Chapter Three

Methodology of the Research

In this research, the writer presents the description of the research design that used in this study. The next part presents the populations and sample. After that, the part discusses data collection method. Finally, the writer explains about data analysis method.

Research Design

This research used quantitative method, specifically survey design. It is because the researcher wants to investigate students' anxiety level, causes and strategies to reduce students' anxiety in the classroom presentation at EED UMY. This research used survey design. According to Creswell (2012), "survey designs are procedures in quantitative research in which you administer a survey or questionnaire to a small group of people (called the *sample*) to identify trends in attitudes, opinions, behaviours, or characteristics of a large group of people (called the *population*)" (p.25). Based on the statement above, the researcher used questionnaires to get the details about students' anxiety in classroom presentation at English education department of UMY. Survey study was involved systematically assemble of sufficient information concerning a particular individual, social setting, occasion, to allow investigate to successfully know how the subject operates and solves the problem.

Research Setting

This study was conducted at English Education Department Universitas Muhammadiyah Yogyakarta. The reason why the researcher chose PBI UMY as research setting was because the participants has been learning English for semester one to eight with use presentation method at EED UMY. One of the presentation subjects is academic presentation in semester seventh. Besides, the researcher found the students' anxious in deliver English presentation. The reasons for selecting English Education Department UMY were accessibility for the researcher to get data. That supported the researchers' for the setting of time.

The researcher conducted this research for seventh months. It starts from February to August 2016. The data collect itself was done on July 2016.

Research Population and Sample

Population. A population is a group of individuals who have the same characteristics (Creswell, 2012). The population of this study is English Education Department students of UMY (University of Muhammadiyah Yogyakarta). More specifically, the population of the research was the students at English Education Department UMY batch 2013. In this study, the population was 100 participants from batch 2013. Students EED UMY batch 2013 have been learning Speaking English and Academic Presentation in seventh semester. From that the researcher can get data based on their experience in presentation in English as a second language. Another reason was that student had been finding a presenting problem in learning English. The students had probably found strategies to reduce their problems.

Sample. A sample is a subgroup of the target population that the researcher plans to study for generalizing the target population (Creswell, 2012). In determining the sample of the study, the researcher used the convenience sampling. This was supported by Cohean et al. (2011) that convenience sampling is call as accidental or opportunity sampling. The considerations for selecting convenience sampling were effectiveness and accessibility.

Instrument and Data Collection Method

This study aimed to know students' anxiety in classroom presentation at English Education Department of UMY. The data were collected by distributing questionnaire. According to Creswell (2012), a questionnaire is a form used in a survey design that participants in a study complete and return to the researcher. The participants were chosen the answers of the questions and supply basic personal or demographic information.

The questionnaires were distributed by the researcher in different ways. First one, the researcher distributed the questionnaires to the participants with face to face (directly). Second one, the researcher distributed the questionnaire to the participants by contacting students' using internet especially social networking system such as Facebook, Line, BBM, Whatsaap, and E-mail.

The total questionnaires consisted of 20 items with arrangement 8 items to measure students' causes, the items are (1,2,3,,4,5,6,7,8) and 12 items to measure students' strategies, the items are (9, 10,11,12,13,14,15,16,17,18,19,20). The questionnaire involved of twenty items.

Table. 2 Items	Descriptive
• 1, 2, 3, 4, 5, 6, 7, and 8. • 9,10,11,12,13,14,15,16,17,18,19,20.	To measure students' causes. To measure students' strategies.

The questionnaire was designed in Indonesian language because it can facilitate the participants of this research to know the content of the statement in the questionnaire. The researcher used four likert scales for options in the questionnaire. They were strongly agree, agree, disagree, and strongly disagree. The reason why the uses only 1-4 scale without neutral is to avoid the neutral answer from the respondents. "Neutral-middle alternative answers give a chance to the respondent to choose that answer" (Azwar, 2009, p.47).

The questionnaire contains unfavorable statement and favourable ones. Unfavoberable in number 9,10,11,12,13,14,15,16,17,18,19,20. These numbers were scored from 4 to 1. Favourable in number 1, 2,3,4,5,6,7,8. The score criteria of questionnaire items are as follow:

The four levels of liker scale for favorable answers

Table. 3 Likert scale favourable	
4	Strongly Disagree
3	Disagree
2	Agree
1	Strongly agree

The four levels of liker scale for unfavorable answers

Table 4.	Likert scale unfavourable
1	Strongly disagree
2	Disagree
3	Agree
4	Strongly agree

Likert scale is used to measure score of level anxiety in research project. According to Boone (2012) who argued that, "a likert scale, on the other hand, is composed of a series of four or more likert-type items that are combined into a single composite score/variable during the data analysis process".

Validity and Reliability

Validity is the degree to which all of the evidence points to the intended interpretation of test scores for the proposed purpose. Thus, a focus is on the consequences of using the scores from an instrument (Hubley & Zumbo, 1996; Messick, 1980 in Creswell, 2012). To disclose the test validity, the researcher was piloted the questionnaire using tool software, SPSS (software package for Social Sciences) version 22.0. The testing validity of this research, the researcher used the correlation r of Pearson product moment. "Pearson product moment was a measure of items analysis by correlating the score item" (Arikunto, 2006, p.1466). The data was processed to find the r value and the researcher compared the r value and r table to determine which question items were valid. The item could be valid if the r value was higher than r table. The criteria of items validity was

illustrated set as follows:

Table. 5 The criteria of items validity
r value $> r$ table = valid
r value $< r$ table = not valid
Source: Arikunto (2006)

Reliability is a score from an instrument that are stable and consistent**.** The scores should be nearly the same when researchers administer the instrument multiple times at different times (Creswell, 2012). Also, scores need to be consistent. The individual should consistently answer closely related questions in the same way. In other words, test validity is defined as the extent to which instrument measures, it is supposed to measure and nothing else. In this research the researcher will use reliability as internal consistency, Cronbach's Alpha. "Cronbach's Alpha was a measure of internal consistency, that was, how closely related to a set of items were as a group "(Cohen et al., 2011. P.201). Sekaran (2000) divided the reliability indicator into three levels:

Table. 6 The Criteria of Reliability (alpha)	
1. 0.8 - 1.0	*Good*
2. 0.6 - 0.799	*Moderate*
3. ≤ 0.6	*Not Good*

The instrument of the study is categorized as valid if the range of cronbach alpha is > 0.6. Table 4.1 shows that the realibility of this study was 808. It means that the questionnaire used to measure the level, problems and strategy are reliable.

Table. 7 The result of reliability test.	
Cronbach's Alpha	N of items
.808	**16**

Data Analysis Method

After collecting the data by conducting questionnaire, the next step was data analysis. The purpose of this investigation was to know and understand the data in order to answers research questions. There were several steps that could be applied in this research to collect, understand, and conclude the data. The data analysis of this study was conducted using descriptive statistics. To answer the question, researcher need descriptive statistics that indicate general tendencies in the data (mean, mode and median), the spread of scores (variance, standard deviation, and range), or comparison of how one score relates to all others (z scores, percentile rank). According to (Creswell, 2012, p183) "descriptive statistics will help you summarize the overall trends or tendencies in your data, provide an understanding of how varied your scores might be, and provide insight into where one score stands in comparison with others". These three ideas are the central tendency, variability, and relative standing.

In order to measure the level of students' anxiety level, the researcher used mean, median and mode to know level of students' anxiety at the classroom.

Mean (M). Mean is the total of the scores divided by the number of scores. To calculate the mean, you sum all of the scores and then divide the sum by the number of scores.

Median (Me**).** Median is the middle of a set of scores. This score is median. The median score divides the scores, rank-ordered from top to bottom, in half. Fifty percent of the scores lie above the median and 50% the other of lie below the median. To
Calculate this score, the researchers array all scores in rank order and then determine what score. The median is halfway between all of the scores**.**

Mode (Mo**).** Mode is the score that appears most frequently in a list of scores. It is used when researchers want to know the most common score in any array of scores on variable.