

Chapter Three

Methodology

This chapter presents the design of the research, setting, population and sample, instrument, data collection procedure and data analysis. In the research design, the researcher explains the design of the research and the reason why the researcher chose the design. In addition, the research setting discusses where and when the data are taken. Population and sample deal with the participants of the research. Moreover, the tool to gather the data and for the validity of the grammar test item is discussed in the instrument of the research. The way to collect the data is explained in data collection procedure. The last, the way to analyse the data is discussed in data analysis

Research Design

In order to reach the purpose of this research, the researcher used quantitative research, using quantitative descriptive design. The reason why the researcher used quantitative research was because the researcher wanted to investigate the EED of UMY students' mastery on passive voice based on the data that could be found after giving a test to the samples. Moreover, the researcher wanted to know the level of the students' mastery on passive voice, whether low, fair, good or very good because some of the lecturers at EED of UMY often claim that the students at EED of UMY lack of passive voice mastery. Creswell (2012) stated that in quantitative research, the researcher discovered an issue based on what happen currently in the field or want to

find the explanation why something appears. Therefore, the researcher used the quantitative as the method so that research question of the research can be answered by the explanation of the results.

Research Setting

This research took place at EED of UMY. The reason why the researcher chose this setting was because EED of UMY provides a subject called *Capita Selecta* on Grammar which included passive voice as the learning material. However, some lecturers said that many students at EED of UMY still lacked mastery of passive voice mastery. Therefore, research was needed to follow up the complaint at this department. Moreover, the researcher also chose EED of UMY as the setting because it is accessible for the researcher to collect the data from the participants at EED of UMY as the researcher is a student at EED of UMY. The researcher also has already been familiar with the environment of EED of UMY. This research occurred on July, 11th – 14th 2017.

Population and Sample

Population. The population of this research was the students of batch 2014 at EED of UMY. The students of batch 2014 have already learned passive voice in the subject of *Capita Selecta* on Grammar, and have spent three years studying English at EED of UMY. Creswell (2012) stated that a similar personality of a group that can differentiate them from other group is called a population. In addition, the number of individuals to be included in the population that researcher get as the participants

called target population (Creswell, 2012). In this research, there were 151 students batch 2014 at EED of UMY as the target population.

Sample. The sample of this research was chosen from the target population. On table 8.1 of Cohen, Manion, and Morrison (2011) showing that there are three confidence levels (90%, 95%, and 99%) and three confidence intervals (5%, 4%, and 3%) in determining the sample. The researcher chose 95% as the confidence level with 5% confidence interval to minimize the error of the data. Based on the confidence levels and confidence intervals of table 8.1 of Cohen, Manion, and Morrison (2011), the researcher chose, from the 151 students as the population, the number of samples were 108 students as the participants. In addition, convenience sampling is the way to choose the sample for this research. According to Cohen et al (2011) convenience sampling is the sample of the research which is accessible at the time and individuals nearby as participants to complete the sample size.

Instrument of the Study

The researcher used grammar test as the instrument of the research to find the data for this research that can measure their level of mastery in passive voice. Brown (2004) stated that a test is a process of evaluating a person's proficiency, comprehension, or behavior in a certain field. Moreover, Crocker and Algina (1986) defined the test as a basic technique for gathering a sample of performance from particular domain. The test in this research consisted of 20 questions and was adopted from the grammar book by Azar (1999). The reason why the researcher chose the 20 questions from this book is because this book is for intermediate level. As the

students at English Education Department of Universitas Muhammadiyah Yogyakarta, the students are required to have at least the mastery of passive voice in intermediate level because they are prospective English teacher who should be competent in English. In addition, multiple choices and dichotomous questions were used in this research as the type of questions.

The grammar test consisted of 20 questions divided into two sections, multiple choices and dichotomous. Cohen, Manion, and Morrison (2011) stated that dichotomous question as two categories of responses that the respondents' problem on answering the questions can be reduced. The questions consisted of two tenses that include 4 questions for simple past on question number 12, 14, 16 and 19, 4 questions or simple present on question number 11, 13, 15 and 8, 4 questions for modal with *be* on question number 18, 20, 2 and 4, 4 questions for modal with *have been* on question number 17, 1, 3 and 10, and the last 4 questions for active voice on dichotomous part on question number 5, 6, 7 and 9.

The summary of the question number of the voice types is provided in the Table 5.

No.	Voice Form	Question Number
1.	Simple Present Tense	11,13, 15, 8
2.	Simple Past Tense	12, 14, 16, 19
3.	Modal with "be"	18, 20, 2, 4

Table 5		
<i>Question Number of Passive Voice Test</i>		
4.	Modal with “have been”	17, 1, 3, 10
5.	Identifying Active-Passive voice	5, 6, 7, 9

Table 5: Question Number of Passive Voice Test

To ensure the validity of the instrument, the researcher used expert judgment as the tool to check the validity of test items. Additionally, validity will be used by the researcher as the tool to check whether the test questions suitable or not for the research.

Data Collection Procedure

In data collection procedure, the researcher asked the lecturers' permission to deliver the grammar test in their class to the participants. After the researcher got the permission from the lecturers to give the grammar test, the researcher distributed the grammar test questions to available students from class A, B, C, and D batch 2014 at EED of UMY to gather the data. The students were given 20 minutes to answer the questions. During the grammar test, the researcher stayed around the class to make sure that the students did the test honestly. After 20 minutes, the answer sheets were collected by the researcher.

Data Analysis

The researcher marked the students' works and mastery based on their answers. Statistical Package for the Social Science (SPSS) version 17.0 windows was used to gain the mean and frequency score to answer the research question of this

current research. The researcher used descriptive statistic as data analysis. Cohen et al (2011) defined descriptive statistic as the meaning of describing the researcher's investigation and clarification about the research. The reason why the researcher used descriptive statistic was because the researcher needed to know the trend of the students' mastery on passive voice at EED of UMY especially the students batch 2014. In this research, the correct answer worth 5 point, and zero for the incorrect answers. The maximum score of the test is 100. To analyse the of EED of UMY students' mastery on passive voice, the researcher took the mean score of students' grade to determine their level of mastery. To categorize the student's mastery in passive voice, the researcher used the five level categories of mastery based on Purwanto (2009) in Table 1. The five levels are very good (score 86-100), good (score 76-85), fair (score 60-75), low (score 55-59) and very low (score below 55).