CHAPTER III

METHOD OF THE RESEARCH

A. Research Design

The design of this research is a correlational research. It deals with exploring relations that exist between variables. Correlational research helps to clarify relations among variables (Schunk, 2008, p.4). There were two variables in this research: independent variable and dependent variable.

The independent variable is a stimulus variable or input, it is that factor which is measured, manipulated, or selected by the experimenter to determine its relationship to an observed phenomenon. Meanwhile, the dependent variable is response variable or output, it is that factor which is observed and measured to determine the effect of the independent variables (Riadi, 2016, p.52). In this research, self assessment is the independent variable and symbolized by X, and speaking ability is the dependent variable and symbolized by Y.

Self Assessment	→	Speaking Ability

B. **Time and Location of the Research**

The research was conducted on March in academic year 2017/2018. SMPN 16 Pekanbaru is located at Jln. Cempaka No. 16 Pekanbaru.

C. **Subject and Object of the Research**

The subject of this research was the Eighth Grade Students at Junior High School 16 Pekanbaru. And the object of this research was self assessment and speaking ability.

D. **Population and Sample of the Research**

1. Population

Population is defined as a set of units (usually people, objects, transactions, or events) that a researcher are interested in studying (Sincich, 2009, p.6). The population of this research was the Eighth Grade Students at Junior High School 16 Pekanbaru. There were five classes which consisted of 197 students. It can be seen in the following table:

Table III.1
Population

No	Class	Students
1	VIII.1	37
2	VIII.2	40
3	VIII.3	36
4	VIII.4	42
5	VIII.5	42
Total		197

2. Sample

Sample is a subset of the units of a population (Sincich, 2009, p.7). Based on the design of the research, the researcher used simple random sampling which all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample (Graham, 1994, p.111).

Arikunto (2006, p.134) stated that if the population is less than 100, it is better to take all of them as the sample but if the total population is more than 100 students, the sample can be taken between 10-15% or 20-25% or more. The researcher took 20% of the population as the sample by putting all the little rolled-up papers that contained all of the students' names into a box and picking them up one by one until getting 7-9 students' names for each class. The percentage of sample can be seen in the table below :

Table III.2
Sample

No	Class	Students	20 % from total student
1	VIII.1	37	7
2	VIII.2	40	8
3	VIII.3	36	7
4	VIII.4	42	9
5	VIII.5	42	9
Total Population		197	
Total Sample			*40*

E. **Technique of Collecting Data**

1. Questionnaire

According to Brown in Dornyei (2003, p.6), questionnaires are any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers. In this research, the researcher used questionnaire to know students' self assessment which was adopted from Brown (2003). The questionnaire dealth with learners' opinion in responding self assessment in language learning by using likert scale which consists of 25 positive statements. It has been translated into bahasa indonesian by the researcher.

Scoring for questionnaire can be seen as follows (stated in Riduwan, 2011, p.86):

Statement	Score
1. Strongly Agree	5
2. Agree	4
3. Undecided	3
4. Disagree	2
5. Strongly Disagree	1

The blue print of questionnaire can be seen in the table below :

Table III.3
Blue Print of Self Assessment Questionnaire

Variable	Indicator	Item Number
X	Students are able to monitor him/herself in language learning.	1, 2, 3, 4, 5.
	Students are able to render an evaluation of general ability.	6,7,8,9,10.
	Students are able to set the goals and mantain an eye on the learning process.	11,12,13,14,15.
	Students are able to apply affective factors in learning.	16,17,18,19,20.
	Students are engaged in the process of constructing their test.	21,22,23,24,25.

2. Test

According to Brown (2003, p.4), test is a method of measuring a person's ability, knowledge, or performance in a given domain. In order to know students' speaking ability, the researcher used retelling story. There were some topics given such as description about pet, house, family, school, room. For students' speaking rubric, it can be seen in the table below:

Table III.4
Speaking Rubric

No	Description	Level					
		1	2	3	4	5	6
1	Accent						
2	Grammar						
3	Vocabulary						
4	Fluency						
5	Comprehension						
	Total of score :						
	Final score :						

Students' speaking score was calculated by using this formula as follows:

Final score = $\frac{Students'\ Score}{Maximum\ Score}$ x 100

F. Technique of Analyzing Data

1) In order to find out how students' self assessment is, Riduwan (2011, p.40) pointed out the formula to analyze the percentage of students' self assessment as follows:

$P = \frac{f}{N}$ x 100 %

Where:

P = Number of percentage
F = Obtained frequency
N = Number of frequency/sample

Riduwan (2011, p.41) indicated the scale to clasify the gained percentage of questionnaire as follows:

1. 81% - 100%   categorized into very high level
2. 61% - 80%   categorized into high level
3. 41% - 60%   categorized into high enough level
4. 21% - 40%   categorized into low level
5. 0% - 20%   categorized into very low level

2) In order to find out how students' speaking ability is, the data were analyzed by using this following formula (stated in Spiegel, 2009, p.49)

$\bar{x} = \frac{\sum x}{N}$

Where:

$\sum$x = Total of students score
N = Total of students

Classification for students' speaking score (Sudijono, 2008, p.35) can be seen as follows:

1. Score 80 – 100   Categorized into very good level
2. Score 66 – 79   Categorized into good level
3. Score 56 – 65   Categorized into enough level
4. Score 40 – 55   Categorized into less level
5. Score 30 – 39   Categorized into fail level

3) In order to find out whether there is correlation between students' self assessment and their speaking ability or not, the data were analyzed by using Pearson Product Moment SPSS 20.0 windows program. It is used

when the two types of the data correlated are interval, the data distribution is normal and linear.

a) Normality Test

The aim of normality test is to know if the data are normally distributed or not. If asymp.sig > 0.05 the data are normal. If asymp.sig < 0.05 the data are not normally distributed. The analysis by using *one sample kolmogorof-smirnov test* can be seen in the following table:

Table III.5
Normality Test

One-Sample Kolmogorov-Smirnov Test

		Self assessment	Speaking ability
N		40	40
Normal Parameters[a,b]	Mean	66,35	53,98
	Std. Deviation	5,895	7,195
Most Extreme Differences	Absolute	,109	,162
	Positive	,094	,162
	Negative	-,109	-,117
Kolmogorov-Smirnov Z		,692	1,025
Asymp. Sig. (2-tailed)		,724	,244

a. Test distribution is Normal.

b. Calculated from data.

Based on the table above, Asymp.sig of self assessment and speaking ability was 0.724 & 0.244 which was higher than 0.05. It can be concluded that the data distribution is normal. Therefore, the analysis of correlation for self assessment and speaking ability can be continued.

b) Linearity Test

This test was used to analyze if the two variables have significant linear relationship or not. To know the linearity analysis, if sig.value

> 0.05 the data are not linear. If sig.value < 0.05 the data are linear. After analyzing it through SPSS, the result can be seen in the following table:

Table III.6
Linearity Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	604,869	1	604,869	16,254	,000[b]
	Residual	1414,106	38	37,213		
	Total	2018,975	39			

a. Dependent Variable: Speaking Ability

b. Predictors: (Constant), Self Assessment

It shows that sig.value= 0.000[b]. Since the sig.value (0.000) < 0.05 the data distribution studied had linear form. According to Sudijono (2011, p.191), the condition to use Pearson Product Moment formula in correlational research is if the data are distributed normally and linear. Since the data distribution was normal and linear, the statistical analysis used parametric procedure, which was Product Moment Correlation. Statistically, the hyphotheses (stated in Riadi, 2016, p.92) are:

H_a: Sig. < α (0.05)

H_o: Sig ≥ α (0.05)

H_a is accepted if sig. < α or there is a correlation between self assessment and speaking ability.

H_o is accepted if sig. ≥ α or there is no correlation between self assessment and speaking ability.

G. Validity and Reliability of Instrument

1. Validity

Validity is the extent to which inferences made from assessment results are appropriate, meaningful, and useful in terms of the purpose of the assessment. An instrument is valid if it is able to measure what must be measured (Gunning, 2012, p.65).

a. Validity of Questionnaire

To know the validity of this questionnaire, the researcher used construct validity. Construct validity is the extend to which a particular test can be shown to assess the construct that it purposes to measure (Gall, 1996, p.249).

2. Reliability

a. Reliability of speaking test.

To find out the reliability of speaking test, the researcher used inter-rater reliability formula because the researcher used two raters in assesing and giving the score of the students' ability in retelling story. Inter-rater reliability occurs when two or more scorers yield inconsistent scores of the same test, possibly for lack of attention of scoring criteria, inexperience, inattention, or even preconceived biases. The researcher compared scores from two raters (rater 1 and rater 2) in order to find out if the scores were similar or different. After comparing the score, the researcher determined the scores from two raters. To obtain the reliability of

the speaking test, the researcher used SPSS 20.0 to find out whether the test is reliable or not.

Table III.7
Cronbach Alpha Table for speaking test

Reliability Statistics

Cronbach's Alpha	N of Items
,818	2

From the table above, it can be seen that the value of Cronbach's Alpha was 0.818. It means the reliability of the test was highly reliable.