estimate for $Y(S_{y.x})$. The standard error of estimate $(S_{y.x})$ reflects the strength of the relationship between two variables. It is used to estimate the agreement of a predicted $\tilde{Y}$ score with the "real" Y score. The standard error of estimate is used somewhat as a standard deviation may be used as a unit of measurement along the baseline of a normal distribution. In this analysis, the writer has determined two variables which are used in the calculation of the product-moment correlation coefficient. The variable from which the prediction is made is called the independent variable or predictor variable (X). The variable that is predicted is called the dependent variable or the criterion variable (Y). Thus, in this quantitative analysis, the respondents' competence in doing English reading tasks at school is the predictor variable or independent variable (X) while the respondents' performance in reading English is the criterion variable or dependent variable (Y).

There are some formulas which can be used in the calculation of the product-moment correlation coefficient. In this calculation, the writer applies the raw score correlation formula which uses original measurements.

The raw score correlation formula used in the calculation of the product-moment correlation coefficient is:

$$r = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{n}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{n}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{n}\right)}}$$

where

r = the correlation coefficient between X and Y

ΣXY = the sum of the cross product of X and Y

ΣX = the sum of X scores

ΣX^2 = the sum of the squares for X

ΣY = the sum of Y scores

ΣY^2 = the sum of the squares for Y

n = the numbers of respondents

The hypothetical scores for thirty-three respondents on two variables, as well as the totals needed for the calculation of r by the raw score formula is represented on the following table:

Table 4

The Hypothetical Scores on Two Variables

RESPONDENT	X	Y	X^2	Y^2	XY
1	62	42	3844	1764	2604
2	62	55	3844	3025	3410
3	92	78.67	8464	6188.97	7237.64
4	92	80	8464	6400	7360
5	96	82	9216	6724	7872
6	62	48	3844	2304	2976
7	72	57.33	5184	3286.73	4127.76
8	96	83.67	9216	7000.67	8032.32
9	98	68	9604	4624	6664
10	86	71.67	7396	5136.59	6163.62
11	94	83	8836	6889	7802
12	84	61.33	7056	3761.37	5151.72
13	96	67.67	9216	4579.23	6496.32
14	86	72	7396	5184	6192
15	72	56.33	5184	3173.07	4055.76
16	92	85.33	8464	7281.21	7850.36
17	92	73	8464	5329	6716
18	74	61.67	5476	3803.19	4563.58
19	62	66.33	3844	4399.67	4112.46
20	86	60	7396	3600	5160
21	82	56	6724	3136	4592
22	96	72	9216	5184	6912
23	82	46.67	6724	2178.09	3826.94
24	72	58	5184	3364	4176
25	66	64.67	4356	4182.21	4268.22
26	86	59.33	7396	3520.05	5102.38

27	86	76	7396	5776	6536
28	76	57.67	5776	3325.83	4382.92
29	92	55.67	8464	3099.15	5121.64
30	86	62.33	7396	3885.03	5360.38
31	86	75	7396	5625	6450
32	62	66.67	3844	4444.89	4133.54
33	94	65.67	8836	4312.55	6172.98
Σ	**2722**	**2168.68**	**229116**	**146486.5**	**181582.54**

The appropriate values are substituted and the raw score correlation formula is used as follows:

$$r = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{n}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{n}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{n}\right)}}$$

$$r = \frac{181582.54 - \frac{(2722)(2168.68)}{33}}{\sqrt{\left(229116 - \frac{(2722)^2}{33}\right)\left(146486.50 - \frac{(2168.68)^2}{33}\right)}}$$

$$r = \frac{181582.54 - \frac{5903146.96}{33}}{\sqrt{\left(229116 - \frac{(7409284)}{33}\right)\left(146486.50 - \frac{(4703172.94)}{33}\right)}}$$

$$r = \frac{181582.54 - \frac{178883.24}{33}}{\sqrt{(229116 - 224523.76)(146486.50 - 142520.39)}}$$

$$r = \frac{2699.30}{\sqrt{(4592.24)(3966.11)}}$$

$$r = \frac{2699.30}{\sqrt{182113328.99}}$$

$$r = \frac{2699.30}{4267.71}$$

$$r = 0.632$$

According to table of interpretation of *r* value (see Chapter II), the result above is in the second group (between 0.600 to 0.800), and the interpretation of correlation is sufficient. It means that with *r* value equals 0.632, the competence in doing English reading tasks at school has a sufficient correlation with the respondents' performance in reading English.

Meanwhile, if the writer consults the result of *r* value in the table of *r* product-moment (see Appendix), the writer can see that with :

- *n* = 33 and level of significance 5% ⟹ 0.334 (from the table)
- *n* = 33 and level of significance 1% ⟹ 0.442 (from the table)

It shows that according to the table, if the number of respondents is equal to 33 with level of significance 5%, the *r* value equals 0.334. Also, if the number of respondents is equal to 33 with level of significance 1%, the *r* value is equal to 0.442. The correlation coefficient (*r* value) computed above is equal to 0.632, which means that it is higher than the *r* values with levels of significance 5% and 1% as seen in the table or *r* product-moment. It also means that it is proved that there is a correlation between the respondents' competence in doing English reading tasks at school (independent variable) and the respondents'

performance in reading English (dependent variable). Then, this can also be said that the null hypothesis (Ho) is rejected.

After computing the r value, it is also necessary to compute the linear regression. The formula needed in the computation of linear regression is:

$$\tilde{Y} = a + bX$$

where:

$\tilde{Y}$ (*Y tilde*) = the predicted criterion score for a respondent who obtains score X on the predictor variable or independent variable

a = the intercept of the regression line

b = the regression coefficient

X = the predictor or independent variable

The necessary quantities for the various formulas to be used must first be computed. They are Σx^2, Σy^2, Σxy, $\overline{X}$, $\overline{Y}$

$$\Sigma x^2 = \Sigma X^2 - \frac{(\Sigma X)^2}{n} = 229116 - \frac{(2722)^2}{33} = 4592.24$$

$$\Sigma y^2 = \Sigma Y^2 - \frac{(\Sigma Y)^2}{n} = 146486.50 - \frac{(2168.68)^2}{33} = 142520.39$$

$$\overline{X} = \frac{\Sigma X}{n} = \frac{2722}{33} = 82.48$$

$$\overline{Y} = \frac{\Sigma Y}{n} = \frac{2168.68}{33} = 65.72$$

$$\Sigma xy = \Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{n}$$

$$\Sigma xy = 181582.54 - \frac{(2722)(2168.68)}{33}$$

$$\Sigma xy = 181582.54 - \frac{55903146.96}{33}$$

$$\Sigma xy = 181582.54 - 178883.24$$

$$\Sigma xy = 2699.30$$

The next step is to solve for a, but in order to find a, the writer must first compute b:

$$b = \frac{\Sigma xy}{\Sigma x^2}$$

$$b = \frac{2699.30}{4592.24}$$

$$b = 0.59$$

After finding b, then a is computed:

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

$$a = 65.72 - 0.59(82.48)$$

$$a = 65.72 - 48.66$$

$$a = 17.06$$

From the computation of the formulas above, the regression equation can now be set up as follows:

$$\tilde{Y} = 17.06 + 0.59X$$

Then, the calculation of the standard error of estimate is as follows:

$$S_{y.x} = \sqrt{\frac{\Sigma y^2 - \frac{(\Sigma xy)^2}{\Sigma x^2}}{n-2}}$$

$$S_{y.x} = \sqrt{\frac{142520.39 - \frac{(2699.30)^2}{4592.24}}{33-2}}$$

$$S_{y.x} = \sqrt{\frac{142520.39 - \frac{7286220.49}{4592.24}}{31}}$$

$$S_{y.x} = \sqrt{\frac{142520.39 - 1586.64}{31}}$$

$$S_{y.x} = \sqrt{\frac{140933.75}{31}}$$

$$S_{y.x} = \sqrt{4546.25}$$

$$S_{y.x} = 67.42$$

So, if the writer predicts the performance of a respondent in reading English, the writer inserts the respondent's score on his competence in doing English reading tasks at school (symbolized as X) into the prediction formula. For example, respondent A gets 90 for his competence in doing reading tasks at school. So, the writer can predict that respondent A will get 70.16 for the prediction of his English reading performance (symbolized as $\tilde{Y}$). Clearly, the computation is as follows:

$$\tilde{Y} = 17.06 + 0.59(90.0)$$

$$\tilde{Y} = 70.16$$

Using the standard error of estimation, the writer could then associate the probability of accuracy in predicting the final test score within given ranges, that the $\tilde{Y}$ score will be no more than ± 67.42 from the actual Y score the respondent will get.

The regression line for $\tilde{Y} = 17.06 + 0.59X$ is shown in the following figure:

Figure 1

The Correlation between The Competence in Doing English Reading Tasks at School and The Performance in Reading English

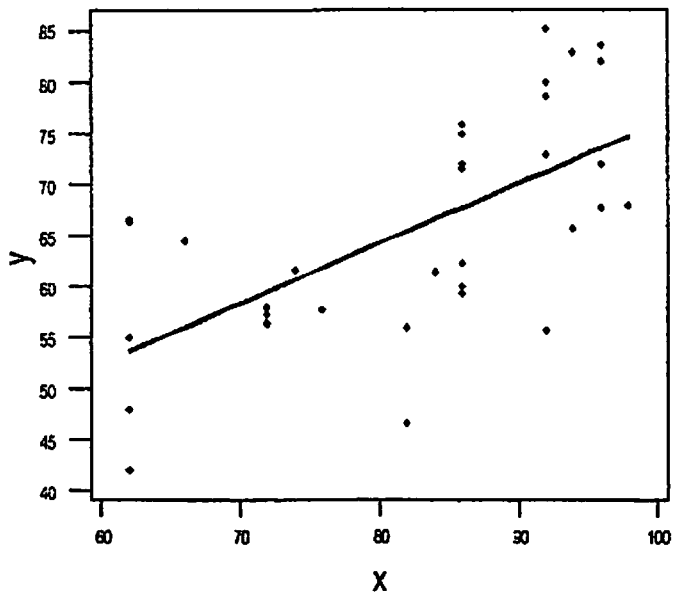

Figure 1 represents the plot of regression line of the correlation between the respondents' competence in doing English reading tasks at school and their English reading performance. Here, the competence in doing English reading tasks at school is symbolized with X, while the English reading performance is symbolized with Y. From figure 1, it can be seen that with *r* value equals 0.632, the writer can draw a straight line. Also, if all the data and the predicted values are pointed at Figure 1, the writer can get the oval shape. The regression line and the

oval shape extend from upper right to lower left. It means that a positive *r* is present and the correlation is a rather strong one. This is reinforced by Popham's statement that if the oval is a fairly narrow one, perhaps "cigar-like" in shape, the relationship is a rather strong one. He also adds that the more closely the oval resembles a straight line, the closer *r* approaches a perfect relationship of plus or minus 1.00 (73). Based on Popham's statement on the previous sentences, the writer concludes that the correlation is positive and rather strong. If the predicted value of $\tilde{Y} = 17.06 + 0.59X$ is pointed at Figure 1, the writer still can draw a straight line and an oval shape.

III.3 Interpretation of The Result

The quantitative analysis of the data computed in the previous subchapters shows that there is a relationship between the competence in doing English reading tasks at school and their performance in reading English. The value of correlation coefficient (*r*) computed in the previous subchapter shows a sufficient correlation between two variables (see Table 1 in Chapter I). This means that the correlation is positive and a rather strong one.

Because the correlation coefficient is positive and a rather strong one, the writer is of the opinion that there must be some factors which influence the respondents in doing the performance tests. Thus, there are a dominant factor and some supporting factors which may affect the respondents' performance in reading English.

III.3.1 The Dominant Factor Influencing The Performance in Reading English

In order to observe the respondents' reading performance in English, the writer involves three kinds of abilities which are needed to be mastered in reading skill. They are: comprehension, vocabulary, and rate of reading abilities. The respondents' performance in reading English shows a significant outcome. Most of the respondents have both high competence in doing English reading tasks at school and performance in reading English. But, there are a few respondents who do not obtain those results, as shown from table 3. The respondents who are in this condition, actually, also have adequate mastery in reading. This condition suggests a dominant factor which affect the respondents' performance in reading English - that is the respondents' knowledge of the foreign language (in this study, the foreign language is English). The writer is of the opinion that the respondents' performance in reading English is affected by the knowledge of English as the foreign language. This assumption is reinforced by Ulijn and Kempen. According to their research, poor foreign language comprehension is not due to insufficient knowledge of grammar, but to lack of conceptual knowledge: the meanings of words and subject knowledge. It follows that, since native speaker readers may also lack knowledge of the subject matter, the only difference between first and foreign language readers is in their knowledge of vocabulary (Cited in Alderson and Urquhart 13). Related to this study, the writer guesses that one dominant factor which may influence the respondents' performance in reading English is not their knowledge of grammar

but their ability to comprehend passages and their knowledge of vocabulary. However, these phenomena are also supported by Alderson, Bastien and Madrazo. In their research, they provide evidence which suggests a student's knowledge of the foreign language is more important to the comprehension of foreign language texts than is reading ability in the first language (Cited in Alderson and Urquhart 13). So, the knowledge of the foreign language - include the knowledge of comprehending texts or passages, conceptual knowledge and the knowledge of vocabulary - is the dominant factor in reading performance in English as the foreign language.

III.3.2 The Supporting Factors Influencing The Performance in Reading English

There are some other factors which support the main factor mentioned above. The writer discovers some supporting factors which may affect the respondents' performance in reading English: reading resources, the competence of the teacher, language environment, and the internal conditions of the respondents.

The first supporting factor is reading resources. Here, reading resources means the availability and use of other English books which contain reading passages, other than the English books used in the classroom. The availability and use of other relevant English books and reading materials are really important to enrich the respondents' performance in reading English. As David Williams said in the conclusion of his research, the importance of relevant reading materials

supplied in sufficient quantity cannot be overemphasized. He explained further that textbooks and supplementary readers should include content which is culturally and environmentally appropriate, and should be based on vocabulary selection suitable to the needs of language readers (49). Furthermore, the availability and use of dictionary also affect the respondents' performance in reading English. The writer finds out that most of the respondents really depend on the availability and use of a dictionary whenever they learn English. They are used to opening the dictionary whenever they find new words. When the teaching reading process begins, the teacher often asks them to find the meanings of new words then translate the passage given. So, the writer assumes that the availability and use of other relevant English books is needed to enhance their performance in reading English. The availability and use of a dictionary is also needed, but the respondents should not use it very frequently.

The second supporting factor is the competence of the teacher. The availability and use of other relevant books and a dictionary will not be very useful without the competence of the teacher. This opinion is reinforced by Thonis' statement that the competence of the teacher is probably the most important consideration in the selection of any set of materials designed to teach pupils to read (195). Furthermore, Thonis explained that teacher competence as reflected in the language or languages of the pupils, in the ability to organize and plan, in the knowledge of reading as a subject, in the methods and techniques of developing reading skills, in the tolerance of pupil activity, in the understanding of pupils' total development, and in the acceptance of and valuing of all pupils,

will contribute in large measure to the effectiveness of the materials selected (196). So, it can be concluded that the availability and use of other relevant English books combined with a competent teacher are really needed by the respondents in order to enhance their performance in reading English and their mastery in reading English.

The third is the language environment. Here, the language environment means the language background of the family and the opportunity for using English as a foreign language at home and at school. The writer is of the opinion that if the respondents often practice their speaking or reading skills with their friends at school and their members of family can speak or read English well, the respondents will have high performance in reading English. This opinion is reinforced by David Williams' statement in the conclusion of his research, that children obviously do better in reading when classroom activities are reinforced in the home environment (48). The last factor is the internal conditions of the respondents. The internal conditions include the health condition, the classroom situation when the tests are conducted, and the limited time available when the tests are conducted. The health condition of the respondents and the classroom situation when the tests are conducted, are included in the internal conditions of the respondents because they faced The Final Test a few days before the reading performance tests are conducted. So, the writer is of the opinion that those conditions may affect their performance in reading English. The limited time available when the reading performance tests are conducted is also included

because the respondents are used to doing any school tasks in a long time. Consequently, the limited time may affect their performance in reading English.

It may happens that those factors mentioned above do not influence most of the respondents who have both high competence in doing English reading tasks at school and performance in reading English directly, because they probably practice and improve their English by themselves or joining an English course, or they have been brilliant since the day they were born.

But, in general, all the dominant and supporting factors described above influence all the respondents, especially those who have high competence in doing English reading tasks at school but obtain low performance in reading English. According to the writer, the dominant and supporting factors described above cause the discrepancy of the respondents in obtaining better results in reading performance tests.

CHAPTER IV

CONCLUSION AND SUGGESTIONS