

**BAB III****PRESENTATION AND ANALYSIS OF THE DATA**

The TOEFL model test was given to the students on May, 23, 1997. It was attended by 29 out of 60 students (48.3 %) who had registered before the test. From 29 students (the testees), only one failed to be taken as a respondent. After the writer selected the testees from their questionnaires, it was found that he did not take one of the three skill subjects, the Auditory Comprehension II, although his TOEFL score is 547.

**Table 3.1 The attendance list of testees**

Note : St. No. = student number, Y=year of student, R=register for the test, A=attend the test, N=amount of data

| St. No. | Y    | R | A | St. No. | Y    | R | A | St. No. | Y    | R | A |
|---------|------|---|---|---------|------|---|---|---------|------|---|---|
| 1       | 1993 | ✓ | - | 9       | 1994 | ✓ | ✓ | 17      | 1992 | ✓ | ✓ |
| 2       | 1993 | ✓ | - | 10      | 1994 | ✓ | - | 18      | 1992 | ✓ | ✓ |
| 3       | 1993 | ✓ | ✓ | 11      | 1994 | ✓ | ✓ | 19      | 1992 | ✓ | ✓ |
| 4       | 1993 | ✓ | ✓ | 12      | 1992 | ✓ | ✓ | 20      | 1992 | ✓ | - |
| 5       | 1993 | ✓ | ✓ | 13      | 1992 | ✓ | ✓ | 21      | 1992 | ✓ | - |
| 6       | 1992 | ✓ | ✓ | 14      | 1992 | ✓ | - | 22      | 1991 | ✓ | - |
| 7       | 1994 | ✓ | ✓ | 15      | 1992 | ✓ | - | 23      | 1994 | ✓ | - |
| 8       | 1994 | ✓ | ✓ | 16      | 1992 | ✓ | - | 24      | 1994 | ✓ | ✓ |

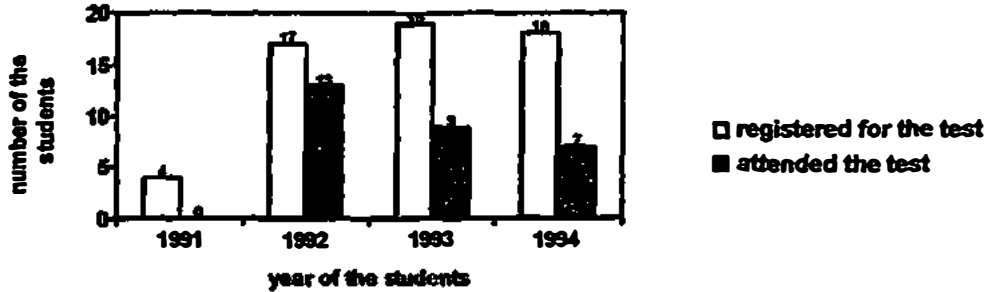
| St. No. | Y    | R | A | St. No. | Y    | R | A | St. No. | Y    | R  | A  |
|---------|------|---|---|---------|------|---|---|---------|------|----|----|
| 25      | 1992 | ✓ | ✓ | 38      | 1994 | ✓ | - | 51      | 1992 | ✓  | ✓  |
| 26      | 1992 | ✓ | ✓ | 39      | 1993 | ✓ | ✓ | 52      | 1993 | ✓  | -  |
| 27      | 1992 | ✓ | ✓ | 40      | 1993 | ✓ | ✓ | 53      | 1992 | ✓  | ✓  |
| 28      | 1994 | ✓ | - | 41      | 1992 | ✓ | - | 54      | 1993 | ✓  | ✓  |
| 29      | 1994 | ✓ | - | 42      | 1992 | ✓ | - | 55      | 1993 | ✓  | ✓  |
| 30      | 1994 | ✓ | - | 43      | 1991 | ✓ | - | 56      | 1992 | ✓  | ✓  |
| 31      | 1994 | ✓ | - | 44      | 1993 | ✓ | - | 57      | 1993 | ✓  | ✓  |
| 32      | 1994 | ✓ | - | 45      | 1993 | ✓ | - | 58      | 1993 | ✓  | ✓  |
| 33      | 1994 | ✓ | - | 46      | 1993 | ✓ | - | 59      | 1993 | ✓  | -  |
| 34      | 1994 | ✓ | ✓ | 47      | 1993 | ✓ | - | 60      | 1993 | ✓  | ✓  |
| 35      | 1994 | ✓ | ✓ | 48      | 1993 | ✓ | - |         |      |    |    |
| 36      | 1994 | ✓ | - | 49      | 1991 | ✓ | - |         |      |    |    |
| 37      | 1994 | ✓ | - | 50      | 1991 | ✓ | - | N       | -    | 60 | 29 |

The students who register for the test are the 1991, 1992, 1993 and 1994 students. The 1991 students were not taken as respondents for they were not attended the test. The most enthusiastic testees were the 1992 students since there were 13 out of 17 (76.45%) 1992 students who registered for the test attended it. Since most of them used to be the writer's classmates, it was easier for the writer to make a continuous contact with them. Another reason is they as students in the tenth semester have enough confidence to attend the test because of their linguistic background compared to the other students is the highest. These students had no more lectures to attend, so they were able to arrange their time for attending the test.

Whereas in the case of the 1993 students, 9 out of 19 (47.4 %) students who register attended the test and of the 1994 students, only 7 out of 18 (38.9%) students

who register did the same. The following histogram shows clearly about the students who register for and attend the test.

Figure 3.1. Histogram of table 3.1



**III.1. THE LANGUAGE ACHIEVEMENT OF THE TESTEES SEEN FROM THEIR SCORES ON SKILL SUBJECTS**

Table 3.2 The relative scores of three skill subjects of 28 testees

| Testee No. | Auditory Comp. II | E.Struc ture II | Ext. Reading | Testee No. | Auditory Comp. II | E.Struc ture II | Ext. Reading |
|------------|-------------------|-----------------|--------------|------------|-------------------|-----------------|--------------|
| 1          | B                 | A               | C            | 15         | C                 | B               | B            |
| 2          | C                 | C               | B            | 16         | A                 | A               | B            |
| 3          | B                 | A               | C            | 17         | C                 | A               | C            |
| 4          | B                 | A               | B            | 18         | B                 | B               | A            |
| 5          | B                 | B               | B            | 19         | A                 | B               | B            |
| 6          | B                 | A               | A            | 20         | C                 | A               | B            |
| 7          | C                 | B               | C            | 21         | C                 | B               | A            |
| 8          | A                 | B               | B            | 22         | B                 | A               | B            |
| 9          | B                 | A               | C            | 23         | B                 | B               | B            |
| 10         | C                 | A               | A            | 24         | A                 | A               | A            |
| 11         | B                 | C               | B            | 25         | B                 | A               | A            |
| 12         | C                 | A               | B            | 26         | B                 | A               | B            |
| 13         | D                 | C               | C            | 27         | C                 | B               | A            |
| 14         | C                 | A               | B            | 28         | B                 | B               | C            |

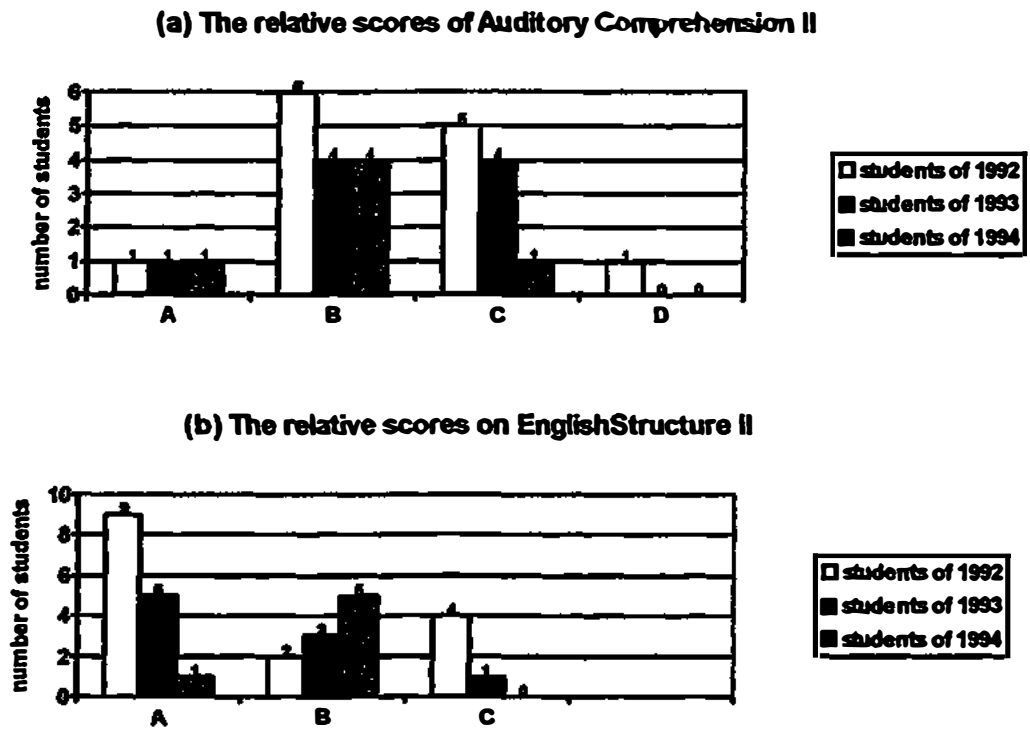
In Auditory Comprehension II, most testees (13 or 46.4% of them) got a B,

10 testees (35.7% of them) a C, 4 testees (14.3%) an A and only one testee (3.6% of them) got a D.

In English Structure II, most testees (15 or 53.6% of them) got an A, 10 testees (35.7% of them) a B, and 3 testees (10.7%) a C. There is no testee who got a D.

In Extensive Reading, most testees (14 or 50% of them) got a B, 7 testees (25% of them) an A and also 7 testees who got a C. There is no testee who got a D.

Figure 3.2 Histogram of table 3.2



(c) The relative scores on Extensive Reading

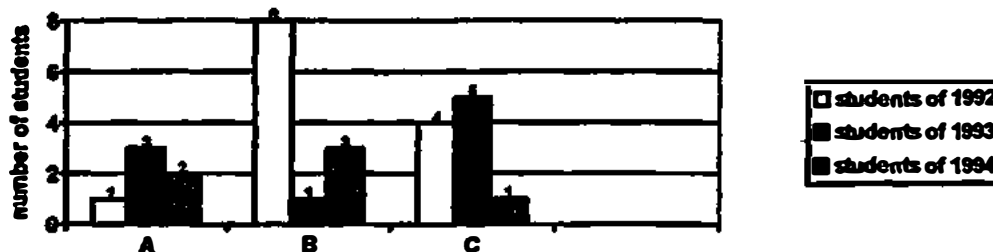


Figure 3.2 (a) above shows that only 3 out of 28 (10%) testees who got an A or they have an excellent achievement for the skill subject on listening. Most of them, 14 out of 28 (50%) testees have a good achievement, a fair achievement is shown by 10 out of 28 (35.7%) testees and there is only one testee (3.5%) who got a D that she has a poor achievement on listening skill.

Mostly, the testees of 1992 students have a good achievement on listening since 6 out of 13 (46.2%) testees got a B and 5 testee (38.45%) got a C or they have a fair achievement. One testee (7%) got a D which means she has a poor achievement and there is also a student who got an A which means she has an excellent achievement on listening skill.

Only one student out of 9 (11%) testees of 1993 students have an excellent achievement for he got an A for listening comprehension. There are 4 testees (44%) in each who has a good and a fair achievement in listening skill and there is no testee who got a D or having a poor achievement.

The testees of 1994 students are leading in two categories since 4 out of 6 (66%) have a good achievement and also a students has a fair achievement in

A different finding was found among the testees of 1993 students who mostly (5 from 6 testees or 83.3% of them ) have a fair achievement in reading. Only one testee (16.6%) who has a good achievement and 3 of them (50%) who have an excellent achievement in reading.

The same condition with the testees of 1992 students, the testees of 1994 student have a good achievement in reading, since there are 3 out of 6 (50%) of them got a B. The other 2 testees (33.3%) got an A or have an excellent achievement and only one testee (16.67%) may have a fair achievement in reading.

### **III.2. THE LANGUAGE PROFICIENCY OF THE TESTEES SEEN FROM THEIR TOEFL**

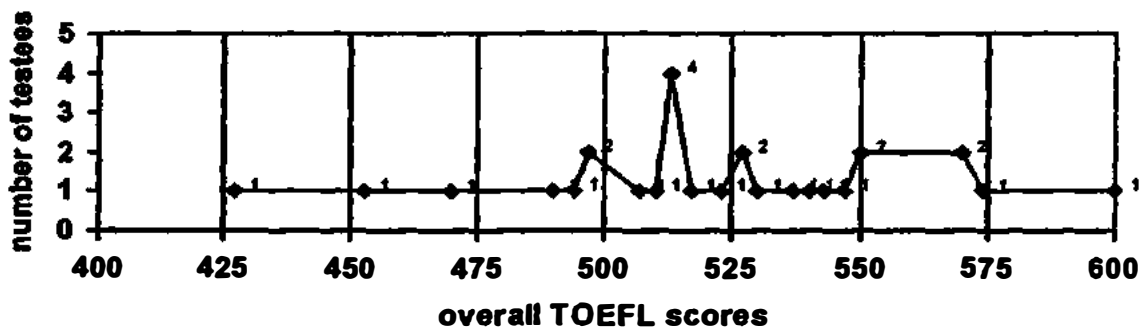
Table 3.3. The overall scores of TOEFL model test of 28 testees.

| Testee No. | Overall TOEFL score | Testee No. | Overall TOEFL score |
|------------|---------------------|------------|---------------------|
| 1          | 527                 | 15         | 570                 |
| 2          | 453                 | 16         | 513                 |
| 3          | 540                 | 17         | 513                 |
| 4          | 574                 | 18         | 523                 |
| 5          | 510                 | 19         | 547                 |
| 6          | 550                 | 20         | 527                 |
| 7          | 494                 | 21         | 570                 |
| 8          | 600                 | 22         | 517                 |
| 9          | 497                 | 23         | 537                 |
| 10         | 507                 | 24         | 543                 |
| 11         | 513                 | 25         | 570                 |
| 12         | 550                 | 26         | 513                 |
| 13         | 427                 | 27         | 497                 |
| 14         | 530                 | 28         | 490                 |

Generally, the scores of TOEFL model test of the testees are good for there is no testees got less than 400 points. The lowest score is 427 points and the highest score is 600 point. Only 25% of the testees or 7 out of 28 got the overall TOEFL score in scale of 400 to 499 points, and mostly 75% of the testees (21 of them) got the overall TOEFL score in scale of 500 to 599 points. There is only a testee (3.6%) who has an excellent score for he got 600 points

The figure 3.3 below shows the amount of testees in each score. There are 4 out of 28 (14.3% of them) got 513, 2 testees (7% of them) got 497, 2 testees got 527, 2 testees got 550, and also 2 testees got 570. There is only one testee (3.6 % of them) in each following scores: 427, 453, 470, 490, 494, 507, 510, 517, 523, 530, 540, 543, 547, 574, and 600.

Figure 3.3 The frequency polygon of table 3.3



**Table 3.4 The converted scores of each TOEFL section of 28 testees**

| Testee No. | Converted Score          |                                |                        | Testee No. | Converted Score          |                                |                        |
|------------|--------------------------|--------------------------------|------------------------|------------|--------------------------|--------------------------------|------------------------|
|            | Listening Comprehension. | Structure & Written Expression | Reading Comp. & Vocab. |            | Listening Comprehension. | Structure & Written Expression | Reading Comp. & Vocab. |
| 1          | 51                       | 53                             | 54                     | 15         | 53                       | 58                             | 60                     |
| 2          | 47                       | 44                             | 43                     | 16         | 44                       | 53                             | 57                     |
| 3          | 47                       | 61                             | 54                     | 17         | 44                       | 58                             | 52                     |
| 4          | 57                       | 56                             | 59                     | 18         | 53                       | 48                             | 56                     |
| 5          | 51                       | 51                             | 54                     | 19         | 57                       | 53                             | 54                     |
| 6          | 50                       | 57                             | 58                     | 20         | 53                       | 51                             | 54                     |
| 7          | 48                       | 47                             | 53                     | 21         | 45                       | 49                             | 47                     |
| 8          | 61                       | 61                             | 58                     | 22         | 48                       | 53                             | 54                     |
| 9          | 51                       | 50                             | 48                     | 23         | 50                       | 54                             | 58                     |
| 10         | 47                       | 51                             | 54                     | 24         | 50                       | 54                             | 59                     |
| 11         | 48                       | 56                             | 52                     | 25         | 47                       | 63                             | 61                     |
| 12         | 53                       | 56                             | 58                     | 26         | 47                       | 53                             | 54                     |
| 13         | 37                       | 46                             | 45                     | 27         | 49                       | 49                             | 51                     |
| 14         | 42                       | 48                             | 52                     | 28         | 49                       | 48                             | 50                     |

In the Listening Comprehension section, the converted score range between 37 and 61. It is mentioned in the previous page that below 40 in the converted score is considered to be poor. Among testees there is one poor score (37) as the lowest score and one excellent score (61) as the highest one.

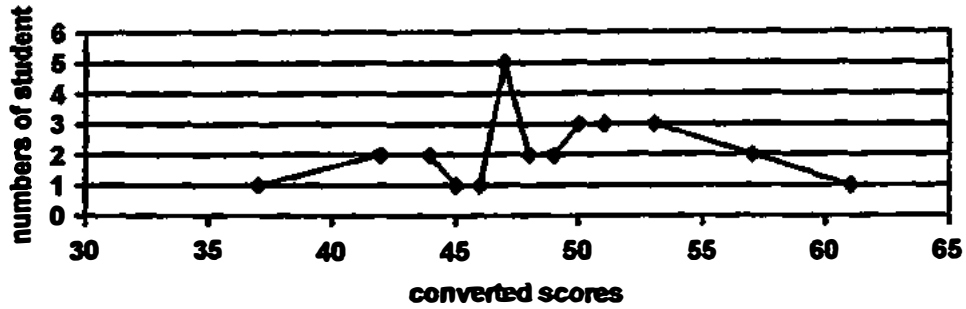
In the Structure and Written Expression section, the converted score range between 44 and 63. There is no poor score, most testees have good scores and some of them have excellent scores (60-63).

In the Reading Comprehension and Vocabulary, the converted scores range between 43-61. There is also no poor score here, most testees also have good scores and some of them have excellent scores (60-61).

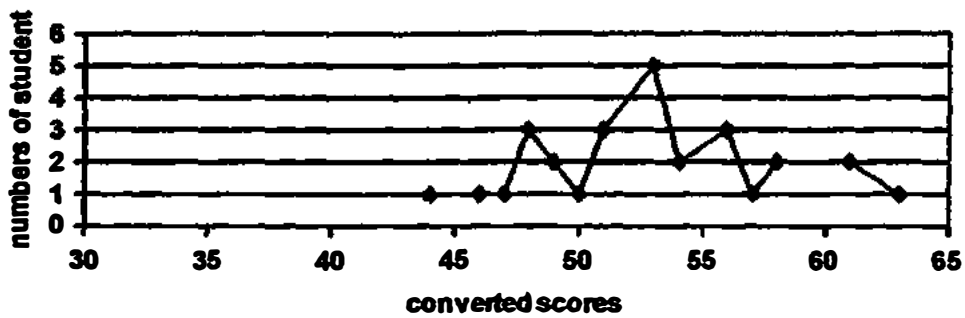


Figure 3.4 Frequency polygon of table 3.4

**(a) Listening Comprehension Section**



**(b) Structure and Written Expression section**



**(c) Reading Comprehension and Vocabulary section**

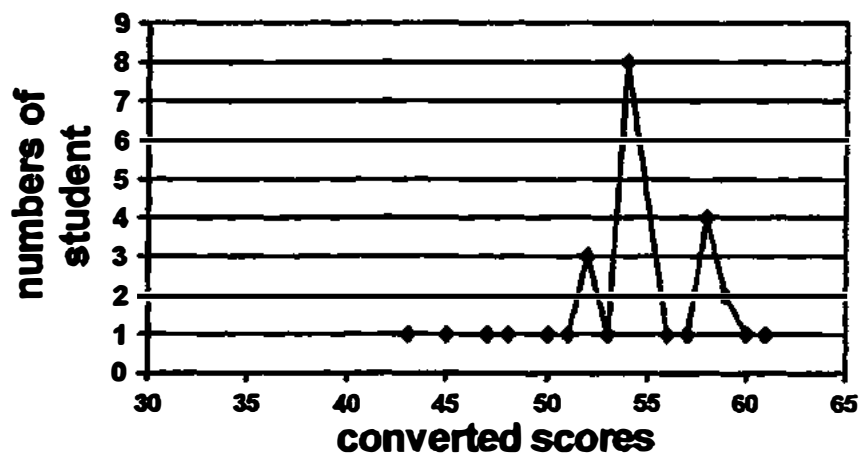


Figure 3.4 (a) shows the number of testees in the converted scores on Listening Comprehension. 5 testees (17.9% of them) got 47, 3 testees (10.7% of them) got 50, 3 testees got 51 and also 3 testees got 53. There are 2 testees (7.1% of them) in each following scores: 42, 44, 48, 49, and 57. There is only one testee (3.6% of them) in each following scores: 37, 45, 46, and 61. One testee got a poor score since he got less than 40. Another one testee got an excellent score since he got more than 60. The others are in good scores since their scores range between 40-59.

The converted scores in Structure and Written Expression are shown in Figure 3.4 (b). 5 testees got 47, 3 testees in each following scores: 48, 51, and 56. There are 2 testees in each following scores: 49, 54, 58 and 61. There is one testee in each following scores: 44, 46, 47, 50, 57, and 63. There are two testees got excellent scores, no testee got poor scores, and other testees got good scores.

Like in structure section, there is no testee got a poor score in reading section. Most testees ( 26 or 96.4% of them) got good scores range between 43 and 59. There are two testees got good scores 60 and 61.

### **III.3. THE RELATIONSHIP BETWEEN THE SCORES ON SKILL SUBJECTS AND THE SCORES ON TOEFL**

In this study, the writer wants to know how the language achievement of the testees relates to the language proficiency of the testees. The testees' achievement is reflected

in their relative scores on skill subjects and their proficiency is reflected in their converted scores on TOEFL. Here, the writer will use a statistical test, namely correlation, to calculate the relationship between two variables. Since there are three sections in the TOEFL used in this study, the writer will match the converted score from each section with the appropriate relative scores from each skill subjects.

**III.3.1. The relationship of the relative scores of Auditory Comprehension II and the TOEFL converted score of Listening Comprehension**

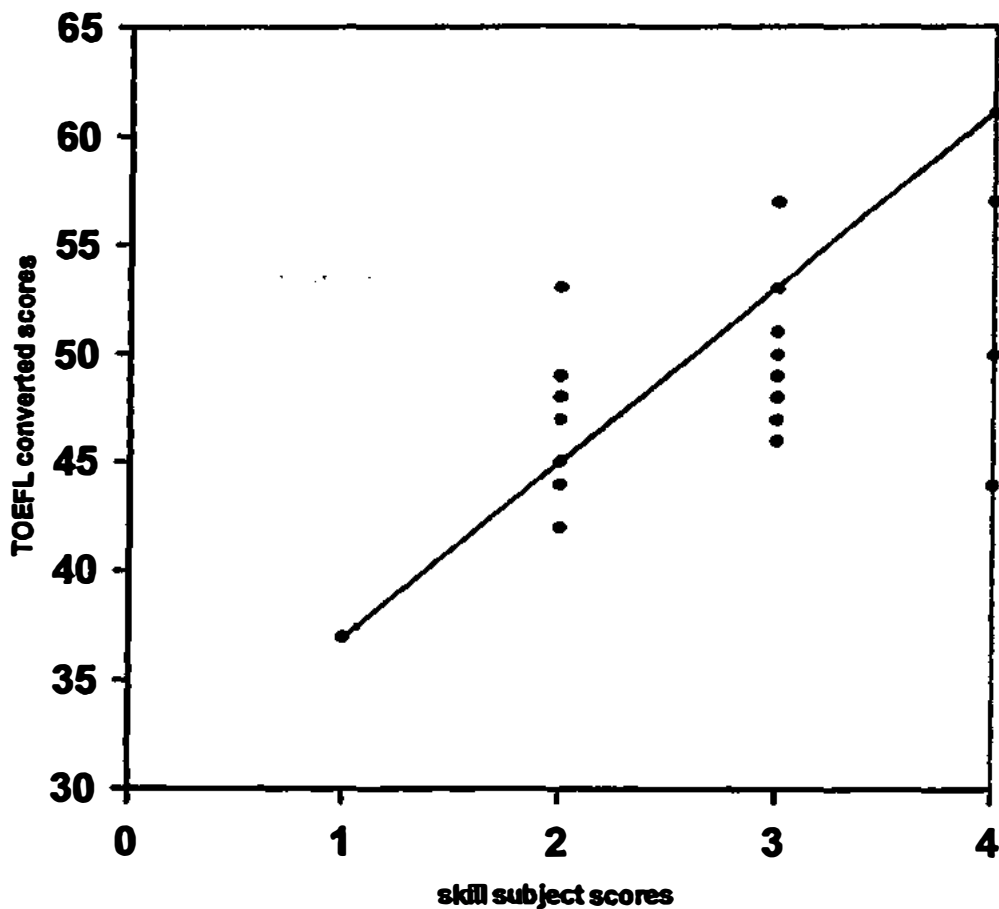
**Table 3.5 The relative scores of Auditory Comprehension II and the TOEFL converted scores of Listening Comprehension**

| No. | Skill subject scores | TOEFL scores | No. | Skill subject scores | TOEFL scores |
|-----|----------------------|--------------|-----|----------------------|--------------|
| 1   | B (3)                | 51           | 15  | C(2)                 | 53           |
| 2   | C (2)                | 47           | 16  | A(4)                 | 44           |
| 3   | B(3)                 | 47           | 17  | C(2)                 | 44           |
| 4   | B(3)                 | 57           | 18  | B(3)                 | 53           |
| 5   | B(3)                 | 51           | 19  | A(4)                 | 57           |
| 6   | B(3)                 | 50           | 20  | C(2)                 | 53           |
| 7   | C(2)                 | 48           | 21  | C(2)                 | 45           |
| 8   | A(4)                 | 61           | 22  | B(3)                 | 48           |
| 9   | B(3)                 | 51           | 23  | B(3)                 | 50           |
| 10  | C(2)                 | 47           | 24  | A(4)                 | 50           |
| 11  | B(3)                 | 46           | 25  | B(3)                 | 47           |
| 12  | C(2)                 | 53           | 26  | B(3)                 | 47           |
| 13  | D(1)                 | 37           | 27  | C(2)                 | 49           |
| 14  | C(2)                 | 42           | 28  | B(3)                 | 49           |

In correlational research, if the correlation exists, it is important to know the exact evidence that shows whether there is a real correlation, a positive or negative

correlation. It is also important to decide whether the correlation is a linear one since the common quantitative measurements are based on the assumption of a linear correlation. (Butler,1995:140). In order to get those informations, the writer makes the scatterplot (scatter diagram) of the table like this :

Figure 3.5 The scatterplot of the table 3.5

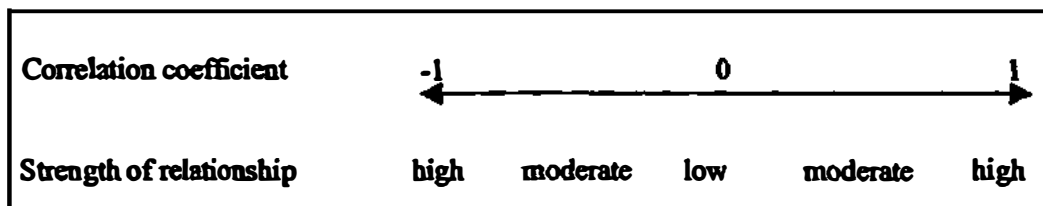


The scatterplot shows that there is a positive correlation until certain degree between the two variables, scores on skill subjects and scores on TOEFL. The

correlation is not strong enough since the dots are not clustered so tightly as to form a straight line which represents a perfect relationship (maximum strength). (MacMillan, 1993:214).

Although the diagram gives informations about the correlation between the two variables, it does not give an exact quantitative number about the correlation degree. In order to complete the informations from the diagram, the writer calculates a descriptive statistics that is known as the correlation coefficient. The writer will use the Pearson product-moment coefficient (represented by  $r$ ) since it is used when both of the variables use continuous scales, such as scores from achievement tests, grade point average and age.(MacMillan,1993:216). The following figure shows the relationship of strength and direction of correlation :

Figure 3.6 Strength and direction of correlation coefficient  $r$



(taken from MacMillan,1993:216)

Calculation of a correlation coefficient between two variables results in a value that ranges from  $-1.00$  to  $+1.00$ . A correlation coefficient of  $1.00$  indicates a perfect positive relationship, and the midpoint of this range,  $0$ , indicates no relationship at all. A coefficient correlation near unity, either  $-1.00$  or  $+1.00$ , indicates a high degree of relationship. Because of the complexity of the phenomena, correlation

coefficients in educational measures seldom reach the maximum points of +1.00 and -1.00. Any coefficient that is greater than plus or minus .90 is considered to be very high. The moderate relationship usually ranges around plus or minus 0.50. There is no exact border in determining the degree of moderate relationship.

In this study in order to know the number of coefficient correlation, the writer uses this formulae:

$$r = \frac{n [\Sigma(X_i Y_i) - (\Sigma X_i)(\Sigma Y_i)]}{\sqrt{[n\Sigma X_i^2 - (\Sigma X_i)^2][n\Sigma Y_i^2 - (\Sigma Y_i)^2]}}$$

whereas :

- r = the number of coefficient correlation
- n = the total amount of the data
- X<sub>i</sub> = the scores of skill subject of respondent-i
- Y<sub>i</sub> = the TOEFL score of respondent-i

From the table can be calculated :

$$r = \frac{n [\Sigma(X_i Y_i) - (\Sigma X_i)(\Sigma Y_i)]}{\sqrt{[n\Sigma X_i^2 - (\Sigma X_i)^2][n\Sigma Y_i^2 - (\Sigma Y_i)^2]}}$$

r=0.5

For the correlation between the skill subjects' scores and the TOEFL scores is moderate and has a positive value, it fits to the diagram. The value of coefficient correlation  $r=0.5$  shows a moderate positive relationship between the skill subject's scores and the TOEFL scores. It can be stated that if the relative scores on Auditory Comprehension II is high, the TOEFL converted score will also high.

Ary (Ary,1990:153) said that one way of determining the degree to which

one can predict one variable from the other is to calculate an index called the coefficient of determination. The coefficient of determination is the square of the correlation coefficient. It gives the percentage of variance in one variable that is associated with the variance in the other. From this opinion, the writer can obtain the coefficient determination of  $r=0.5$  that is

$$\begin{aligned}\text{Coefficient of determination} &= r^2 \\ &= 0.5^2 = 0.25\end{aligned}$$

It means that 25 percent of the variance in scores of skill subjects is associated with variance in scores of TOEFL.

The writer will test the result of the research through the significant testing to know whether the correlation is not equal with zero. To do the test the writer will use normal distribution, with the following hypothesis :

HO : the coefficient correlation between the mark on skill subject and the TOEFL score is equal to zero.

H1 : the coefficient correlation between the mark on skill subject and the TOEFL score is not equal to zero.

The formulae is :

$$Z = \frac{(n-3) \ln \frac{(1+r)(1-0)}{(1-r)(1+0)}}$$

whereas : n = the amount of the data

r = the value of coefficient correlation

0 = the zero value of coefficient correlation

From the former calculation the writer gets :

$$Z = \frac{(28-3) \ln (1+r)(1-0)}{2 (1-r)(1-0)}$$

$$Z = \frac{(28-3) \ln (1+0.5)(1-0)}{2 (1-0.5)(1+0)}$$

$$Z = 13.7$$

After that the writer stated her confidential grade that is 97%. It means that = 100%-97%. = 3%

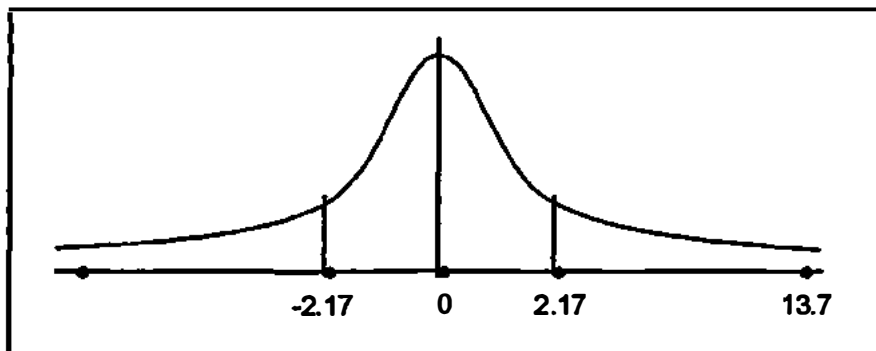
From the table Z, she gains the value of  $(\alpha/2)$  for = 3% is

$$Z(\alpha/2) = Z(1.5\%) = 2.17$$

It means  $Z(\alpha/2) = 2.17$

Then the result is shown in the diagram as follow :

Figure 3.7 Normal curve of  $Z=13.7$



Because 13.7 is excluded from the curve ( the value of Z lies between the negative and positive value of the table), then  $H_0$  is denied. It means that statistically there is a moderate positive relationship between the scores on skill subject (Auditory Comprehension II) and the TOEFL score (Listening Comprehension). It means that raising in the relative scores on Auditory Comprehension II can be followed by the



TOEFL converted score on Listening Comprehension. The students having good relative scores on this skill subject may also have good converted TOEFL scores on listening section.

**III.3.2. The relationship of the relative scores on English Structure II and the TOEFL converted scores on Structure and Written Expression.**

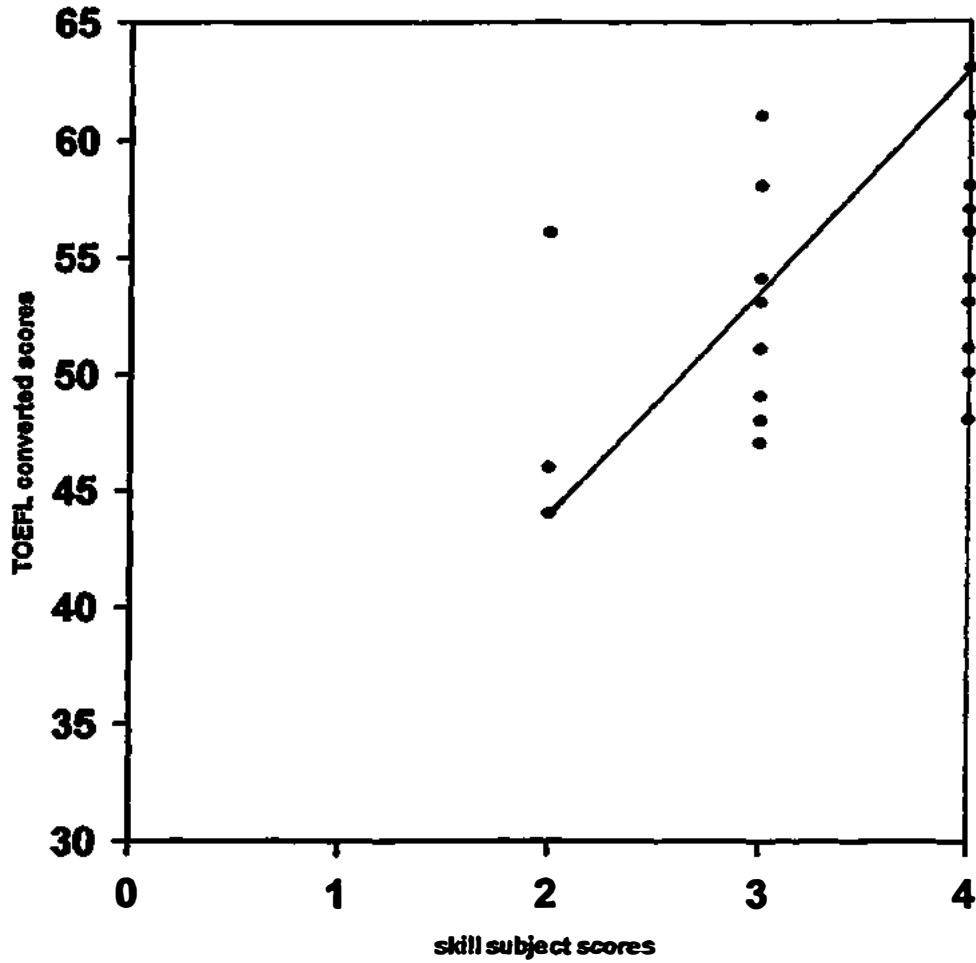
**Table 3.6 The relative scores of English Structure II and the converted scores of Structure and Written Expression**

| No. | Skill subject scores | TOEFL scores |
|-----|----------------------|--------------|
| 1   | A                    | 53           |
| 2   | C                    | 44           |
| 3   | A                    | 61           |
| 4   | A                    | 56           |
| 5   | B                    | 51           |
| 6   | A                    | 57           |
| 7   | B                    | 47           |
| 8   | B                    | 61           |
| 9   | A                    | 50           |
| 10  | A                    | 51           |
| 11  | C                    | 56           |
| 12  | A                    | 56           |
| 13  | C                    | 46           |
| 14  | A                    | 48           |

| No. | Skill subject scores | TOEFL scores |
|-----|----------------------|--------------|
| 15  | B                    | 58           |
| 16  | A                    | 53           |
| 17  | A                    | 58           |
| 18  | B                    | 48           |
| 19  | B                    | 53           |
| 20  | A                    | 51           |
| 21  | B                    | 49           |
| 22  | A                    | 53           |
| 23  | B                    | 54           |
| 24  | A                    | 54           |
| 25  | A                    | 63           |
| 26  | A                    | 53           |
| 27  | B                    | 49           |
| 28  | B                    | 48           |

Like the first statistical analysis, the writer follows the first step that is making a scatterplot (scatter diagram) of the table above as the following :

Figure 3.8 The scatterplot of the table 3.6



The diagram shows that there is a positive correlation between the two variables although it is not strong since the dots are not clustered so tightly. Many dots lies in one part of the diagram.

From the data above the value of coefficient correlation is :

$$r = \frac{n [\Sigma(X_i Y_i) - (\Sigma X_i)(\Sigma Y_i)]}{[n \Sigma X_i^2 - (\Sigma X_i)^2][n \Sigma Y_i^2 - (\Sigma Y_i)^2]}$$

$$r = 0.35$$

The coefficient correlation between the scores on skill subject and TOEFL score on is moderate and positive and also it fits the scatter diagram. The coefficient of determination is the square of  $r$ , that is  $0.35^2 = 0.1225$ . It means that 12.25 percent of the variance in scores of skill subjects is associated with variance in scores of TOEFL.

In order to get the more definite result, the writer will test the result of the research through the significance testing to know if the coefficient correlation of the research is not equal to zero. The hypothesis of the normal distribution is :

$H_0$  = the coefficient correlation between the mark on skill subject and TOEFL score is equal to zero.

$H_1$  = the coefficient correlation between the mark on skill subject and TOEFL score is not equal to zero.

The value of  $Z$  is :

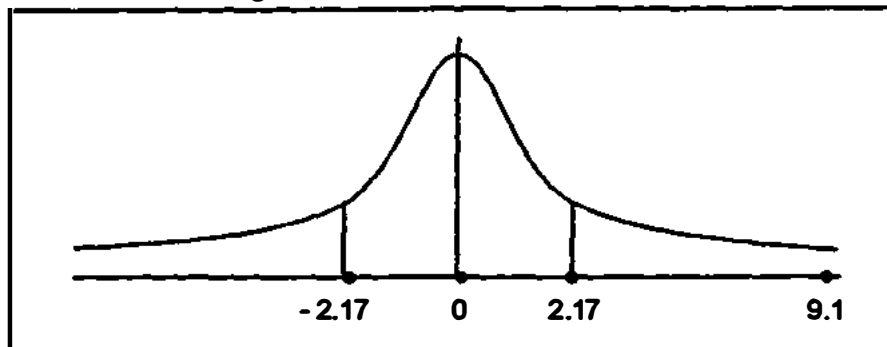
$$Z = \frac{(n-3) \ln \frac{(1+r)(1-0)}{(1-r)(1+0)}}$$

$$Z = \frac{(28-3) \ln \frac{(1+0.35)(1-0)}{(1-0.35)(1+0)}}$$

$$Z = 9.1$$

The confidential grade is  $97\%=100\%-97\%=3\%$ . From the table Z the writer gets the value of  $Z(\alpha/2)=2.17$ , and the diagram is:

Figure 3.9 Normal curve of  $Z=9.1$



Because  $Z=9.1$  is excluded from the curve then  $H_0$  is denied. It means that statistically there is a linear relationship between the scores on skill subject and the TOEFL scores. The increasing scores on skill subjects may be followed by the increasing scores on TOEFL.

**III.3.4. The relationship of the relative scores on Extensive Reading and the TOEFL converted scores on Reading Comprehension and Vocabulary Expression.**

**Table 3.7. The relative scores of Extensive Reading and the TOEFL converted scores of**

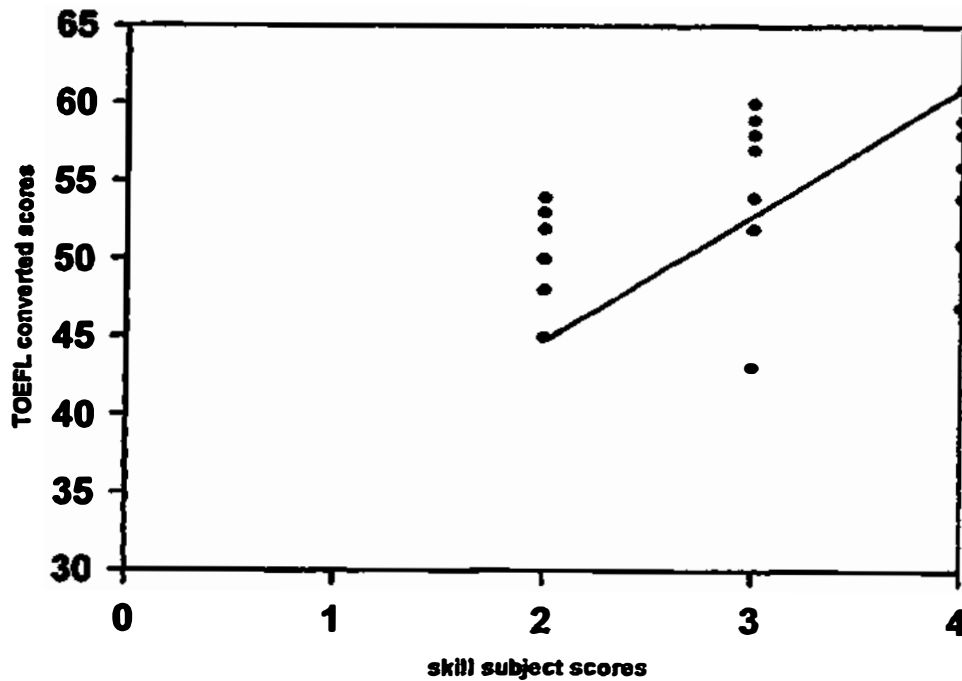
**Reading Comprehension and Vocabulary**

| No. | Skill subject scores | TOEFL scores |
|-----|----------------------|--------------|
| 1   | C                    | 54           |
| 2   | B                    | 43           |
| 3   | C                    | 54           |
| 4   | B                    | 59           |
| 5   | B                    | 54           |
| 6   | A                    | 58           |
| 7   | C                    | 53           |
| 8   | B                    | 58           |
| 9   | C                    | 48           |
| 10  | A                    | 54           |
| 11  | B                    | 52           |
| 12  | B                    | 58           |
| 13  | C                    | 45           |
| 14  | B                    | 52           |

| No. | Skill subject scores | TOEFL scores |
|-----|----------------------|--------------|
| 15  | B                    | 60           |
| 16  | B                    | 57           |
| 17  | C                    | 52           |
| 18  | A                    | 56           |
| 19  | B                    | 54           |
| 20  | B                    | 54           |
| 21  | A                    | 47           |
| 22  | B                    | 54           |
| 23  | B                    | 58           |
| 24  | A                    | 59           |
| 25  | A                    | 61           |
| 26  | B                    | 54           |
| 27  | A                    | 51           |
| 28  | C                    | 50           |

The scatterplot (scatter diagram) for this table is :

**Figure 3.10 The scatterplot of the table 3.7**



Then the writer gains the data to calculate the coefficient correlation as follow :

$$r = \frac{n [\sum(X_i Y_i) - (\sum X_i)(\sum Y_i)]}{[n\sum X_i^2 - (\sum X_i)^2][n\sum Y_i^2 - (\sum Y_i)^2]}$$

$$r = 0.35$$

So the coefficient correlation between scores on skill subject and TOEFL scores is moderate and positive and also it fits its scatter diagram. The coefficient of determination is the square of  $r$ , that is  $0.35^2 = 0.1225$ . It means that 12.25 percent of the variance in scores of skill subjects is associated with variance in scores of TOEFL.

The writer will test the result of the research through significance testing to know if the coefficient correlation of the research is not equal with zero. The null hypothesis for the test is :

The coefficient correlation between the mark on skill subject with the TOEFL score is equal to zero.

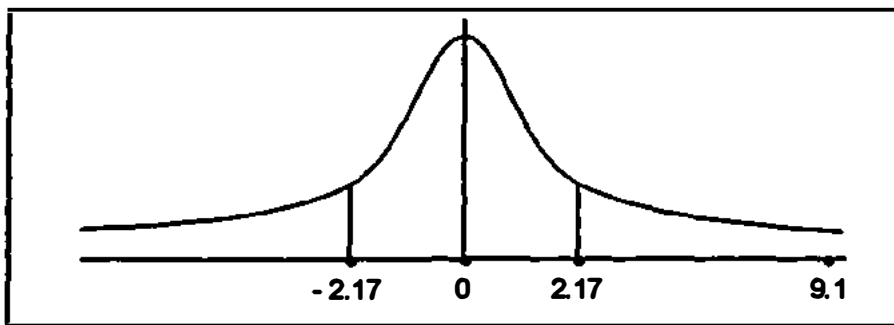
The test is as the following :

$$Z = \frac{(n-3) \ln (1+r)(1-0)}{2 (1-r)(1+0)}$$

$$Z = \frac{(28-3) \ln (1+0.35)(1-0)}{2 (1-0.35)(1+0)}$$

$$Z = 9.1$$

The curve diagram for the confidential grade 97% (=3%) is :

Figure 3.11 Normal curve of  $Z=9.1$ 

For the value of  $Z$  in the research is excluded in the curve then  $H_0$  is rejected. It means that there is a linear relationship between the mark on skill subject and the TOEFL score and this finding is also supported by the spreading diagram.

The additional information the writer got from the questionnaires is that most students or 92% (23) of the respondents technically did not satisfy with the listening equipment the writer used in the TOEFL. The writer used a manual tape recorder and many students complained about it for they were not able to listen the recording passages clearly.

### **III.3.5. The Final Analysis of the Data.**

After calculating the data through statistical tests, the writer wants to discuss the final findings of the analysis.

The scores of the three skill subjects, Auditory Comprehension II, English Structure II and Extensive Reading relate to those of TOEFL scores in their moderate positive relationship. It means that the correlation between two variables is not strong. The correlation also shows a positive relationship, that is the high scores

of one variable is followed by that of the other variable. The probable reason why the relationship is not strong is that not all of the variables correlate to each other. The following determination is expected to support this opinion.

From the coefficient of determination, the writer gets the result that in scores of Auditory Comprehension II, 25 percent of its variance is associated with variance in scores of TOEFL. Moreover, there is only 12.25 percent of the variance in the scores of English Structure II is associated with variance in the scores of Structure and Written Expression. It is also happened in the scores of Extensive Reading, that 12.25 percent of the variance in the scores of skill subject is associated with variance in the scores of Reading Comprehension and Vocabulary Expression.

The scores on skill subjects, the writer may stated it as the formal result of language achievement. It shows the degrees of the testees' understanding and practicing of such language skills. The scores on TOEFL reflect the language proficiency the testees got so far. Before the testees have enough language proficiency, they must learn English first through the process of learning.

Generally, the result of language achievement among the testees is good enough for all the respondents passed the skill subjects which may influence their degree on TOEFL scores to be consider having a good proficiency in English.



# **CHAPTER IV**

## **CONCLUSION AND SUGGESTION**