

CHAPTER III

METHOD OF THE RESEARCH

A. Types of the Research

This research is an experimental research. According to Gay, (2000, p.367). experimental research is the only type of the research that can test hypotheses to establish cause and effect relationship. Creswell stated that there are three kinds of experimental design; true, quasi, and pre-experimental research. Creswell (2012, p.294) stated an experimental research is: “the traditional approach to conduct quantitative research, whether it influences an outcome or dependent variable“. The design of this research is the Quasi-Experimental research. Creswell stated quasi experimental is the situation occur in which researcher needs to use to intact group .

According to Nunan (2002, p.41), the characteristic of this type is that it has both pre and post – test, and experimental and control groups, but not random assignment of subject. There were two variables used in this research. The first was that Letter Game (X), and the second was that students’ speaking ability (Y). Louis Cohen, et.al (2007) stated that an experimental involves making a change in the value of one variable-called the independent variable- and observing the effect that changes one another variable called the dependent variable. By Creswell (2012, p.310) the design of the research can be illustrated as follows:

Table III.1
Nonequivalent Control Group Design

Class	Pre –Test	Treatment	Post – Test
A	T1	✓	T2
C	T1	X	T2



Note:

- A : Experimental Group
- C : Control Group
- T1 : Pre- test to experimental and control group
- T2 : Post- test to experimental and control group
- ✓ : Receiving particular treatment
- X : Without particular treatment

Furthermore, the researcher wanted to investigate and find out the effect of Letter Game on students' speaking ability.

B. Time and Location of the Research

1. Time of the Research

This research was conducted from February to March 2016.

2. Location of the Research

The location of this research was at Islamic Junior High School Al-Muttaqin Pekanbaru in 2015/2016 of academic year. It is located on HR. Subrantas KM. 13.5, tampan, pekanbaru.

C. The Subject and the object of the Research

1. The Subject of The Research

The subject of this research was students of the eighth grade at Islamic Junior High School Al-Muttaqin Pekanbaru.

2. The Object of The Research

The object of this research was the effect of using Letter game on students' speaking ability of the eighth grade at Islamic Junior High School Al-Muttaqin Pekanbaru.

Hak Cipta Dilindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

D. The Population and the Sample of the Research

1. Population of the Research

Gay (2000, p.122) stated that population is the group of interest researcher; the group to which she or he would like the results of the study to be generalizeable.

The population of this research was the eighth grade students at Islamic Junior High School Al-Muttaqin Pekanbaru. The total of population at the eighth grade of student 117 students from 4 classes. The following is number of population:

Table III.2
The Population of The Research

No	Class	Total
1	VIII A	32 Students
2	VIII B	31 Students
3	VIII C	32 Students
4	VIII D	22 Students
	Total	117 Students

2. Sample of the Research

The total number of population was large enough to be taken all as sample of the research. In this research, the sampling technique that the Researcher used was cluster sampling.

According to Gay (2000, p.129), cluster sampling is most useful when the population is very large or spread out over a wide geographic area. They were VIII A as an experimental class and VIII C as a control class. Total amount of the sample was 64 students, 32 students was in experimental group and 32 students were control group.

Hak Cipta Dilindungi Undang-Undang

1. Diarangi mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Diarangi mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

The specification of the sample can be seen on the table below:

Table III.3
The Sample of The Research

No	Class	Total	
1	VIII A	32 students	Experimental Group
2	VIII C	32 students	Control Group
Total Sample		64 students	

E. The Technique of Collecting Data

In collecting data, present researcher took data from oral test by using pretest and posttest. Pretest was administered to the subject before applying Letter Game in teaching Speaking. Meanwhile posttest was administered after applying Letter Game in teaching speaking.

Pretest and posttest contained the same test items. They were just different in time allocation. These pretest and posttest were taken by giving oral test. Students were given five minutes to present or describe real objects orally. Then, the researcher used these items as the pretest and posttest which used three steps. Those were pretest, treatment, and posttest.

1. Pretest

The pretest was administered before the researcher used Letter Game in teaching speaking. It was aimed to know students' ability in speaking.

2. Treatment

The researcher as a teacher treated the students by applying Letter Game around School in teaching speaking

3. Posttest

Posttest was administered after applying treatment. The posttest items were the same as pretest items. Pretest and posttest also have some

Hak Cipta Dilindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

application when they was conducted in a classroom. The purpose of this posttest has to know students' ability in speaking.

a. Assessing Speaking

Speaking is a complex skill requiring the simultaneous use of different ability which often develops at different roles. Speaking skill are generally recognized in analysis of speech process that are pronunciation, grammar, vocabulary, fluency and comprehension. Heaton presented the sample of an oral English rating scale that used 1-6 points. Below is the frame of Heaton's (1990) in Sari (2011, pp.14-16) oral English rating scale:

Table III.4
Assessing Speaking

6	Pronunciation good -only 2 or 3 grammatical errors - not much Searching for words - very few long pauses - fairly easy to understand - very few interruptions necessary- has mastered all oral skills on course.
5	Pronunciation slightly influenced by L1- a few grammatical errors but most sentences correct – sometimes searches for words – not too many long pauses – general meaning fairly clear but a few interruptions necessary – has mastered almost all oral skills in course.
4	Pronunciation influenced a little by L1 – a few grammatical errors but only 1 or 2 causing serious confusion – searches for words – a few unnatural pauses - conveys general meaning fairly clearly –a few interruptions necessary but intention always clear–has mastered most of oral skills on course
3	Pronunciation influenced by L1-pronunciation and grammatical errors–several errors cause serious confusion–longer pauses to search for word meaning–fairly limited expressions–much can be understood although some effort needed for parts–some interruptions necessary– has mastered only some of oral skills on Course.
2	Several serious pronunciation errors–basic grammar errors unnaturally long pauses very limited expression–needs some effort to understand much of it–interruptions often necessary and sometimes has difficulty in explaining or making meaning clearer–only a few of oral skills on course mastered
1	A lot of serious pronunciation errors–many basic grammar errors–full of unnaturally long pauses–very halting delivery– extremely limited expressions–almost impossible to understand –interruptions constantly necessary but cannot explain or make meaning clearer–very few of oral skills on course mastered.

Hak Cipta Dilindungi Undang-Undang

1. Diarangi mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Diarangi mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Each element characteristic is then defined into six chart behavioral statements as stated in the frames above. The writer will objectively see the characteristic of each student's speaking ability whether they achieve 1, 2,3,4,5 and 6. In order to case the computation the writer converts the small score of Heaton to the scale of 100 as follow:

6 = 87-100	5 = 77-86
4 = 67-76	3 = 57-66
2 = 46-56	1 = below 45

According to Brown (2003, pp.148-149) Assessing Speaking as follows:

Table III.5
Assessing Speaking

Points	Pronunciation
0.0-0.4	Frequent phonemic errors and foreign stress and intonation patterns that cause the speaker to be unintelligible.
0.5- 1.4	Frequent phonemic errors and foreign stress and intonation patterns that cause the speaker to be occasionally unintelligible
1.5-2.4	Some consistent phonemic errors and foreign stress and intonation patterns, but the speaker is unintelligible.
2.5- 3.0	Occasional non-native pronunciation errors, but the speaker is always intelligible.
Points	Fluency
0.0-0.4	Speech is so halting and fragmentary or has such a non-native flow that intelligibility is virtually impossible.
0.5-1.4	Numerous non- native pauses and /or a non-native flow that interferes with intelligibility.
1.5-2.4	Some non-native pauses but with a more nearly native flow so that the pauses do not interfere with intelligibility.
2.5- 3.0	Speech is smooth and effortless, closely approximating that of a native speaker.

According to Hughes (2003, pp.131-132) There are some components that should be considered in giving students' score: they are accent, grammatical, vocabulary, fluency and comprehension. The scoring

Hak Cipta Dilindungi Undang-Undang

1. Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

process was done by two raters by using the indicators of speaking ability as mentioned below:

Table III.6
Speaking Assessment

1. Accent

Score	Requirement
6	Native pronunciation with no trace of "foreign accent."
5	No conspicuous mispronunciations, but would not be taken for narative speaker.
4	Marked "foreign accent" and occasional mispronunciation which do not interfere with understanding
3	"foreign second" requires concentrated listening, and mispronunciations lead to occasional misunderstanding and apparent errors in grammar of vocabulary
2	Frequent gross error and a very heavy accent make understanding difficult, require frequently repetition
1	Pronunciation frequently unintelligible

2. Grammar

Score	Requirement
6	No more than two errors during the interview.
5	Few errors, with no patterns of failure.
4	Occasional errors showing imperfect control of some pattern but no weaknesses that causes misunderstanding
3	Frequent errors showing some major pattern uncontrolled and causing occasional irritation and misunderstanding
2	Constant errors showing control of very view major patterns and frequently preventing communication
1	Grammar almost entirely inaccurate except in stock phrases

3. Vocabulary

Score	Requirement
6	Vocabulary apparently as accurate and extensive as that of an educated native speaker.
5	Professional vocabulary broad and precise; general vocabulary adequate to cope with complex practical problems andvaried social situations.
4	Professional vocabulary adequate to discuss special interest, general vocabulary permits discussion of any non-technical subject with some circumlocutions.
3	Choice of words sometimes inaccurate, limitations of vocabulary prevent discussion of some common professional and social topics.
2	Vocabulary limited to basic personal and survival areas (time, food, transportation, family, etc.)
1	Vocabulary inadequate for even the simplest conversation

Hak Cipta Dilindungi Undang-Undang

1. Diarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Diarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

4. Fluency

Score	Requirement
6	Speech on all professional and general topics as effortless and smooth as a native speaker's
5	Speech is effortless and smooth, but perceptively non-native in speed and evenness
4	Speech is occasionally hesitant, with some unevenness caused by rephrasing and grouping for words
3	Speech is frequently hesitant and jerky; sentences may be left uncompleted
2	Speech is very slow and uneven except for short or routine sentences
1	Speech is no halting and fragmentary that conversation is virtually impossible

5. Comprehension

Score	Requirement
6	Understands everything in both formal and colloquial speech to be expected of an educated native speaker.
5	Understands everything in normal educated conversation except for very colloquial or low-frequency items, or exceptionally rapid or slurred speech.
4	Understand quite well normal educated speech when engaged in a dialogue, but occasional repetition or rephrasing
3	Understand careful, somewhat simplified speech when engaged in a dialogue, but may require considerable repetition and rephrasing
2	Understands only slow, very simple speech on common social and touristic topics; require constant repetition and rephrasing
1	Understand too little for the simplest type of conversation

1. The Validity of the Test

According to Hughes (2003, p.26) a test is said to be valid if it measures accurately what it is intended to measure. In this research, the researcher used the content validity to measure whether the test was valid or not in this research. According to Hughes (2003, p.26) A test is said to have content validity if its content constitutes a representative sample of the language skills, structures, etc, with which it is meant to be concerned.. Content validity just focused on how well the items represent the intended area.

Hak Cipta Dilindungi Undang-Undang

1. Diarangi mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Diarangi mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

2. The Reliability of the Test

Reliability is the measuring of test that is consistent and dependable. It means that the test should consistently measure the person's ability. Furthermore, Brown states that there are two scoring processed in reliability. They are inter-rater reliability and intra-rater reliability. Inter-rater reliability occurs when two or more scores yield inconsistent scores of the same test. Intra-rater reliability is common occurrences for classroom teachers because of the unclear scoring criteria, bias toward particular 'good' and 'bad' students, or simple carelessness.

In this research, the researcher used inter-rater reliability. It means that the scores of the test were evaluated more than one person. The students' speaking scores were evaluated by two raters. The following table is the categories of reliability test used in determining the level of reliability of the test.

Table III. 7
The Level of Reliability

No.	Reliability	Level of Reliability
1	0.0 - 0.20	Low
2	0.21- 0.40	Sufficient
3	0.41 – 0.70	High
4	0.71 – 1.0	Very high

In determining the reliability of the test in the research, the researcher used inter-rater reliability formula because the researcher used two raters in assessing and giving score of students' speaking ability. The scores given by rater 1 were correlated to scores given by rater 2. The higher correlation was, the higher inter-rater reliability. As explained by

Hak Cipta Diindungi Undang-Undang

1. Diarangi mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:
 - a. Pengutipan hanya untuk kepentingan pendidikan, penelitian, penulisan karya ilmiah, penyusunan laporan, penulisan kritik atau tinjauan suatu masalah.
 - b. Pengutipan tidak merugikan kepentingan yang wajar UIN Suska Riau.
2. Diarangi mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau.

Henning that if rating of students' result of the test is rated by two or more judges or raters, the correlation between raters should be inter-correlated. Then, the inter-correlation of the raters was used in finding the reliability of the test.

To determine the correlation between scores given by rater 1 correlated to scores given by rater 2, the reseacher used *Pearson Product Moment* formula through SPSS 22 version. The following table describes the correlation between scores given by rater 1 and rater 2 by using *Pearson Product Moment* formula through SPSS 22 version.

Table III. 8

Correlations

		RATER1	RATER2
RATER1	Pearson Correlation	1	.582**
	Sig. (2-tailed)		.000
	N	32	32
RATER2	Pearson Correlation	.582**	1
	Sig. (2-tailed)	.000	
	N	32	32

** . Correlation is significant at the 0.01 level (2-tailed).

From the table above, it could be seen that the coefficient of correlation product moment $r_{obtained}$ (r_o) between scores given by rater 1 and rater2 was 0.582. Before comparing it to r_{table} (r_t), the researcher obtained the degree of freedom

$$df = N - nr$$

$$df = 32 - 2 = 30$$

After the degree of freedom (df) = 30 was obtained, the coefficient of $r_{obtained}$ product moment was compared to r_{table} , either at significance level of 5% or 1%. At significance level of 5%, r_{table} was 0.349; while at



significance level of 1% r_{table} was 0.449. Based on r_{table} , it can be analyzed that (r_o) was higher than (r_t) either at level of 5% and 1%. It is clear that $0.349 < 0.582 > 0.449$. So that, the researcher concluded that H_o is rejected and H_a is accepted. It means there was a significant correlation between scores given by rater 1 and rater 2. In the other words, the speaking test was reliable.

F. Technique of Data Analysis

In order to find out whether there is a significant effect of using Letter Game on independent students' speaking ability, the data were analyzed statistically. In analyzing the data, the researcher analyzed the data of the research from the scores of pre-test and post-test by using sample T-test.

In analyzing the data, the researcher used t-test formula. According to Gay and Airasian (2000, p.512), t-test is one of the statistics tests used to determine whether two means are significantly different at a selected probability level. Therefore, the researcher used independent sample t-test. The data were analyzed by using SPSS 22 in order to find out the result of the students in speaking ability who are taught and who are not taught by using letter game. The researcher concluded that:

1. H_a was accepted if the value in the **Sig. (2-tailed)** column is *equal or less* than .05 (e.g. 0.03, .01, .001). It means that there is a significant effect of students' speaking ability at Islamic junior high school Al-Muttaqin Pekanbaru.
2. H_o was accepted if the value is *above* .05 (e.g. 0.06, 0.10). It means that there is no significant effect of students' speaking ability at Islamic junior high school Al-Muttaqin Pekanbaru.