### **CHAPTER III**

# **RESEARCH METHODOLOGY**

This chapter presents the research design, variable, population and sample, research instrument, data collection and data analysis.

### A. Research Design

Research design is a plan or program make by researcher as the activity target is done (Sugiyono, 2012). This research used the correlation research design. Correlation research is non-experimental research that is similar to ex post facto research in that they both employ data derived from preexisting variables. There is no manipulation of the variables in either type of research (Ary, 2006). According to Fraenkel and Wallen (2009), correlation research is also sometimes referred to as from of descriptive research because it describes an existing relationship between two variables.

In statistical science, the correlation between two variables is known as *bivariate correlation*, while the correlation between more than two variables is known as *multivariate correlation*. Since the correlation study searches for whether or not there is a correlation between two variables or more, the correlation between two variables can be a positive correlation and negative correlation (Sudijono, 2006). A study has a positive correlation when two variables (or more) move in tandem. It means if the X variable decreases, the Y variable also decreases and vice versa. However, a study has a negative correlation when one variable decreases, while the others increase and vice versa. In this research, bivariate correlation was used.

Based on the distinction above, it can be concluded that correlation research is a research that is done to find out whether there is a relationship between two variables to existing data without manipulating the data, variable X and variable Y. In this case, variable X is the students' listening comprehension and variable Y is the students' speaking skill.

### **B.** Variable

In this research the researcher used and independent variable dependent variable. The independent variable is 'listening comprehension' or usually known as X variable and the dependent variable is 'speaking skill' or usually known as Y variable.

## C. Population and Sample

#### **1.** Population

According to Creswell (2002), a population is a group of individuals who have the same characteristic. A population is defined as all members of any well define class, events, or objects (Ary, 2006). Populations of the research are 40 students at Diploma-1 English Program of Genta English Course.

# 2. Sample

According to Mark and Peter (2001), sample is part estimates of population parameter. It means that the sample is a core of population that used to do the observation whether there is significant correlation between students' listening comprehension and their speaking skill. The researcher chose all population to become the sample. It consists of 40 students.

## **D.** Research Instrument

Instrument is tool to collect the data. Arikunto (2000) states that instruments are a tool that researchers use to help them collect data to make it easier and more systematic. The instruments of this research were documentation and test.

# 1. Documentation

The instrument that the researcher used was the documentation of listening scores that was gotten from one of teacher in Genta English Course.

# 2. Test

Test is a procedure intended to establish the quality, performance, or reliability of something, especially before it is taken into widespread use. The test that was conducted by the researcher was speaking test. The test was conducted in order to know to what extend the skill of students in speaking. Furthermore, the researcher wanted to see directly their performance in speaking.

# E. Data Collection

## 1. Documentation

Documentation which used in this research was the documentation of listening comprehension scores. The data of listening score were collected through the documentation of students at Diploma-1 English Program of Genta English Course.

## 2. Speaking Test

To collect the speaking score the researcher was ask students to make conversation orally (17 students) and video record in MP4 format (23 students) in specific topics which appropriate with scoring rubrics aspects and criteria (Harris, 1974). (see appendix 1)

Table 3.1Topic of Speaking Test

No.	Topic of Speaking Test	
1.	Shadowing to an English Video	
2.	Persuading Someone	

According to Harris, there are some components that are scored in speaking test. The components that have to be scored are pronunciation, grammar, vocabulary, fluency, and comprehension.

The rubric was used to reduce the subjectivity of the test. In case, to judge the skill that the students have is not easy to do because judgments are sometimes subjective. For the example is discriminating the skill of grammar; once it can be judged "good", but the criteria of "good" itself is an opinion or a point of view. Therefore, to assess the performance of speaking will be better if the assessor is two or more assessors.

No	Category	Range
1.	Almost perfect	21 – 25 point
2.	Very good	16 – 20 point
3.	Good	11 – 15 point
4.	Enough	6 – 10 point
5.	Poor	1 - 5 point

Table 3.2Score Category

### F. Data Analysis Technique

Students' score was determined from their listening and speaking performance and the result of their questionnaire. In analyzing the data, the researcher used *Correlation Product Moment Correlation* SPSS 16.0 program which developed by Carl Pearson because the researcher wants to find out the influence which is related to correlational study. *Correlation product moment* is used to show whether there is a correlation or relationship between X variable and Y variable