

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter the researcher discusses research methods, population and sample, research instruments, validity and reliability, data collection, and data analysis.

#### **A. Research Method**

The researcher chose a survey for conducting the research. Survey is a research design in which a researcher asks questions about opinion, perception, preference or characteristic etc. The type of survey is online survey research; this study uses a quantitative descriptive method and uses a survey type of research, with a questionnaire instrument or questions that can be easily distributed to respondents online. Sugiono (2014:14), states that quantitative descriptive methods can be interpreted as research methods used to examine a particular population or sample, data collection using research instruments, data analysis using quantitative, or statistics based on percentages to test predefined hypotheses.

Descriptive quantitative (statistics) is a numerical summary of the distribution of a sample's score on a number, or scale, aims to determine students' interest in learning English through RLM (Gall; 2014:8).

## **B. Population and Sample**

### 1. Population

The population is all research subjects or institutions that will be researched; it can be concluded as the number of research subjects (Sugiyono, 2013: 180). in this study population n is students SMPN 1 Ngunut Tulungagung, accounting to 1029 students.

### 2. Sample

In sampling, researchers used Voluntary Response Sampling. Voluntary Response Sampling is a sampling technique when members of the population are given voluntary responses to fill out a questionnaire as a research instrument. This is the best way to conduct online surveys (Arnab Raghunath: 2017).

## **C. Research Instrument**

The researcher used online questionnaire to determine the level of students' interest in learning English through RLM. The number of questions in the questionnaire is 20 items.

The kind of online questionnaire is a closed ended questionnaire with dichotomous question and multiple choices question. A dichotomous question is a question that has two possible answers in yes/no survey research. They are used to distinguish the quality, experience, or those respondents clearly. Benefits dichotomous question is easy and quick.

Moreover, this can simplify the survey experience. Dichotomous question has the advantage to facilitate response and facilitate data analysis. The questions are 19 items yes/no question and 1 item question is multiple choices for determining a favorite student's digital platform during RLM.

#### **D. Validity and Reliability**

Validity and reliability is an important part in a study because the accuracy and consistency of an instrument will be valid and reliable by testing the validity and reliability.

##### **1. Validity**

Validity is the extent to which an instrument measures what it is supposed to measure. In other words, the validity is measuring what it was designed to measure. In language testing, Brown (2004) defines validity as the extent to which the conclusions made from the results of the assessment are appropriate, meaningful, and useful in terms of the purpose of the assessment. To measure whether the online questionnaire had good validity, researchers analyzed the online questionnaire using the SPSS program for Windows Version 25.0. The validity test was conducted on 50 respondents for validating the instrument. The researcher compared  $r$  observed to  $r$  table at significant level of 5 % is 0.273 ( $df = 50$ ) the  $r$  value of each item that should be higher than the  $r$  table to be consider as a valid a question . The

result of the analysis should that 20 item were valid, because the r observed higher than r table.

Item	r Observed	r Table	Status
Item 1	0.508	0.273	Valid
Item 2	0.645	0.273	Valid
Item 3	0.652	0.273	Valid
Item 4	0.560	0.273	Valid
Item 5	0.667	0.273	Valid
Item 6	0.645	0.273	Valid
Item 7	0.685	0.273	Valid
Item 8	0.626	0.273	Valid
Item 9	0.749	0.273	Valid
Item 10	0.687	0.273	Valid
Item 11	0.464	0.273	Valid
Item 12	0.546	0.273	Valid
Item 13	0.572	0.273	Valid
Item 14	0.652	0.273	Valid
Item 15	0.300	0.273	Valid
Item 16	0.789	0.273	Valid
Item 17	0.586	0.273	Valid
Item 18	0.664	0.273	Valid
Item 19	0.682	0.273	Valid

Item	r Observed	r Table	Status
Item 20	1	0.997	Valid

Statistics		
Item 20		
N	Valid	50
	Missing	0

## 2. Reliability

Based on Harrison in Johnson (2001) said that the reliability of a test is consistent. Thus, reliability is a measure of the accuracy, consistency, dependability, or the reasonableness of scores resulting from the implementation of a specific examination. It also defines reliability as the level of consistency with instruments that measure any measuring. In this study, the researcher conducted an online questionnaire to 50 students of SMPN 1 Ngunut. After that, the researcher use SPSS statistics 25.0 to calculate the score during try out session. The criteria of reliability of instrument can be divided into five classes as follows (Ridwan: 2004).

### **Cronbach's Alpha Interpretation Based on Triton**

Cronbach's Alpha	Interpretation
0,00 - 0,20	Less reliable
0,21 - 0,40	Rather reliable
0,41 - 0,60	Quite reliable
0,61 - 0,80	Reliable
0,81 - 1.00	Very reliable

Based on the pilot tests have been conducted, researcher can determine the reliability of the test results. Researcher uses SPSS software to calculate score. Then test results can be seen as follows:

<b>Case Processing Summary</b>			
		N	%
Cases	Valid	50	100.0
	Excluded <sup>a</sup>	0	.0
	Total	50	100.0
a. Listwise deletion based on all variables in the procedure.			

<b>Reliability Statistics</b>	
Cronbach's Alpha	N of Items
.901	19

From the table above showed that alpha value was 0.901 its mean the alpha value is very reliable.

#### **E. Data Collection**

For collecting data, the researcher used the step below:

1. The researcher asks to help the English teacher to be included in the class grub and distributed the questionnaire via Whatsapp.
2. The researcher makes a Google form and writes all questionnaires.
3. The researcher shares the link of Google form to students groups.
4. The researchers spend 5 minutes to give an explanation of the purpose of the questionnaire via whatsapp.
5. The researcher gave 30 minutes for students to answer the questionnaire and send it back for confirmation.
6. Finally, the researcher collected the students' answer from Google form

## **F. Data Analysis**

Data processing techniques in this study using a calculation of SPSS (Statistical Product and Service Solution) version 16.0 for Windows because these programs have the ability of high statistical and data management system in a graphical environment using the menu descriptive and dialog boxes is simple, making it easier to understand how to operate (Sugiyanto , 2012).

The analytical method used in this research is descriptive analysis of the percentage. Descriptive this percentage is processed by frequency divided by the number of respondents and multiplied by 100 percent, as proposed by Sudjana (2001: 129). Then the data from questionnaire analyzed by using percentage, to rate the frequency and percentage of students' interest in learning English through Remote Learning Mode, the researcher used criteria:

- a. 76 - 100 = Very High
- b. 56- 75 = Height
- c. 26- 55 = Low
- d. 0-25 = Very Low (Sugiyono, 2014:20)