CHAPTER III
RESEARCH METHOD

In this chapter will discuss about research design, participant, research instruments, data collection and data analysis

A. Research Design

The research methodology that use in this research is quantitative method with a survey design. According to Fraenkel (2012) survey design is used to find out the opinions of a large group of people about a particular topic or issue. Whereas, Creswell (2012) defines a survey research design as procedures in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviours, or characteristics of the population. In this procedure, survey researchers collect quantitative, numbered data using questionnaires (e.g., mailed questionnaires) or interviews (e.g., one-on-one interviews) and statistically analyze the data to describe trends about responses to questions and to test research questions or hypotheses. The researcher uses survey design because to investigate the students' perception of using E-learning.

B. Participant

Participant is a is an individual who participates in a research study or is someone from whom data are collected (McMillan, 1996). The participant of this research is involved 131 English Department students

who learn at Islamic University around the city of Kediri, consisting of 3 Islamic Universities, there are IAIN Kediri, UNISKA (Universitas Islam Kadiri) and Universitas Wahidiyah Kediri. The students who participate in this study had taken the E-learning in any courses. They were selected randomly.

C. Research Instrument

In this study, researcher uses questionnaire as an instrument. A questionnaire is are forms used in a survey design that participants in a study complete and return to the researcher. Participants mark answers to questions and supply basic, personal, or demographic information about themselves (Creswell, 2012). A questionnaire consisting of a series of question and other prompts for the purpose of gathering information from the respondents. The contents of the questionnaire that used in this study was adapted and simplified from similar previous studies conducted by Mammatah (2016) and Cakrawati (2017) which investigated students' perception of using E-learning.

Questions and items in the questionnaire were replicated and changed to suit the needs of this study. The type of questionnaire in this research use close-ended questionnaire which is used a rating scale. The questionnaire uses a Likert Scale to get the information from the participants. Likert Scale is to measure the extent of subject agreement with each item. The extent is measured on a five-point scale: strongly disagree, disagree, neutral, agree,

and strongly agree (Mcnabb, 2010). Questionnaire for this research have been tested for the validity and reliability.

1. Validity

Test validity is defined as the degree to which a test measures what claims, or purports, to be measuring. (Brown, 1996). Validity test in this study uses expert opinion. The validator in this study was Mrs. Ria Fachrurriana, M.Pd., then, the instrument was tested on respondents. Validity measurement using SPSS 22.0 versions for windows. Question items are declared valid if the calculated r value is greater than r table (0.5324). There are 5 of 37 items that are invalid because r value is smaller than r tables, there are questions no. 20, 23, 31, 32 and 37. The invalid question items are not used in the study.

2. Reliability

The instrument used in research is not enough to be valid but must be reliable to be suitable as a research instrument. Based on Harris (1969) reliability is the consistency of test scores. A test cannot measure anything well unless it measures consistently. Cronbach's Alpha is a mathematical formula used for testing the level of reliability of the measure, where an instrument can be said to be reliable if it has a reliability coefficient or alpha of 0.6 or more (Sugiyono , 2012) in Zahra, R. Ratika and Nofha Rina (2018). The researcher calculates the score

using Cronbach's Alpha from SPSS 22.0 versions for windows. The table below shows the statistical calculations of Cronbach's Alpha with SPSS 22.0.

Table 3.1 Reliability Statistic of Cronbach's Alpha

Cronbach's Alpha	N of Items
0.877	37

The result of the test found reliability based on Cronbach's Alpha value is 0.877. These results are declared reliable because $\alpha > 0.6$. Therefore, the instruments of all items were reliable.

D. Data Collection

In collecting data, the researcher uses questionnaire to achieve the objectives of the research. There are some procedures performed by researcher during the study. The procedures are:

1. The researcher prepares the instrument to collect the data

2. Making the questionnaire. The questions in questionnaire are about students' perception of using E-learning during Covid-19 pandemic.

3. Then, the researcher validates the questionnaire to the expert, then conducts try out to get validity and reliability of the questionnaire.

4. The researcher distributes the questionnaire to the participants through google form via online.

5. After getting the data, the researcher analyzes the data quantitatively and explain descriptively with making conclusion as the result of the research.

E. Data Analysis

The data is analyzed statistically by counting the percentage of the students' answers in each item of the questionnaire. It used to know the students' perception of using E-Learning. Based on Ari Kunto (in Nurbaiti thesis), the formula used is:

$$p = \frac{F}{N}x100\%$$

Notes :

P = **percentage**

F = **Frequency**

N = **Number of samples**

100% = **consist value**