

CHAPTER III

RESEARCH METHOD

This chapter discusses about the research method used in this study. It covers the discussion of the research design, Population, Sampling, and Sample of the study, Validity and Reliability Testing, Data Collecting Method, and Data Analysis Technique.

A. Research Design

This research used a descriptive quantitative approach with survey design. (Creswell, 2008, p. 18) stated a descriptive survey is a research design that intends to describe quantitatively the tendency, behavior, opinion of a certain population by taking some samples as the representation. Surveys permit the researcher to summarize the characteristics of different groups or to measure their attitude and opinion toward some issues (Ary, 2010, p. 372). In the educational research, the issues can be included school's improvement or any classroom instructional. Then, the researcher used survey design in this research because it fits with the purpose of the study that is to describe the students' perception of use E-learning for English teaching at MAN1 Polewali Mandar.

Therefore, related to the purpose of survey research design, this research was conducted to investigate the students' perception of use E-learning for English teaching at MAN 1 Polewali Mandar.

B. Population, Sampling, and Sample of the Study

1. Population

Population is all subjects being studied. (Ary, 2010, p. 647) stated that population is the larger group to which a researcher wishes to generalize; it includes all members of a defined class of people, events, or objects. According to (Creswell, 2008, p. 151) population defined as a group of individuals who have the same characteristic. Population is the general area consists of object and subject with a certain quantity and characteristics which is determined by the researcher to study and conclude.

Moreover, the population of this study was all of the eleventh-grade religion students of MAN 1 Polewali Mandar in the academic year of 2020/2021, which all consists of 110. They all consist of 51 male students, and 59 female students and they divided into 3 classes those are XI Religion 1, XI Religion 2, and XI Religion 3. The researcher only takes English classes that are taught by Mrs. M. Names are disguised to maintain teacher confidence. Besides, that class has fully implemented the use of e-learning for English teaching, in contrast to other classes where they just want to move to use E-learning.

2. Sampling

Sampling is the technique in taking simple. Sampling in research can be used to make conclusions about a population or to make generalizations in relation to existing theories (Taherdoost, 2016, p. 20).

Moreover, sampling is a process of selecting a group of people, events or behavior with which to conduct a study (Burns, 2003, p. 31). In this study, the researcher chose purposive sampling which the researcher took the sample base on certain purposive. According to (Sugiono, 2012, p. 126) purposive sampling techniques is a sampling technique with certain considerations. In this case the researcher took the sample in XI Religion class because the class was recommended by the English teacher at MAN 1 Polewali Mandar. Moreover, based on the information the researcher got from the English teacher, XI Religion class has fully implemented the use of e-learning in English learning, in contrast to other classes where they just want to move to use e-learning.

Moreover, this study used purposive sampling technique because the researcher choose the sample base on the purpose of the study that is to investigate the students' perception of use e-learning for English teaching at MAN 1 Polewali Mandar. In this study, the eleventh-grade religion students of MAN 1 Polewali Mandar tend to be suitable as the sample where the researcher could gather data about the students' perception of use e-learning for English teaching at MAN 1 Polewali Mandar.

3. Sample

Sample is part of population that is being studied. The sample of this study is taken from the population that is the eleventh-grade religion students of MAN 1 Polewali Mandar. Therefore, the sample of this study

was students of XI Religion 1, XI Religion 2, XI Religion 3 which the total consist of 57 students. They all consist of 21 male students, and 36 female students. The researcher took this class because they fit to be the subject of this study in which they had been use e-learning for English teaching and this also based on the recommendation from the English teacher.

C. Research Instrument

Research instrument is the tool used to gather data. According to (Jack R Fraenkel and Norman E Wallen, 2013, p. 111), an instrument is the device such as pencil-and-paper test, a questionnaire or rating a scale that the researcher uses to collect the data. In survey research, questionnaire is used as the basic tool in collecting data. Therefore, the researcher used questionnaire as the instrument to gather data in this research.

In this research, a questionnaire was used to investigate students' perception on the use E-Learning for English Teaching at MAN 1 Polewali Mandar. The researcher provided 20 statements into a spreadsheet on Google Form shared to the students. In this case, the students can directly supply their own answer to the set of statements.

The research questionnaire consisted of 20 statements that focused on students' perceptions of use e-learning for English teaching. But to make it easier for students to fill in, the questionnaire was prepared using Bahasa Indonesia language so that it would later need to be translated again by the researcher. The researcher made an electronic questionnaire in the form of a Google Form, then distributed it to groups of WhatsApp eleventh grade

religion students at MAN 1 Polewali Mandar. Because this type of questionnaire is a closed questionnaire, students only choose the answers available without having to think about their own answers. The researcher told the informant that the questionnaire would remain confidential and would not affect the value of English lessons.

In a typical scenario, closed-ended questions are used to gather quantitative data from respondents. Furthermore, according to Adams (2008:21) Likert scale is the most commonly scale used for attitude or opinion. Likert scale provides five choices of response to answer the questionnaire. Those kinds of responses are strongly agree, agree, neutral, disagree, and strongly disagree. The Likert scale was chosen in this research because this study was intended to measure the students' perception. The score for each rating scale are showed in the table 3.1 as follow:

Table 3.1 Score for each Likert Scale

No	Scale	Score
1.	Strongly Agree	5
2.	Agree	4
3.	Neutral	3
4.	Disagree	2
5.	Strongly Disagree	1

The questionnaire was in the form of statements drawn based on the theory. It consisted of twenty statements asked about the students' perception of use E-learning for English Teaching. The questionnaire was administered by using Bahasa Indonesia in order to make the respondents fully comprehend about the whole statements.

D. Validity and Reliability Testing

In conducting a study, the instruments used must be confirmed as valid and reliable before being used to gather data. The questionnaire in this study was created based on the theory of students' perception and English E-learning. Therefore, to ensure that the instrument that was questionnaire used in this research was valid and reliable, the researcher did validity and reliability testing as follows:

1. Validity

Validity is measuring what it is designed to be measured. In term of research, validity is defined as the extent to which an instrument measured what it claimed to measure (Ary, 2010, p. 225). There are three kinds of validity as follows:

a. Construct validity

According to (Brown, 2000) a construct or psychological construct as it is also called, is an attribute, proficiency, ability or skill that happens in the human brain and is defined by established a theory. In addition, the test items developer should provide evidence that the scores really reflect the construct, by reviewing the theory

and the previous studies (Ary, 2010, p. 231). So, it should be measured to prove that the items in the instrument measures the construct that was designed to measure and not some other theoretically unrelated construct.

In this research the construct of the instrument was provided in the Blueprint. Blueprint was used to create the formation of the instrument. In this research questionnaire tend to has high validity if it contained statements investigating the students' perception of use E-learning for English Teaching. Therefore, the form of Blueprint could be seen in Appendix 1.

b. Content validity

Content validity is requires the test takers to perform the behavior that is being measured (Brown, 2000, p. 22). The purpose of this research was to investigate the students' perception of use E-learning for English Teaching at the eleventh-grade students of MAN 1 Polewali Mandar. Then, the statements in the questionnaire of this research was related to the purpose of the study that were asking the students' perception of use E-learning for English Teaching.

Furthermore, before being used as an instrument of research, the researcher distributed the questionnaire as the trial to students of XII BAHASA at MAN 1 Polewali Mandar. The trial was done on October 22th 2020. The researcher provided 20 items of

questionnaire. From the trial the researcher got students' score for each question and then calculated the validity of each items by using pearson product moment in SPSS 17.0. Each items are considered to be valid if the value of r_{obtained} were more than the r_{table} ($r_{\text{obtained}} > r_{\text{table}}$). From 10 samples ($N=10$) with significance level 5%, the r_{table} was 0,5494. The result of validity instrument for each item was summarized in the table 3.2 as follow:

Table 3. 2 The Result of Validity Testing of each Item of the Questionnaire

Item Number	r-obtained	r-table (N = 10, a = 5%)	Notes
Item 1	0,944	0,5494	Valid
Item 2	0,838	0,5494	Valid
Item 3	0,722	0,5494	Valid
Item 4	0,758	0,5494	Valid
Item 5	0,726	0,5494	Valid
Item 6	0,851	0,5494	Valid
Item 7	0,687	0,5494	Valid
Item 8	0,689	0,5494	Valid
Item 9	0,923	0,5494	Valid
Item 10	0,747	0,5494	Valid
Item 11	0,805	0,5494	Valid
Item 12	0,705	0,5494	Valid

Item 13	0,895	0,5494	Valid
Item 14	0,923	0,5494	Valid
Item 15	0,895	0,5494	Valid
Item 16	0,843	0,5494	Valid
Item 17	0,835	0,5494	Valid
Item 18	0,790	0,5494	Valid
Item 19	0,923	0,5494	Valid
Item 20	0,636	0,5494	Valid

Reliability refer to the consistency of the score obtained.

According to (Wallen, 2009, p. 13) realibility refers to the consistency the score obtained how consistent they are for individual from one administration of an instrument to another and from one set of items to another. Therefore, after calculating the validity of the instrument, the researcher also calculated the reliability of the instrument by using Cronbach's Alpha in SPSS 17.0. The result of reliability testing of the questionnaire could be seen as follow.

Reliability Statistics

Cronbach's	
Alpha	N of Items
.973	20

Based on the table, the result of reliability testing for the questionnaire was found very reliable based on the value of the Cronbach's Alpha that is 0.973. According to (Ridwan, 2004, p. 118), the criteria of reliability instrument can be divided into 5 classes as follows:

1. If the *alpha cronbach* score 0.00-0.20: less reliable
2. If the *alpha cronbach* score 0.21-0.40: rather reliable
3. If the *alpha cronbach* score 0.41-0.60: enough reliable
4. If the *alpha cronbach* score 0.61-0.80: reliable
5. If the *alpha cronbach* score 0.81-1.00: very reliable

Because of the score of Cronbach's alpha 0.973, it could be concluded that the instrument was very reliable. Therefore, the items of the questionnaire could be used to gather data.

E. Data Collecting Method

Data collecting method is the way of the researcher in collecting data. In this research the researcher collected data by distributing the questionnaire. The researcher distributed the questionnaire to all students of XI Agama which consist of 110 students on October 24th 2020.

The researcher distributed the questionnaire to the students via online by using Google Form. In the first page of Google Form the researcher stated the purpose of the questionnaire and the instruction how to fill the questionnaire. Then, at the bellow of the instruction, the researcher asked students to fill their name and class as the identity of the respondent. Then,

they were able to click continue to the next page which contain of twenty statements of the questionnaire. Students could fill it based on their own perception of use E-learning for English Teaching at MAN 1 Polewali Mandar.

F. Data Analysis Technique

After collecting data from the students, then the researcher analyzed the data. In applying descriptive quantitative technique in this research, the researcher analyzed the data from the questionnaire by using SPSS 17.0 to find out the descriptive statistic. The descriptive statistics such as frequency, percentage, and the mean score were used to find out the students' perception of use E-learning for English Teaching at Madrasah Aliyah Negeri (MAN) 1 Polewali Mandar in academic year 2020/2021.

There were some steps in analyzing the data. Firstly, the researcher collected the questionnaires from the students. Then, the results from the questionnaires were tabulated in Microsoft Excel program. After that, the researcher looked for frequency, percentage, and the mean score of the questionnaire by using SPSS 17.0 to find out students' perception. Then the mean scores were compared with the table interpretation of mean score that could be seen in the table 3.3. The next, based on the table interpretation of mean score, it could be determined kind of the responses of the students and finally the conclusion was drawn.

Table 3.3 The Interpretation of Mean Score (Merleau-Ponty, 2002)

Mean Score	Name	Predicate	Interpretation
4,1 - 5,0	SA	Strongly Agree	Positive
3,1 - 4,0	A	Agree	Positive
2,1 - 3,0	N	Neutral	Neutral
1,1 - 2,0	DA	Disagree	Negative
0,0 - 1,0	SDA	Strongly Disagree	Negative