

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter presents the method that use to collect the data of research. It consists of the research design, the indicator of the research, the variable of the research, the population and sample, the research instrument, the location of the research and the data analysis.

#### **3.1 Research Design**

In this study, it can be classified in quantitative research. This is where the quantitative research involves collecting quantitative data based on precise measurement using structured, reliable, and validated data collection instruments or through archival data sources. Quantitative research approaches summarize results numerically.

The design of this research is multiple correlation. This research is designed to examine to get valid data based on the research problem in order to know the extent of correlation between Self-Confidence, Self-Efficacy and English reading achievement of second grade students of MAN 3 Nganjuk.

In this research, the study is using the correlation data and will be processed. The quantitative method designed to show the relationship among three variables. The first variable is the Self-Confidence, the second variable is the Self-Efficacy, and the third variable is the English reading achievement of the second grade students. To analyse the data

after collecting, the writer used multiple linier regression that is available in program SPSS version 25.

### **3.2 Variable of the Research**

There are three variables in this research:

3.2.1 Independent variable (X1) Self-Confidence

3.2.2 Independent variable (X2) Self-Efficacy

3.2.3 Dependent variable (Y) The English Reading achievement of the students.

### **3.3 Population and Sample**

#### **3.3.1 Population**

Population is all of object to be an area and to fill equipment particular related with research problem, or all of unit or individual in the range that will be researched. We can define population as a group of elements or cases, whether individuals or objects that conform to specific criteria and to which we intent to generalize the result of the research.

In this research, the researcher observed some students for about 70 students from 140 students of the second grade of MAN 3 Nganjuk in academic year 2019-2020.

### 3.3.2 Sample

Sample is the group of subjects or participants from whom the data are collected. Based on this statement, sample is parts of population that have the characteristics or to be researched particular. Furthermore, sampling is indispensable technique of behavioural research, it means that the research work cannot be undertaken without using sampling. Hence, we can select the number of individual as a sample whom would represent the population to be researched.

In this research, the sample will be taken randomly. To know the extent of correlation among Self-Confidence, Self-Efficacy and English reading achievement, it is interesting to gain the data from second grade students. The respondents taken in this study were class XI MIPA I with total students 21 students, class XI MIPA 2 with total students 24 students, and class XI IPS 1 with total students 25 students. Therefore, a total population of all students at the second grade were 140 students.

Hence, researcher will take group of samples with the balance totals, it gives to every group of population to get the same occasion to be chosen as a sample.

### 3.4 Research Instrument

Researcher must know what kind of data collection and the manner to gain the data. He or she must be sure that types of data

obtainable from the selected instruments will be able in every statistical model. The data collection is the accumulation of specific evidence that will enable the researcher to properly analyse the results of all activities of research. For this research, it will use questionnaire and test to gain the data. For the questionnaire, there will be two kind of questionnaire, the first is the questionnaire of Self-Confidence, the second is the questionnaire of Self-Efficacy. Therefore, to know the capacity of their English achievement, there is also test for reading ability.

#### 3.4.1 The questionnaire of Self-Confidence

Researcher adapts the questionnaire of Self-Confidence that is credible, and its validity and reliability have been measured based on Leute's theory. For this questionnaire, it uses 4 likert scales that represent the value or rating. The likert scales consist of perception "Selalu" on poin number 1, "Sering" on poin number 2, "Jarang" on poin number 3, and "Tidak Pernah" on poin number 4. Researcher provides 20 items questionnaire which represent the students' feelings to gain the accurate data of the research.

#### 3.4.2 The questionnaire of Self-Efficacy

The researcher adapts the questionnaire of Self-Efficacy that is credible based on Bandura's theory, and its validity and reliability have been measured. For this questionnaire, it uses 4 likert scales that represent the value or rating. The likert scales consist of perception "Selalu" on poin number 1, "Sering" on poin number 2,

“Jarang” on poin number 3, and “Tidak Pernah” on poin number 4. Researcher provides 20 items questionnaire which represent the students’ feelings to gain the accurate data of the research.

#### 3.4.3 The test of English reading achievement

To collect the data of English Reading Achievement of the second grade students, researcher used the instrument by giving them the test. The test is multiple choice that can be accessed in google form. The students will login to address of the google form and answer the questions that given by researcher based on the indicator and material they learn. The questions consist of 20 items.

### **3.5 Data Collection**

To collect the data, the researcher uses some steps. Those are:

- 3.5.1 Preparing the items of the Self-Confidence and Self-Efficacy questionnaires. The researcher also gives a test of English to know the students’ achievement. In this case, the researcher uses questionnaire and test, hence, the framework of questionnaire and test are needed. There will be available the copied papers of the questionnaire sheet that involves the indicator of Self-Confidence and Self-Efficacy.
- 3.5.2 Researcher used the google form to collect the data from students. Hence, students are given the link to login and answer the questionnaire and test of reading. The tests including the topics of recount text and explanation text, the material surely have been delivered to students

before. Nevertheless, the samples will be taken randomly, so they have the same chance to be gained.

**Table 3.2 Collecting Data**

No.	Data	Instrument	Collecting Data
1.	Self-Confidence	Questionnaire	<ol style="list-style-type: none"> <li>1. Researcher prepared the framework of question items related to Self-Confidence indicator.</li> <li>2. Researcher created the google form link and share it to the students to login and checklist the questionnaire for gaining the information.</li> </ol>
2.	Self-Efficacy	Questionnaire	<ol style="list-style-type: none"> <li>1. Researcher prepared the framework of question items related to Self-Efficacy indicator.</li> <li>2. Researcher created the google form link and share it to the students to login and checklist the questionnaire for gaining the information.</li> </ol>
3.	English Reading Ability	Test	<ol style="list-style-type: none"> <li>1. The students are given the link to access and answer the question or test in google form.</li> </ol>

### 3.6 Data Analysis

After collecting data, researcher will accumulate the results of all research activities using software application of IBM SPSS Version 25.

To measure the accuracy of data that has been gained, there are validity and reliability. Validity refers to how accurately a method measures what it is intended to measure. If research has high validity, it produces results that correspond to real properties, characteristic, and variations. R-table at a significance value of 5%, if in each item of questionnaire the value of  $r\text{-count} > r\text{-table}$  then the item is said to be valid. Conversely, if  $r\text{-count} (r_{xy}) < r\text{-table}$  then the item is invalid. To know the validity, researcher input data to the SPSS program version 25 and processing the step **Analyze – Correlate - Bivariate**. Still in the same program, to gain the Reliability result, researcher using formula **Analyze – Scale -Reliability Analysis**.

Reliability is the degree to which a test consistently measures whatever it measures. The reliability test is referring to the alpha value, if the alpha value is greater than the r-table with a significance of 5% (0.235) then the questionnaire or instrument is reliable. To estimate the reliability of the test by using the IBM SPSS Program version 25.

In addition, when testing the hypothesis, the authors input the data from the ordinal scale questionnaire should be changed into the interval scale data that it can be input in the multiple linear regression correlation test. Multiple linear test is processing data to find out the correlation

coefficient of the Self-Confidence, Self-Efficacy and English Reading achievement of the second grade students of MAN 3 Nganjuk.