

CHAPTER III

PRESENTATION AND ANALYSIS OF THE DATA

This chapter is divided into two sub chapters. The first sub chapter is presentation of the data. In presentation of the data, I described the data from multiple-choice test and cloze test. The second sub chapter is analysis of the data. This analysis describes the relationship between the variables in the research. The variables are the student's mastery in doing multiple-choice test (X) and their mastery in doing cloze test (Y) in reading comprehension.

III.1. Presentation of the Data

In order to get relevant data, I used two kinds of tests in this research. First is multiple-choice test and second is cloze test. For multiple-choice, I prepared four passages with different topics for two researches. Each passage is followed by 5 questions. In accordance with my purpose, I had manipulated the questions. The students were instructed to choose any responses that seem to be the most suitable answer. In this test items I used five options. They include one correct response called the key, and incorrect responses called distracters. The students were not allowed to open the dictionary during the test.

By considering the aim of multiple-choice test from Grellet (1981 : 220), this multiple-choice test is used to test the students' comprehension about tests. Furthermore, it also helps the students to think about a word and

infer its meanings, or think about the text. The type of multiple-choice test in this test is asking the respondents to understand what was actually said in the text, a fact or piece of information in the text. The respondents may have to think in order to understand the structure of the sentence or try to infer the meaning of unfamiliar words.

For cloze test, I also made four passages in different topics where in each passage there are 5 blanks, so the total is 20 blanks. The test was constructed by deleting every tenth – eleventh word systematically, including verbs, nouns, adjectives, and prepositions. The students were told to read through the passage, and fill with only one word. The students were not allowed to open dictionary.

As stated by Gronlund (1977 : 28) that a test becomes effective depends on the way it is planned. According to this theory, a test must follow several steps to become effective. Before I conducted the research, firstly I have determined the purpose of the test. This test is a formative test or monitor learning progress because I want to know their progression in reading comprehension by using two kinds of tests. Then, I compared their mastery in those two tests.

Since the kind of test is formative test, the outcomes that must be tested are knowledge of terms, knowledge of facts, and ability to make translation. The next step is to list the specific students behavior that are to be accepted as evidence that the outcomes have been accepted.

- Knowledge : Identifies, defines, selects
- Comprehension : Predicts

When the learning outcomes have been defined, a table of specifications should be prepared.

- Multiple Choice
 - Identifies : 8 items
 - Defines : 3 items
 - Selects : 4 items
 - Predicts : 5 items

- Cloze test

In cloze test, all the items are predicts since this test measures the ability of the respondents to comprehend the text.

In scoring multiple-choice, I gave score 5 for each number of questions, so the students would obtain 100 points if they could answer 20 items correctly. And also for cloze test, I gave score 5 for each number of questions, so the maximum score is 100 points.

The data are presented in tables to know the significant correlation between the students' mastery in doing multiple-choice and their mastery in doing cloze test in reading comprehension. Table 1 is the result of test I and Table 2 is the result of test II. Thus, the presentation of the data can be seen as follows:

Table 3.1.
Test Result of Test I

Respondents	Multiple-choice Test	Cloze test
1	80	70
2	80	50
3	90	60
4	50	80
5	90	60
6	100	70
7	90	60
8	90	40
9	80	90
10	80	60
11	70	80
12	90	60
13	60	70
14	70	50
15	70	50
16	90	40
17	60	50
18	100	80
19	100	50
20	70	80
21	80	80
22	60	60
23	70	90
24	90	70
25	90	60
26	100	80
27	70	70

28	90	60
29	70	80
30	90	30
31	90	70
32	80	60
33	70	60
34	80	40

Table 3.1 represents the respondents' performance in test I both in multiple-choice test and cloze test. From the data of multiple-choice test, it can be seen that the highest score is 100 and the lowest is 50. There is only one respondent (2,9 %) whose score is under 60 and only four respondents (11,8 %) who can answer all the questions correctly. It can be inferred that in average, most of the respondents gain high score (above 60).

On the other hand, from the data of cloze test, none of the respondents gains 100. The highest score is 90 and the lowest is 30. There are nine respondents (26,5%) whose score are under 60 and only two respondents (5,8 %) gain the highest score. It seems that respondents' ability in doing cloze test are not the same. It can be inferred that some of the respondents get difficulty in doing cloze test. From the table, it can be seen that many respondents gain lower scores in cloze test than those in multiple-choice.

Table 3.2.
Test Result of Test II

Respondents	Multiple-choice Test	Cloze test
1	50	80
2	50	50
3	90	70
4	60	50
5	90	70
6	40	80
7	70	80
8	90	90
9	100	90
10	70	70
11	80	80
12	90	70
13	70	60
14	70	30
15	60	80
16	70	60
17	50	20
18	80	70
19	90	60
20	60	70
21	70	80
22	70	60
23	90	50
24	60	50
25	70	80

26	80	50
27	80	50
28	70	90
29	80	70
30	60	60
31	90	70
32	60	80
33	60	60
34	80	50

Table 3.2 represents the respondents' performance in test II both in multiple-choice test and cloze test. From the data of multiple-choice test, it can also be seen that the highest score is 100 and the lowest is 40, lower than test I. In test II, there are four respondents (11,8 %) whose score are under 60. The numbers of respondent who gain lower score are more than those in test I. And there is only one respondent (2,9 %) who can answer all the questions correctly. It can be inferred also that in average, most of the respondents gain high score (above 60).

From the data of cloze test, the highest score is 90 and the lowest is 20. The lowest score of test II is lower than that in the first, that is, 30. The numbers of respondent who gain the lowest score is the same, i.e., nine respondents (26,5%) but the numbers of respondent whose score is above 60 is higher than those in test I, that is, three respondents (8,8 %). It can be inferred that most of the respondents made mistakes in cloze test.

If the two data are compared, it can be seen that cloze test is more difficult to do than multiple-choice test because many respondents gain lower scores in cloze test than in multiple-choice. The total numbers of respondent who gain score under 60 in multiple choice are 5, whereas in cloze test are 18. It can be seen also from the lowest score in both two tests that the lowest score in multiple-choice is 40 while in cloze test is 20.

Table 3.3.
Result of Multiple Choice Test

Respondents	Test I	Test II	Average
1	80	50	65
2	80	50	65
3	90	90	90
4	50	60	55
5	90	90	90
6	100	40	70
7	90	70	80
8	90	90	90
9	80	100	90
10	80	70	75
11	70	80	75
12	90	90	90
13	60	70	65
14	70	70	70
15	70	60	65
16	90	70	80
17	60	50	55
18	100	80	90

19	100	90	95
20	70	60	65
21	80	70	75
22	60	70	65
23	70	90	80
24	90	60	75
25	90	70	80
26	100	80	90
27	70	80	75
28	90	70	80
29	70	80	75
30	90	60	75
31	90	90	90
32	80	60	70
33	70	60	65
34	80	80	80
Total	2740	2450	2595

Considering the total scores in multiple-choice test gained by the respondents, the highest score is 95 and the lowest score is 55. Most of the respondents have higher score and only two respondents gain lower score. Some of the respondents reveal great differences in those two tests. For instance, the scores of respondent 6 in which is the highest in Test I (100) extremely decline in Test II (40). However, most of the scores of the respondents in Test I are higher than those in Test II.

Table 3.4.
Result of Cloze Test

Respondents	Test I	Test II	Average
1	70	80	75
2	50	50	50
3	60	70	65
4	80	50	65
5	60	70	65
6	70	80	75
7	60	80	70
8	40	90	65
9	90	90	90
10	60	70	65
11	80	80	80
12	60	70	65
13	70	60	65
14	50	30	40
15	50	80	65
16	40	60	50
17	50	20	35
18	80	70	75
19	50	60	55
20	80	70	75
21	80	80	80
22	60	60	60
23	90	50	70
24	70	50	60
25	60	80	70
26	80	50	65
27	70	50	60

28	60	90	75
29	80	70	75
30	30	60	45
31	70	70	70
32	60	80	70
33	60	60	60
34	40	50	45
Total	2160	2230	2195

Meanwhile, the total highest score in cloze test gained by the respondents is 90 and the lowest score is 35. There are seven respondents (20,3%) whose total scores are under 60. Most of the respondents have higher score. Some of the respondents reveal great differences in those two tests. For instance, the scores of respondent 23 in which is the highest in Test I (90) extremely decline in Test II (50). But some of the respondents' score are better in Test II than those in Test I. For instance, the scores of respondent 8 in Test I is 40 but her score is the highest in Test II (90). However, most of the scores of the respondents in Test I are higher than those in Test II.

In evaluating the effectiveness of the items, I followed the procedure of the item analysis.

- First, I arranged the scores from the highest scores to the lowest scores.

Table 3.5
List of Scores

Multiple-choice Test			Cloze Test		
No.	Respondent	Score	No.	Respondent	Score
1.	19	95	1.	9	90
2.	3	90	2.	11	80
3.	5	90	3.	21	80
4.	8	90	4.	1	75
5.	9	90	5.	6	75
6.	12	90	6.	18	75
7.	18	90	7.	20	75
8.	26	90	8.	28	75
9.	31	90	9.	29	75
10.	7	80	10.	7	70
11.	16	80	11.	23	70
12.	23	80	12.	25	70
13.	25	80	13.	31	70
14.	28	80	14.	32	70
15.	34	80	15.	3	65
16.	10	75	16.	4	65
17.	11	75	17.	5	65
18.	21	75	18.	8	65
19.	24	75	19.	10	65
20.	27	75	20.	12	65
21.	29	75	21.	13	65
22.	30	75	22.	15	65
23.	6	70	23.	26	65
24.	14	70	24.	22	60
25.	32	70	25.	24	60
26.	1	65	26.	27	60

27.	2	65	27.	33	60
28.	13	65	28.	19	55
29.	15	65	29.	2	50
30.	20	65	30.	16	50
31.	22	65	31.	30	45
32.	33	65	32.	34	45
33.	4	55	33.	14	40
34.	17	55	34.	17	35

- Then, I selected approximately one third of the highest scores and call this upper group (11 respondents). The next is selecting the same number of the lowest scores and call this lower group (11 respondents). Finally, set the middle group of respondents aside (12 respondents).

Table 3.6
Upper and Lower Scores

Multiple-Choice Test				Cloze Test			
Upper		Lower		Upper		Lower	
1.	95	1.	70	1.	90	1.	60
2.	90	2.	70	2.	80	2.	60
3.	90	3.	65	3.	80	3.	60
4.	90	4.	65	4.	75	4.	60
5.	90	5.	65	5.	75	5.	55
6.	90	6.	65	6.	75	6.	50
7.	90	7.	65	7.	75	7.	50
8.	90	8.	65	8.	75	8.	45
9.	90	9.	65	9.	75	9.	45
10.	80	10.	55	10.	70	10.	40
11.	80	11.	55	11.	70	11.	35

- The next step, I made columns to record the answers made by the respondents which belong to the upper and lower groups.

Table 3.7
Item of Multiple-choice Test

	Alternatives	A	B	C*	D
Item 1	Upper	0	0	11	0
	Lower	0	2	8	1
		A	B*	C	D
Item 2	Upper	0	11	0	0
	Lower	1	7	0	3
		A	B	C	D*
Item 3	Upper	1	0	1	9
	Lower	2	3	1	5
		A*	B	C	D
Item 4	Upper	8	1	1	1
	Lower	6	2	2	1
		A	B	C*	D
Item 5	Upper	0	0	11	0
	Lower	0	1	10	0
		A*	B	C	D
Item 6	Upper	11	0	0	0
	Lower	8	1	1	1
		A*	B	C	D
Item 7	Upper	9	2	0	0
	Lower	7	4	0	0
		A	B	C	D*
Item 8	Upper	0	0	0	11
	Lower	2	0	0	9
		A	B	C*	D

Item 9	Upper	0	0	11	0
	Lower	0	0	11	0
		A	B*	C	D
Item 10	Upper	2	9	0	0
	Lower	2	8	0	1
		A*	B	C	D
Item 11	Upper	9	0	2	0
	Lower	6	2	2	1
		A*	B	C	D
Item 12	Upper	9	2	0	0
	Lower	6	3	2	0
		A	B*	C	D
Item 13	Upper	0	7	3	1
	Lower	0	8	3	0
		A	B	C	D*
Item 14	Upper	2	0	0	9
	Lower	3	0	0	8
		A	B*	C	D
Item 15	Upper	0	8	1	2
	Lower	1	4	3	3
		A*	B	C	D
Item 16	Upper	11	0	0	0
	Lower	9	2	0	0
		A	B*	C	D
Item 17	Upper	0	10	0	1
	Lower	3	3	3	2
		A	B*	C	D
Item 18	Upper	0	11	0	0
	Lower	0	7	0	4
		A	B	C*	D

Item 19	Upper	0	0	9	2
	Lower	0	2	4	5
		A*	B	C	D
Item 20	Upper	11	0	0	0
	Lower	11	0	0	0

* = The correct answer

Table 3.8
Item of Cloze Test

		True	False
Item 1	Upper	7	4
	Lower	5	6
Item 2	Upper	8	3
	Lower	4	7
Item 3	Upper	5	6
	Lower	3	8
Item 4	Upper	9	2
	Lower	5	6
Item 5	Upper	9	2
	Lower	7	4
Item 6	Upper	11	0
	Lower	11	0
Item 7	Upper	11	0
	Lower	11	0
Item 8	Upper	7	4
	Lower	3	8
Item 9	Upper	8	3
	Lower	7	4
Item 10	Upper	9	2
	Lower	4	7

Item 11	Upper	8	3
	Lower	8	3
Item 12	Upper	7	4
	Lower	6	5
Item 13	Upper	7	4
	Lower	7	4
Item 14	Upper	8	3
	Lower	5	6
Item 15	Upper	9	2
	Lower	6	5
Item 16	Upper	11	0
	Lower	8	3
Item 17	Upper	7	4
	Lower	4	7
Item 18	Upper	11	0
	Lower	9	2
Item 19	Upper	8	3
	Lower	2	9
Item 20	Upper	8	3
	Lower	4	7

- After making tables, I estimated item difficulty by determining the percentage of respondents who answered the item correctly with the following formula :

$$P = \frac{R}{T} \times 100 \%$$

where :

P = The percentage of respondents who answered the item correctly

R = The number of respondents who answered the item correctly

T = The total number of respondents who tried the item

R is obtained by the following formula :

$$R = R_U + R_L$$

where :

R_U = The number in the upper group who answered the item correctly

R_L = The number in the lower group who answered the item correctly

Item difficulty refers to the percentage answering the item correctly, the smaller the percentage figure the more difficult the item.

Table 3.9
Item Difficulty

Multiple-choice Test		Cloze Test	
Item 1	$\frac{19}{22} \times 100\% = 86,4\%$	Item 1	$\frac{12}{22} \times 100\% = 54,5\%$
Item 2	$\frac{18}{22} \times 100\% = 81,8\%$	Item 2	$\frac{12}{22} \times 100\% = 54,5\%$
Item 3	$\frac{14}{22} \times 100\% = 63,6\%$	Item 3	$\frac{8}{22} \times 100\% = 36,5\%$
Item 4	$\frac{14}{22} \times 100\% = 63,6\%$	Item 4	$\frac{14}{22} \times 100\% = 63,6\%$
Item 5	$\frac{21}{22} \times 100\% = 95,5\%$	Item 5	$\frac{16}{22} \times 100\% = 72,7\%$
Item 6	$\frac{19}{22} \times 100\% = 86,4\%$	Item 6	$\frac{22}{22} \times 100\% = 100\%$
Item 7	$\frac{16}{22} \times 100\% = 72,7\%$	Item 7	$\frac{22}{22} \times 100\% = 100\%$
Item 8	$\frac{20}{22} \times 100\% = 90,9\%$	Item 8	$\frac{10}{22} \times 100\% = 45,5\%$
Item 9	$\frac{22}{22} \times 100\% = 100\%$	Item 9	$\frac{15}{22} \times 100\% = 68,2\%$

Item 10	$\frac{17}{22} \times 100\% = 77,3\%$	Item 10	$\frac{13}{22} \times 100\% = 59,1\%$
Item 11	$\frac{15}{22} \times 100\% = 68,2\%$	Item 11	$\frac{16}{22} \times 100\% = 72,7\%$
Item 12	$\frac{15}{22} \times 100\% = 68,2\%$	Item 12	$\frac{13}{22} \times 100\% = 59,1\%$
Item 13	$\frac{15}{22} \times 100\% = 68,2\%$	Item 13	$\frac{14}{22} \times 100\% = 63,6\%$
Item 14	$\frac{17}{22} \times 100\% = 77,3\%$	Item 14	$\frac{13}{22} \times 100\% = 59,1\%$
Item 15	$\frac{12}{22} \times 100\% = 54,5\%$	Item 15	$\frac{15}{22} \times 100\% = 68,2\%$
Item 16	$\frac{20}{22} \times 100\% = 90,9\%$	Item 16	$\frac{19}{22} \times 100\% = 86,4\%$
Item 17	$\frac{13}{22} \times 100\% = 59,1\%$	Item 17	$\frac{11}{22} \times 100\% = 50\%$
Item 18	$\frac{18}{22} \times 100\% = 81,8\%$	Item 18	$\frac{20}{22} \times 100\% = 90,9\%$
Item 19	$\frac{13}{22} \times 100\% = 59,1\%$	Item 19	$\frac{10}{22} \times 100\% = 45,5\%$
Item 20	$\frac{22}{22} \times 100\% = 100\%$	Item 20	$\frac{20}{22} \times 100\% = 90,9\%$

From the tables we know that, in multiple-choice test, item 15 has the smaller percentage. It means that the item is more difficult than others. Other items that seem to be difficult are items 17, and 19. However, the percentages of all items are above 50%. Thus, it can be inferred that most of respondents could answer all the items correctly.

In cloze test, item 3 has the smaller percentage. It also means that this item is difficult for respondents. It also supported the value of percentage, that is 36,5%, which is smaller than the smaller percentage in

multiple-choice test. Other items are item 8 and 19 with 45,5 %. The percentage of the items which are below 50 % is 20 % (4 difficult items). It can be concluded that the items in cloze test are more difficult than those in multiple-choice test.

- The next step is estimating item discriminating power by comparing the number of respondents in the upper and lower groups who answered the item correctly with the following formula :

$$D = \frac{R_u - R_L}{1/2T}$$

where :

D = The index of discriminating power

R_U = The number in the upper group who answered the item correctly

R_L = The number in the lower group who answered the item correctly

T = The total number of respondents included in the item analysis

The discriminating power of an item is reported as a decimal fraction; maximum positive discriminating power is indicated by an index of 1,00. This is obtained only when all respondents in the upper group answer correctly and no one in the lower group does. Zero discriminating power (0,00) is obtained when an equal number of respondents in each group answer the item correctly. Negative discriminating power is obtained when more respondents in the lower group than in the upper group answer correctly.

Table 3.10
Discriminating Power

Multiple-choice Test		Cloze Test	
Item 1	$\frac{11-8}{1/2.22} = 0,3$	Item 1	$\frac{7-5}{1/2.22} = 0,2$
Item 2	$\frac{4}{11} = 0,4$	Item 2	$\frac{4}{11} = 0,4$
Item 3	$\frac{4}{11} = 0,4$	Item 3	$\frac{2}{11} = 0,2$
Item 4	$\frac{2}{11} = 0,2$	Item 4	$\frac{4}{11} = 0,4$
Item 5	$\frac{1}{11} = 0,1$	Item 5	$\frac{2}{11} = 0,2$
Item 6	$\frac{3}{11} = 0,3$	Item 6	$\frac{0}{11} = 0$
Item 7	$\frac{2}{11} = 0,2$	Item 7	$\frac{0}{11} = 0$
Item 8	$\frac{3}{11} = 0,3$	Item 8	$\frac{4}{11} = 0,4$
Item 9	$\frac{0}{11} = 0$	Item 9	$\frac{1}{11} = 0,1$
Item 10	$\frac{1}{11} = 0,1$	Item 10	$\frac{5}{11} = 0,45$
Item 11	$\frac{3}{11} = 0,3$	Item 11	$\frac{0}{11} = 0$
Item 12	$\frac{3}{11} = 0,3$	Item 12	$\frac{1}{11} = 0,1$
Item 13	$\frac{-1}{11} = -0,1$	Item 13	$\frac{0}{11} = 0$
Item 14	$\frac{1}{11} = 0,1$	Item 14	$\frac{3}{11} = 0,3$
Item 15	$\frac{4}{11} = 0,4$	Item 15	$\frac{3}{11} = 0,3$

Item 16	$\frac{2}{11}=0,2$	Item 16	$\frac{3}{11}=0,3$
Item 17	$\frac{7}{11}=0,6$	Item 17	$\frac{3}{11}=0,3$
Item 18	$\frac{4}{11}=0,4$	Item 18	$\frac{2}{11}=0,2$
Item 19	$\frac{5}{11}=0,45$	Item 19	$\frac{6}{11}=0,5$
Item 20	$\frac{0}{11}=0$	Item 20	$\frac{4}{11}=0,4$

In multiple-choice test, mostly the value of discriminating power is positive discriminating, 85 % (17 items). Zero discriminating power is only 10 % (2 items), while negative discriminating is only 5 % (1 item). It means that the respondents with high scores on the test (upper group) answered the item correctly more frequently than students with low scores on the test (the lower group).

In cloze test, the respondents seem to do the same as in multiple-choice since the value of discriminating power is mostly positive. Zero discriminating power is 20 % (4 items) and this value is more than that in multiple-choice. There is no negative value in this test.

- The last step is determining the effectiveness of the distracters, by comparing the number of respondents in the upper and lower groups who selected each incorrect alternative. A good distracter will attract more students from lower group than upper group.

- In multiple-choice test, the explanation is presented below:
 - Item 1 : alternative B and D are functioning effectively, while alternative A is completely ineffective since it attracted no one.
 - Item 2 : alternative A and D are functioning effectively, while alternative C is ineffective.
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In cloze test, I did not need to determine the effectiveness of the distracters since there are no alternatives in this test.

III. 2. Quantitative Analysis

Quantitative analysis method is a method of analyzing data which is emphasized on using and collecting information statistically. Data collected are in the form of numbers. The numbers represent values of variables, which measure characteristic of subjects, respondents, or other cases (Neuman, 1994 : 96).

The objective of setting up this test is to know whether there is any significant correlation between the student's mastery in doing multiple-choice test and their mastery in doing cloze test in reading comprehension. Since the data has two closely related aspects, I use Pearson Product-Moment Correlation.

According to the Ferguson (cited in Soepeno, 1997 : 46) the study of this type of data has two related aspects, correlation and prediction. Correlation is concerned with describing the degree of relation between

variables. Prediction is concerned with estimating one variable from a knowledge of another. Correlation can be meant as association within variables and prediction from independent variables to dependent variables. In this study, if the result of the respondents in multiple-choice test is high and followed by the result of the cloze test which is high, so the correlation is association.

The hypothesis of this study are :

H_0 : There is no significant correlation between the students' mastery in doing multiple choice and their mastery in doing cloze test in reading comprehension

H_1 : There is a significant correlation between the students' mastery in doing multiple choice and their mastery in doing cloze test in reading comprehension

H_0 is referred as the null hypothesis and the alternative hypothesis is

H_1 .

Moreover, the formula of the elements are:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

where:

r_{xy} = correlation coefficient of X and Y variables

$\sum XY$ = total value of X multiplied by Y

N = the number of the respondents

X = total value for multiple choice test

Y = total value for cloze test

After the result of r is obtained, then I calculate t value by applying

the formula :

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

where :

r = the result of correlation coefficient

n = the number of respondents

Table 3.11

Pearson Product-Moment Correlation

Respondents	X	Y	X ²	Y ²	XY
1	65	75	4225	5625	4875
2	65	50	4225	2500	3250
3	90	65	8100	4225	5850
4	55	65	3025	4225	3575
5	90	65	8100	4225	5850
6	70	75	4900	5625	5250
7	80	70	6400	4900	5600
8	90	65	8100	4225	5850
9	90	90	8100	8100	8100
10	75	65	5625	4225	4875
11	75	80	5625	6400	6000
12	90	65	8100	4225	5850
13	65	65	4225	4225	4225
14	70	40	4900	1600	2800
15	65	65	4225	4225	4225
16	80	50	6400	2500	4000

17	55	35	3025	1225	1925
18	90	75	8100	5625	6750
19	95	55	9025	3025	5225
20	65	75	4225	5625	4875
21	75	80	5625	6400	6000
22	65	60	4225	3600	3900
23	80	70	6400	4900	5600
24	75	60	5625	3600	4500
25	80	70	6400	4900	5600
26	90	65	8100	4225	5850
27	75	60	5625	3600	4500
28	80	75	6400	5625	6000
29	75	75	5625	5625	5625
30	75	45	5625	2025	3375
31	90	70	8100	4900	6300
32	70	70	4900	4900	4900
33	65	60	4225	3600	3900
34	80	45	6400	2025	3600
Total	2595	2195	201925	146475	168600

Now, we compute the data using Pearson Product-Moment Correlation:

$$\begin{aligned}
 r_{xy} &= \frac{34 \cdot 168600 - 2595 \cdot 2195}{\sqrt{[34 \cdot 201925 - 2595^2] [34 \cdot 146475 - 2195^2]}} \\
 &= \frac{5732400 - 5696025}{\sqrt{(6865450 - 6734025)(4980150 - 4818025)}} \\
 &= \frac{36375}{\sqrt{(131425)(162125)}}
 \end{aligned}$$

$$= \frac{36375}{\sqrt{21307278125}}$$

$$= 0,2491948 \approx 0,25$$

By considering the r_{xy} , we would be able to calculate t :

$$t = \frac{0,25}{\sqrt{(1 - 0,25)/(34 - 2)}}$$

$$= \frac{0,25}{\sqrt{(0,75)/(32)}}$$

$$= \frac{0,25}{\sqrt{0,023}}$$

$$= \frac{0,25}{0,1530}$$

$$= 1,633$$

From the calculation, it can be seen that t -observed value is 1,633.

Then, it is compared with t -critical value from the table. The degree of freedom is 32 from the formula :

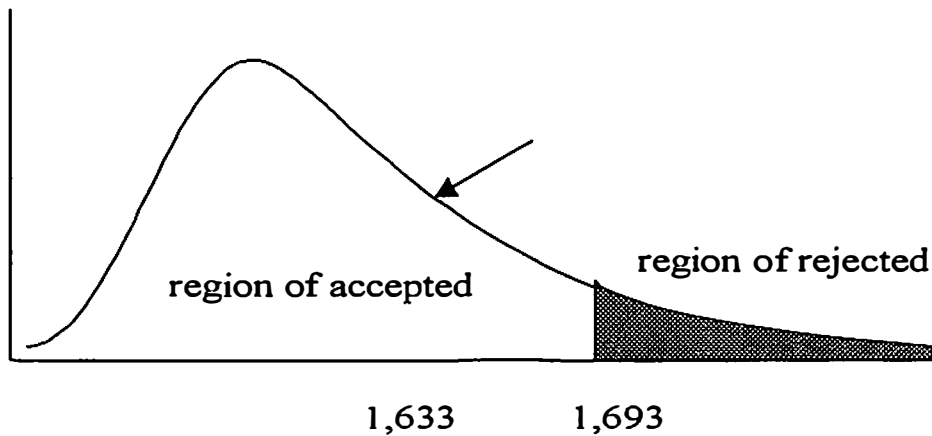
$$df = n - 2$$

$$= 34 - 2$$

$$= 32$$

The level of significance in this analysis is 95 % which means that $\alpha = 100\% - 95\% = 5\%$ (0,005). Thus, the value of t -critical is 1,693.

Finally, the diagram of t-distribution is presented below :



The diagram shows that t-observed value of the analysis (1,633) is not more than the t-critical value (1,693). Since t-observed value is inside the region of accepted, so H_0 is accepted and H_1 is rejected. It means that there is no significant correlation between the students' mastery in doing multiple choice-test and their mastery in doing cloze test in reading comprehension.

III. 3. Interpretation of the Data

The computation dealing with the correlation of two variables by using Pearson Product-Moment Correlation is 1,633, and the critical value with 95 % level of significance is 1,693. This means that there is no significant correlation between the students' mastery in doing multiple-choice test and their mastery in doing cloze test in reading comprehension.

If we refer back to the available data, we will find that the score of the respondents in multiple-choice test is higher than their score in cloze test. It means that the respondents are more capable to answer the test in multiple-choice than in cloze test. This statement can also be interpreted that there is no tendency that the respondents who have better score in doing reading comprehension test in multiple-choice also get better score in cloze test.

Moreover, some factors might influence the scores in doing both tests. In multiple-choice test, the respondents seem to do it more easily than in cloze test. It might be supported by the fact that in multiple-choice they only have to comprehend the text, before they can answer the question relatively easily based on the information they get from the text. Guessing the right answer from the alternatives seems to be one possible reason.

The characteristic of the cloze test is the deletion of words in a text which must be comprehended by the respondents. There are many possible answers to fill in the blanks. It makes them difficult to do this test. Besides, they must master many vocabularies because the words deleted in cloze test may consist of verbs, adjectives, adverbs, and prepositions. At first, they have to know what kind of words that should be used. Then, they must find appropriate words. Since there are no alternative answers in this text, it makes it difficult for the respondents to find the right answers. However, it is also possible that they answer the blanks by guessing.

If we see from the scores, it can be said that multiple-choice is more effective than cloze test since it gives better scores. But it can not be inferred that the test which gives worse scores is not effective for students because the effective test depends on the careful planning.

From the item difficulty in multiple-choice test, the percentages of all items are more above 50 %. Thus, the items are effective enough to be given to the respondents; while in cloze test, although the percentages of the items (above 50 %) is smaller than in multiple-choice but it is still effective to be given.

From the discriminating power, the positive value of multiple-choice is higher than in cloze test. It means that the respondents answered the item correctly more frequently in multiple-choice test than in cloze test. It can be said that multiple-choice is easier than cloze test. However, the different percentage in both test are not too high. Thus, the respondents have tendency to answer all the items correctly.

From the above points of view, it can be inferred that those two tests are effective enough to be given to measure the respondents' ability in reading comprehension test. As I stated earlier that multiple-choice test are widely used in reading comprehension test, but cloze test can also be used to replace multiple-choice to measure students' mastery in reading comprehension. Since the correlation is not too high, the replacement of the test is not a total replacement but it should be done once in a while.

CHAPTER IV

CONCLUSION