Chapter III
Methodology of Research

This chapter covers the methodology of research, methodology of research refers to how the researcher collected the data. There are several subtopics in this chapter, they are researcher design, population and sample, variable of research, data collection procedures, and data analyze procedures.

3.1 Research Design

In conducting this research, the researcher used Quantitative method and more specific to correlation research in order to know the correlation and the significance correlation between both of the variable. So, the researcher formulates this research design to describe the correlation both of variable which correlate each other and have a correlation on both of sides:

\[ \begin{align*}
X = \text{Students’ motivation} \\
Y = \text{Students speaking skill}
\end{align*} \]

3.2 Population and Sample

Population is the whole units to be searched. Population is the human, things, or others that can be used as subjects in taking data sources in the research. In this research, the population is the students of eleventh grade of SMAN 1 Tibawa at
Palalu Street, Isimu utara village. The students of eleventh grade are 259 students that divided into 8 classes (4 science and 4 social classes).

Sample is sub group of the population. This group represents the characteristic of the population. The researcher orientated to Arikunto (2008, p. 112). Who stated that if the population is more than 100, the researcher will take 15%-25% as Sample of this research. So, the researcher will take 15% from 259 students.

The sample used systematic sampling. The researcher took number from 1-259 randomly by taking multiple 5 for each classes. Therefore, the researcher took 5-4 students in every class. Result of systematic sample is 43 students. The systematic samplings that the researcher used in research are 43 students of 11th grade of SMA N1 Tibawa.

3.3 Variable of Research

There are two variables in this research. X Variable is student motivation. In the previous chapter the researcher stands to harmers’ theory as the indicators of motivation in language learning in order to develop the questionnaire of students’ motivation. It is because the theory related to the research problem. Therefore, indicators of X variable (students’ motivation) are:

1. Goal and goal setting
2. Learning environment
3. Interesting learning
Indicator of Y variable is students speaking skill, the researcher assessed students’ speaking skill by use oral proficiency scoring category from (Brown, 2007 as cited in Masnaini 2009.p23). The researcher used five of indicators below as the guidance to measurement the students speaking skill.

1. Pronunciation
2. Grammar
3. Vocabulary
4. Fluency
5. Comprehension

3.4 Data collection procedure

3.4.1 Questionnaire

The researcher used questionnaire to test the students’ motivation. The researcher created the questionnaire which includes Harmer’s indicators of motivation. There are 30 statements in the questionnaire which developed by 3 indicators of motivation by Harmer’s theory. The first indicators contain 10 statements about goal and goal setting, the second indicators contain 10 statements about learning environments and the last indicators contain 10 statements of interesting learning. The statements of questionnaire measured by 5-point Likert scale (1=strongly disagree; 5= strongly agree). The indicators of motivation and numbers of questionnaire are shown by Table 6:
Table 6: The Indicators of Motivation and Numbers of Questionnaire

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>NUMBERS OF QUESTIONNAIRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goal and goal setting</td>
<td>1,2,3,4,5,6,7,8,9,10</td>
</tr>
<tr>
<td>2. Learning environment</td>
<td>11,12,13,14,15,16,17,18,19,20</td>
</tr>
<tr>
<td>3. Interesting class</td>
<td>21, 22,23,24,25, 26, 27, 28, 29, 30.</td>
</tr>
</tbody>
</table>

3.4.2 Test of speaking

Test of speaking is used to get the data of the students speaking ability. Based on explanation of test types in the theoretical review above, the researcher used transactional (dialogue) as the test type of speaking and prepares 2 topics of dialogue appropriated material from Competence standard and basic competence which the students learn in eleventh grade. Therefore, 2 topics are expressing love and expressing sadness.

The researcher divided the students into several groups consist of 2 or 3 students and they were choose one of 2 topics that the researcher already prepare. The students made up the dialogue appropriate with the topic which they choose before and then they presented it in front of class. The students’ speaking achievement score measured by oral proficiency scoring category (Brown, 2007 as cited in Masnaini 2009. p23).

The researcher used independent examiner to assess the students’ speaking skill because the independent examiner knows the students’ ability, thus it will be
objective for students. The independent examiner is the English teacher who is capable of speaking English and capable of assessing the students speaking ability.

3.5 Data Analysis Procedure

The process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting, and different analyses, moving deeper and deeper into understanding the data, representing the data, and making an interpretation of the larger meaning of the data. The data analyzed by SPSS 16 (statistical product and service solution 16).

In analyzing the data the researcher correlated both of variables. But, before the researcher correlated two variables, the researcher counted data of motivation’ questionnaire and classified them into five categories (1=strongly disagree; 5=strongly agree). Then, the researcher will count the score of speaking skill and classified them into five categories too (1=very low; 5=very good).

In relation to the research, this research was analyzed through the correlation analysis steps: descriptive statistics; describe standards deviation and count mean, minimum and maximum score for each variable, the normality assumption test by using Chi-Square and regression analysis.
3.5.1. Data normality test

This step is used to measure the normality of data, in this case the distribution of value is being observed. It is applied for both X variable and Y variable with testing hypothesis as follows:

\[ H_0: \text{Variable data is normally distributed} \]
\[ H_1: \text{Variable data is not normally distributed.} \]

If both of variables normally distributed so, regression analyzed to count regression coefficient.

3.5.2 Regression and correlation analysis

The aim of regression analysis is to find out the influences of variable toward another variable. The regression analysis consisted of following steps:

1. Counting the R square (determinant coefficient) to know whether or not the variant of students’ speaking skill could be explained by the linear correlation of students’ motivation.

2. Regression model Compatibility ANOVA test used to test the linear regression equations and the significant of regression coefficient. In other words, the test used to find out the significant correlation between both variables.

3. Regression coefficient test used to find out the significance influence of X variable toward Y variable
3.6. Statistical Hypothesis

Analysis data need statistical hypothesis. Thus, the statistical hypothesis will explain as follows:

a. \( H_0 \): there are no significance correlation between students’ motivation and students’ speaking skill

b. \( H_1 \): there are significance correlation between students’ motivation and students’ speaking skill