

## **Chapter Three**

### **Methodology**

In this chapter the researcher discusses the methodology in conducting this research. The data were gathered to find out the answer of the research question, namely How is the students' motivation in learning English at Madrasah Mu'allimaat Muhammadiyah Yogyakarta? The methodology contains research design, research setting, population and sample, data collection, instrument, data collection procedure and data analysis.

#### **Research Design**

The researcher used quantitative design in gathering the data. It is because the data of this research was in the form of numbers and used statistical analysis (Sugiyono, 2011). In this research, the researcher used descriptive statistic to describe students' motivation in learning English at MMY. The researcher chose this quantitative research design because the researcher wanted to measure the level of students' motivation in learning English at MMY, whether the level was in the category of low, medium, high, or very high. The measurement was conducted statistically to describe the level of motivation. Creswell (2012) stated that descriptive research explores a statistical test to measure the tendency of one or more variables of data to vary consistently. Therefore, descriptive quantitative was appropriate to be employed in this research.

## **Research Setting**

The researcher conducted this study in MMY. There were two reasons why the researcher chose MMY. The first, it is easy to be accessibility. This school implements English for conversation in the first day of every first and second week every month. Secondly, the researcher did the teaching practicum in this school. Therefore, the researcher was familiar with the learning circumstance and the students' characters in MMY. The researcher wanted to know the student motivation in learning English at MMY. Collecting the data was done in September 2016.

## **Population and Sample**

**Population.** Population is the entire research subject (Arikunto, 2013). Besides, Sugiyono (2011) said that population is the generalization that consists of object or subject that has quality and particular characteristic determined by the researcher to be studied. In this research, the population was all of the active students in MMY grade XI. In this class there were 193 active students, so the total population of this research was 193. The researcher chose the students from grade XI because the students have got enough experince in learning English. They have English subject for three years on yunior high school and one year in senior high school. Therefore, the students would be able to answer the questionnaire from the researcher based on their own opinion and their experience.

**Sample.** According to Arikunto (2013) sample is a representative of the total population. Cohen, Manion, and Marion (2011) also said that sample is a smaller number or subset of the total population which the information can be representative from the total population. To get the number of population, the researcher did the calculation based on Cohen, Manion, and Marion teory (2011, p. 147) about the sample size, confidence level, and confidence intervals for random sample. The population of my data is 193. It means close to 200. So, the sample of 193 with the confidence level 95% and confidence interval 5% is 132.

In conducting this research, the researcher used convenience sampling because it is easy to connect the respondents. The consideration was easy in time and place. It means that the researcher could determine the nearest individual and available during the data gathering time to get 132 respondents. The same statement comes from Sugiyono (2011) that convenience sampling can be used for accidental or opportunity sampling where a researcher can choose the nearest individuals to prepare as respondent from the beginning until the end of the research.

### **Data Collection Method**

In this research, the researcher used questionnaire as the instrument. Firstly, the researcher made 25 items in the questionnaire. Then, the questionnaires was distributed to several students. The result shown that there were some questionnaire items that were not suitable for them. After that, the researcher consulted it to the supervisor. The supervisor sugested to delete the questionnaire

items that were not suitable for the respondents. After revision and distribution, there were 12 questionnaire items that were reliable to the respondents and only 7 items that valid. The 7 items covered the indicators of intrinsic and integrative motivation.

The questionnaires were distributed to answer the research question. The ratings scales were strongly agree (4), agree (3), disagree (2), strongly disagree (1). The questionnaires used Indonesian language, so the respondents found it easy in understanding the questionnaire, and they knew how to answer it based on their experience. The questionnaires were distributed to 132 students of grade XI of MMY. The researcher stayed in the class during the completion of the questionnaires. All of the students filled the questionnaires in the classroom. The students were not allowed to bring questionnaire outside the classroom to avoid the invalid data. The researcher allocated 15 minutes to the respondents to answer the questionnaires items.

### **Validity of the Questionnaire**

The researcher distributed 25 questionnaire items to 132 students of grade XI at MMY. After all the data were gathered, the researcher analyzed the item validity of the questionnaire by using SPSS. The data were analyzed to identify the  $r$  value and the researcher compared the  $r$  value and  $r$  table. The  $r$  table of this study ( $n=132$ ) with the significance level 0.05 and confidence level 95% is 0,165. The  $r$  table is provided at appendix three. The questionnaire items can be said

valid if the  $r$  value is higher than  $r$  table (Arikunto, 2006). The criteria of item validity are provided in table 3.1

Table 3.1 <i>The criteria of item validity</i>
$r$ value $>$ $r$ table = Valid
$r$ value $<$ $r$ table = Not valid
Source: Arikunto (2006)

After the data were processed, the researcher found that only 7 questionnaires were valid and 5 statements were not valid. The result of item validity test can be seen in table 3.2 below:

Table 3.2 Test Item Validity				
No	Question Item	$r$ value	$r$ table	Description
1	Q1	0,235	0,165	Valid
2	Q2	0,127	0,165	Not valid
3	Q3	0,258	0,165	Valid
4	Q4	0,124	0,165	Not valid
5	Q5	0,185	0,165	Valid
6	Q6	0,226	0,165	Valid
7	Q7	0,111	0,165	Not valid
8	Q8	0,207	0,165	Valid
9	Q9	0,136	0,165	Not valid
10	Q10	0,146	0,165	Not valid
11	Q11	0, 257	0,165	Valid
12	Q12	0, 216	0,165	Valid

Therefore, the researcher eliminated the items that were not valid, namely Q2, Q4, Q7, Q9, and Q10 from the data. The researcher only used the valid items namely Q1, Q3, Q5, Q6, Q8, Q11, and Q12 for the next analysis. As the result, the instrument has limitation as a weakness. This instrument only could be used to measure the intrinsic and integrative motivation as the indicators of motivation. The extrinsic and instrumental motivations were not covered in this research because when conducting piloting the result of item validity test on extrinsic and instrumental motivation was not valid. Consequently the item related to extrinsic and instrumental motivation should be deleted from the questionnaire. Therefore, the researcher did not measure the students' motivation using extrinsic and instrumental indicators of motivation.

### **Reliability of Instruments.**

According to Field (2009) an instrument can be said reliable if the Cronbach's Alpha or reliability coefficient ( $\alpha$ ) is higher than 0.70 or  $> 0.70$ . The result of the research showed the cronbach's alpha was 0.8. This means that the level of reliability was high. The reliability score is shown in the table below:

Table 3.1 Reliability score

Cronbach's Alpha	N of Items
.785	12

Because the result of reliability test was 0.785 showing high reliability of the items, the instrument was reliable to be used for the research.

## **Data Analysis**

After gathering the data, the researcher used SPSS program version 20. 0 to analyze the data. The data of current study were analyzed on descriptive statistic consisting of frequencies, mean, and median. It is intended to answer the research question. The data analyses were explained in descriptive statistics. The explanation of the results was supported by theories.