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The Validity of Cloze Test in Measuring Reading Comprehension of The Students (Case Study SMP Swasta Bharlind School Medan)

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ABSTRACT

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Keywords:

Validity; Cloze Test; Measuring Reading. This study deals with validity of cloze test in measuring reading comprehension. The objectives are to find out cloze test of fixed or variable deletion a valid measure of reading comprehension, and to find out to which level of reading comprehension is cloze test most valid. This was an export facto quantitative study. In this study, the writer took 40 students at SMP Swasta Bharlind School Medan, as the sample and they were divided into two grows. There are six hypotheses in this study in order to answer the research problems. Cloze test and TOEFL test were used as the instrument for collecting the data. The findings were that cloze test using fixed-ratio method significantly correlate with reading comprehension of TOEFL and also with literal and inferential comprehension items of TOEFL in measuring reading comprehension. And the cloze test using variableratio method significantly correlate with reading comprehension of TOEFL but doesn't significantly correlate with both literal and inferential comprehension items of TOEFL in measuring reading comprehension. Then, cloze test using fixed-ratio method is a valid measure of reading comprehension (0,77), while cloze test using variable-ratio method is not a valid measure reading comprehension (0,69). Mean while cloze test using variable-ratio method does not significantly correlate with inferential comprehension items of TOEFL in measuring reading comprehension.

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INTRUDUCTION

English KTSP (2011) states that reading is one of the language skills, which is expected to be developed in teaching-learning process. The others are listening, speaking and writing.

Teaching English in Indonesia is primarily focused on reading. The main reason is because reading for students has a specific goal that is to enable them to obtain information they need from English printed materials. Another reason why teaching reading is important is because the themes

of the subject on the reading materials are related to the students' need in absorbing knowledge and technology.

According to (Smith and Johnson, 1980): "Reading is meaningful interpretation of printed or written verbal symbols". From the quotation above, we can say the reading means getting out the message or the required information that the writer put into the test as efficiently as possible.

Further, (Alexander, 1988) says that: "Comprehension is an active process that involves the child's integrate of prior knowledge with information in the test order to comprehend the text". From the quotation above, the writer concluded that reading comprehension is an active, thinking process in understanding the message in the text, which involves student's experiences and prior knowledge.

In relation to teaching and learning process, testing student's ability or knowledge is one of the processes of educational measurement for which test are often used. "Test is a systematic procedure for measuring a sample of a person's behavior", (Gage and Berliner, 1984).

More over, (Valette, 1977) says that: "The most familiar role of classroom test is to furnish an objective evaluation of each student's progress that is his her performance in course objectives". It means that though the students have an opportunity to show how well they can handle specific elements of the target language. Through a test we judge the current situation either as successful with little or no change at all. And by means of the test, a teacher knows whether or not his/her student's are able to read.

Wallace and Larsen (1978) states that: "In measuring reading comprehension, teachers tend to use objective tests such as, multiple-choice test, true-false test, matching test and completion test. Beside objective tests, essay test is also a device to asses learners' reading comprehension. Among the variety of tests, which are used in measuring reading comprehension, cloze test has been estimated as an informal technique that can be used to measure reading comprehension"

More over, (Heaton, 1975) says that: "The cloze test that was originally intended to measure reading difficulty, has been applied to first language testing of reading comprehension for sometimes now". From the quotation above, we can conclude that cloze test can be applied in measuring reading comprehension. Other reasons are because cloze test is a easy to construct, require less time to administer and can be given whenever it is needed. But before we use this test, we need to know whether or not the test possessed the most important characteristic of a good test, which is validity.

"Validity may be defined as the extent to which a test measure what it is supposed to measures and nothing else. Without standards for validity, tests can be misused and may actually have deleterious effects on the person being tested", (Borg and Gall, 1983). This means that before we use cloze test as a measure of reading comprehension, we need to find out cloze test really measure what it claims to measure.

According to Bormuth (1962) in Weir (1990): "Cloze test are valid and uniform measure of reading comprehension ability". Moreover, (Alderson, 1978) describe that: "Cloze procedure has been a reliable and valid measure of readability of reading comprehension".

Based on the explanation above, the writer would like to find out the validity of cloze test in measure reading comprehension.

METHODOLOGY RESEARCH

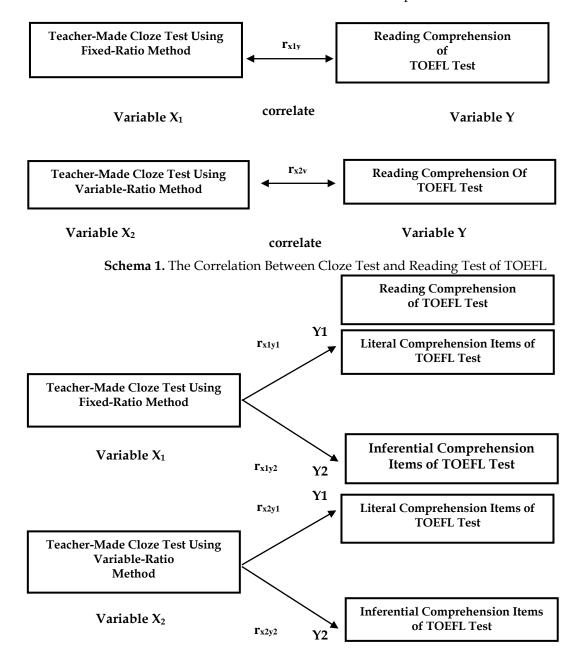
Research Design

This research was conducted using expose facto design. It means that this research did not intend to manipulate the variable but to measure and analyze the already occurred properties of the variable. This design demanded two groups of respondent and at least two variables, namely, independent and dependent variable. This design was different from experimental design because in expose facto design there was no treatment on the independent variable. This research was applied by using quantitative approach. It means that there was generalization on the whole

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population although some students was taken as the samples. To illustrate the design, schema 1 and schema 2 are presented as follow.

The design illustrated in schema 1 is intended to answer research problem number one, while the one illustrated in schema 2 is meant to answer research problem number two.



Schema 2. The Correlate between Cloze Test with Literal and Inferential Comprehension Items of TOEFL

The design illustrated in schema 1 is intended to answer research problem number one, while the one illustrated in schema 2 is meant to answer research problem number two.

The Population and Sample

The Population

The population of this research was students of SMP Swasta Bharlind School Medan. The total of the whole students 99 students. They all were the population of this research.

The Sample

Due to the large number of the students as the population of this research, it is difficult to conduct aresearch. Consider to the limitation of time, to the expenditure of much money, and to the effort required, the writer obtain the data trough a process of sampling. Best (1981) requires that: "A sample is a small proportion of a population selected for observation or analysis. Trough the sampling process, the population may be observable effectively".

In relation to this, (Arikunto, 1992) states that: "The size of the sample can be either to following size 10% - 15%, 20% - 25% or more". Based on the theory, 40% of the population was taken as the sample of this research. So, the total number of the sample was 40% students which was randomly selected by using lottery technique. The sample was divided into two groups with equal number of the students, 20% students for each group and it was randomly selected also.

Instrument for Collecting Data

In this research, the data was collected by giving test to the students, which are:

Cloze Test

In cloze test, the students will be asked to supply the missing which have been deleted from the passage. Before administering the test, the writer will read the instruction and explain it to the students how to do the test. The passage consists of 40 blank and the time for doing the test will be 40 minutes.

One minutes for each item. The material of the test will be taken from the material that was already learned by students.

The TOEFL Test

The test will be in form of multiple-choice test. The students will be asked to choose the right answer based on the passage. The test consists of 40 items and each item consist of four options. Each correct answer will be scored 2,5 so the highest score be 100. Each incorrect answer will be given 0 score.

Technique for Analyzing the Data

It has been explained before that in order to find out the validity of cloze test in measuring reading comprehension the formula of Pearson Product Moment Coefficient was used. The data were analyzed by: Cloze test using fixed-ratio method was correlated with reading test of TOEFL., Cloze test using variable-ratio method was correlated with reading test of TOEFL., Cloze test using fixed-ratio method was correlated with literal comprehension items of TOEFL., Cloze test using variable-ratio method was correlated with literal comprehension items of TOEFL., Cloze test using variable-ratio method was correlated with literal comprehension items of TOEFL., Cloze test using variable-ratio was correlated with inferential comprehension items of TOEFL.

Because of the Pearson formula is used to express the degree of validity of test scores, therefore, it is called validity coefficient. The formula is as follows:

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

Where:

N = number of sampleX = sum of test IY = sum of test II

 r_{xy} = total sums of X and Y

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(Aruan, 2002) interprets that : "The degree of the coefficients correlation of test scores are follow:

0.8 < r < 1	→ very high correlation
0.6 < r < 0.8	→ high correlation
0.4 < r < 0.6	→ fair correlation
0.2 < r < 0.4	→ low correlation
0.0 < r < 0.2	→ very low correlation

RESULTS AND DISCUSSION

The Data

The data of this research were gathered from the administration of a set of test, cloze test which fixed-ratio method, cloze test with variable-ratio method, reading comprehension of TOEFL. The results of the test can be seen in table 1 and table 2.

Table 1. The Scores of TOEFL and Fixed-Cloze Test

				TOEFL	
No	Students Reg. Number	Cloze Test	Reading Test of TOEFL	Literal	Inferential
1	2	3	4	5	6
1	001	60	50	50	45
2	002	60	50	55	50
3	003	55	50	55	50
4	004	65	60	50	45
5	005	75	60	65	60
6	006	75	65	65	60
7	007	70	60	45	40
8	008	70	60	50	45
9	009	70	65	60	55
10	010	65	50	45	40
11	011	75	70	65	60
12	012	60	50	40	35
13	013	70	65	60	55
14	014	70	65	65	60
15	015	60	55	50	45
16	016	75	65	65	60
17	017	70	60	45	40
18	018	65	50	40	35
19	019	70	50	60	55
20	020	75	60	65	60

From the data above, it was obtained that, in group A: The highest score at the fixed-cloze test is 75 (with 5 students), and the lowest score is 55 (with 1students)., The highest score at reading comprehension of TOEFL is 70 (with 1 students) and the lowest score is 50 (with 7 students)., The highest score at literal comprehension items of TOEFL is 65 (with 6 students) and the lowest score is 45 (with 2 students)., The highest score of inferential comprehension items of TOEFL is 60 (with 6 students), and the lowest score is 35 (with 2 students).

Table 2. The Scores of TOEFL and variable-Cloze Test of Group B

	Students		TOEFL		
No	Reg. Number	Cloze Test	Reading Test of TOEFL	Literal	Inferential
1	001	45	60	30	40
2	002	50	55	35	50
3	003	30	55	45	40
4	004	35	40	40	45
5	005	70	65	45	50
6	006	65	60	65	50
7	007	50	60	45	50
8	008	55	55	50	50
9	009	45	60	45	70
10	010	40	45	35	35
11	011	35	65	35	35
12	012	40	50	35	35
13	013	35	45	40	40
14	014	30	40	35	40
15	015	50	45	45	65
16	016	65	60	45	60
17	017	70	65	45	35
18	018	65	70	45	45
19	019	65	75	45	40
20	020	60	75	45	45

From the data above, it can be obtained that in group B : The highest score at the variable-cloze test is 70 (with 2 students), and the lowest score is 30 (with 2 students)., The highest score at reading comprehension of TOEFL is 75 (with 2 students) and the lowest score is 40 (with 2 students)., The highest score at literal comprehension items of TOEFL is 65 (with 1 students) and the lowest score is 30 (with 1 students)., The highest score of inferential comprehension items of TOEFL is 70 (with 1 students), and the lowest score is 35 (with 4 students).

Data Analysis

To analyze the data means to calculate the data gathered from the administration of the test in order to prove the hypotheses that are exist to the research. The Pearson Product-Moment Coefficient correlation was used to test whether the Null Hypothesis that are exist to the research.

The Pearson Product-Moment Coefficient was used to test Whether the Null Hypotheses are accepted or rejected. If the result of the correlation is higher than t-table, the Null Hypotheses are rejected. If the result of the correlation is lower than t-table, the Null Hypotheses are accepted.

Analyzing the data

From the result of the test, a calculation is made to find out validity of cloze test in measuring reading comprehension. The writer analyzed the data which are the scores of group A and group B by applying the Pearson Product-moment formula. The data were correlated, namely: Cloze test using Fixed-ratio method was correlated with reading test of TOEFL., Cloze test using variable-ratio method was correlated with reading test of TOEFL., Cloze test using fixed-ratio method was correlated with literal comprehension items of TOEFL., Cloze test using fixed-ratio method was correlated with inferential comprehension items of TOEFL., Cloze test using variable-ratio method was correlated with literal comprehension items of TOEFL., Cloze test using variable-ratio method was correlated with inferential comprehension items of TOEFL.

After calculating the data of each correlation of the test in order to find out the validity of cloze test in measuring reading comprehension and to find out to which level of reading comprehension is cloze test most valid (see appendix 1-6), is obtained that: r of the first correlation 68 ISSN 2087-4049

is 0,77, r of the second correlation is 0,61, r of the third correlation is 0,61, r of the fourth correlation is 0,69, r of the fifth correlation is 0,56, r of the sixth correlation is 0,26

Aruan (2002:34) interprets that: "The degrees of coefficient of coefficient correlation (validity coefficient) of test scores as follow:

0,8 < r <1	(very high correlation)
0.6 < r < 0.8	(high correlation)
0.4 < r < 0.6	(fair correlation)
0.2 < r < 0.4	(low correlation)
0.0 < r < 0.2	(very low correlation)

Research Findings

Based of calculation, the findings can be presented as follows: r of the first correlation is 0,77 and it is categorized as high correlation. It means that cloze test using fixed- ratio method possessed high validity in measuring reading comprehension., r of the second correlation is 0,61 and it is categorized as high correlation. It means that cloze test using variable- ratio method possessed high validity in measuring reading comprehension., r of the third and fourth correlation are 0,61 and 0,69 and they are categorized as high correlation. It means that r of the correlation between fixed-cloze test and inferential comprehension items of TOEFL (0,69) is higher than r of the correlation between fixed-cloze test and literal comprehension items of TOEFL (0,61). Then, the writer concluded that cloze test using fixed-ratio method in measuring reading comprehension is most valid to the literal level of reading comprehension., R of the fourth correlation is 0,56. It means that cloze test using variable-ratio method possessed fair validity valid neither to the literal., r of the sixth correlation is 0,26 and it is categorized as low correlation. It means that cloze test using variable-ratio method is not valid neither to the literal or inferential comprehension items of reading comprehension.

Hypotheses Testing

To test the hypotheses of the research, t_{value} is used to be compared to the distribution table of t in certain degrees of freedom (df). In this study, the degree of freedom is 40 (obtained from n-2; 40– 2 = 88) at level of significance 0,01.

Then, after comparing the t calculated to the t table from each correlation, it was found that: The t-calculated of the first correlation is higher than the t table at level of significance 0,01 with df = 38, that is 0,77> 0,320. So, Ho is rejected and Ha is accepted. It means that "cloze test using fixed-ratio method significantly correlate with standardized test reading comprehension of TOEFL in measuring reading comprehension., The t calculated of the second correlation is higher than the t-table at level of significance 0.01 with df = 38, that is 0.61 > 0.328. So, Ho is rejected and Ha is accepted. It means that "cloze test using variable-ratio method significantly correlate with standardized test reading comprehension of TOEFL in measuring reading comprehension.", The t calculated of the third correlation is higher than the t table at level of significance 0,01 with df = 38, that is 0,61 > 0,328. So, Ho is rejected and Ha is accepted. That means that "cloze test using fixed-ratio method significantly correlate with literal comprehension items of TOEFL in measuring reading comprehension.", The t calculated of the fourth correlation is higher than the t table at level of significance 0,01 with df = 38, that is 0,69 > 0,328. So, Ho is rejected and Ha is accepted. It means that "cloze test using fixed-ratio method significantly correlate with inferential comprehension items of TOEFL in measuring reading comprehension.", The t calculated of the fifth correlation is higher than the t table at level of significance 0.01 with df = 38, that is 0.56 > 0.328. So, Ho is accepted and Ha is rejected. It means "cloze test using variable-ratio method significantly correlate with literal comprehension items in measuring reading comprehension.", The t calculated of the sixth correlation is lower than the t-table at level of significance 0,01 with df = 38, that is 0.26 < 0.328. So, Ho is accepted and Ha is rejected. It means "cloze test using variable-ratio method does not significantly correlate with inferential comprehension items of TOEFL in measuring reading comprehension."

CONCLUSION

This chapter is the presentation of the conclusion for the research based on the data gathered after the administration of the research and the suggestions given by the researcher.

Based on the data analysis in the previous chapter, some conclusion are drawn as follows: There is a positive correlation among the correlation test using fixed-ratio method with reading comprehension of TOEFL, literal comprehension items of TOEFL, and with inferential comprehension items of TOEFL in measuring reading comprehension. There is no correlation among the correlation between cloze test using variable-ratio method and reading comprehension of TOEFL in measuring reading comprehension, literal comprehension items of TOEFL and with inferential comprehension items of TEOFL. This means that cloze test using fixed-ratio method is a valid instrument in measuring comprehension but cloze test using variable-ratio method is not a valid instrument in measuring reading comprehension., Cloze test using fixed-ratio method is most valid to the literal level of reading comprehension than the inferential level. While cloze test using variable-ratio method is not to any of them.

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