CHAPTER III

RESEARCH METHOD

In this chapter discusses about the research design population sampling and sample, research instrument, validity and reliability testing, data collection methof and data analysis, the setting of the research, the subject of the research, data collection and data sources.

A. Research Design

The research design is a strategy for collecting data and as a research guide, it holds all of the element in the research. According to Henry Manheim, research design was not only anticipate and decisions that seemingly countless related to the implementation of the collection, processing, and analysis of data but this presents a logical basis. There are two kinds of research design; qualitative and quantitative. This research conducted in quantitative approach. A quantitative approach is used to test objective theories by connecting between variables in the instrument so that data can be analyzed using statistical procedures (Creswell, 2009). Which means, the problem underlying the researchers took the data, define the variables and then measuring the numbers that can be analyzed in accordance with the statistical procedures in force. So this quantitative research has an important goal in making measurements.

This research was used survey research method to find out the students' perception in teacher's online assessment. Neuman W Lawrence (2003) stated that survey research is quantitative research. In survey

research, the researcher asks several people (respondents) about past or present beliefs, opinions, characteristics of an object and behavior. The researcher conducted questionnaires to understand students' perceptions of English online assessment. This research applied at students of SMPN 1 Sumbergempol Tulungagung class 8A and 8B which consists of 50 students.

B. The Subject of The Research

1. Population

According to Johar Arifin, population is the whole object or individual to be studied; has certain characterictics, is clear and complete. In this case, the population is an area consisting of subjects ormobjects that have certain quantities and characteristics that the researcher determines to study and draw conclusions. The population of this research were all eight grade students; at SMPN 1 Sumbergempol Tulungagung in academic years 2021/2022 which has eleven class.

Table 3.1 Population of The Research

No.	Classes	Total
1	Students of 8A	24
2	Students of 8B	26
3	Students of 8C	30
4	Students of 8D	28
5	Students of 8E	28
6	Students of 8F	24
7	Students of 8G	28
8	Students of 8H	28
9	Students of 8I	26
10	Students of 8J	30
11	Students of 8K	28

Total	300

2. **Sampling**

   According to Margono (2004), sampling technique is a way used to determine the sample. This study used purposive sampling technique to gain the samples. Purposive sampling is a sampling technique with certain considerations (Sugiyono, 2017: 138). Purposive sampling was chosen because the researcher discover several characteristics of the sample in 8A and 8B class. Both of the class has same value and mean on English subjects.

3. **Sample**

   A good sample is needed to selecting research samples. According to Arikunto (2006, 131), the sample is a representation of the population in the study. According to Arikunto (2012: 134), there are two ways to select the sample. First, if the population is less than 100, all populations can be sampled. Second, if the population i nover 100, the researcher can take 10%-15% or 20%-25% from all population as a sample. The total population of 8 grader of SMPN 1 Sumbergempol Tulungagung was 300 students. So, the researcher used 17% samples from all population. There are class 8A which consists of 24 students and 8B which consists of 26 students. The total sample of this research was 50.

C. Research Instrument

Research instruments is the equipment used to collect data (Arikunto, 2010: 262). Instrumen research is a tool used to collect, measure, and analyze data relating to what is being investigated. There are several types of research instruments including tests, interviews, surveys or checklists.

In this study, the researcher used questionnaire as the instruments of the research. According to S.Roopa and MS Rani (2012), questionnare is simpy a list mimeographed or print question that is complete by or for a responden to give is opinion. The questionnaire can be considered as a written interview. With a questionnaire we can also get data from a large sample of people. Data collection is also relatively fast because researchers do not need to be present at the time of filling out the questionnaire. This is useful for studying large populations.

In this research, the researcher use five alternative answers by using a Likert scale in the questionnaires. So, it provided five choices of response for the respondents in answering the questionnaire. The research used Likert scale because it intended to measure the students' perceptions. According to Sugiyono (2016) the Likert scale is used to measure attitudes, opinions and perceptions of a person or group of people about social phenomena. With this Likert scale, respondents are asked to complete a questionnaire that requires them to indicate their level of agreement with a series of questions. This question used in this study has

been specifically defined by the researcher. The table below shows the rating scale of Likert Scale.

Table 3.2 Likert Scale

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

The researcher give questionnaire to students by using google form with share the link on WhatsApp group includes 50 students' of 8A and 8B class at SMPN 1 Sumbergempol. The items of questionnaire are used Bahasa Indonesia to make it easier to do.

D. Data Source

According to Riduwan (2014: 88), the primary data source in the study is data obtained from respondents through questionnaires, focus groups, and panels, or also data from interviews of researchers with informants. The primary data in this study were obtained from the results of a questionnaire given to grades 8A and 8B of SMPN 1 Sumbergempol Tulungagung.

E. Validity and Reliability Testing

1. Validity Testing

According to Fraenkel and Wallen (2006: 150), validity is the most important idea to consider when preparing or selecting an instrument to use. The researcher analyzed the test of face validity,

content validity, and construct validity to gauge whether the tests had good validity or not.

a. Construct Validity

According to Bachman and Palmer (1996: 21) it refers to the meaning of the construct validity and appropriateness of interpretation based on test scores. This means that the test must match the theory of the skills and components of the language being measured. Construct validity in this research was provided in blueprint (on appendix). It used to create the information of the questionnaire.

b. Face Validity

According to (Ary, 2010: 225) face validity refers to the ability of a test instrument to measure what should be measured. This validity measures something that appears but is not what it is supposed to measure, so this is a cursory assessment. This research used face validity because it was survey the students' perception of online writing assessment. So this questionnaire is relevant to investigate the students' perception towards online writing assessment. The students in tryout class said that the instrument items was clearly and easy to understand. so, it an conclude that the face validity was fulfilled.

c. Content Validity

According to Straub, Boudreau et al (2004), content validity is the extent to which the content in an instrument reflects the universal content in which the instrument will be generalized. This means that content validity has been carried out by analyzing the content through expert judgment to ensure that the content is appropriate and relevant to the class objectives. If the test content is a representative sample of the technology being tested, the test is declared to have valid content. The purpose of this research was to identify the students' perception on the use of online assessment employed in English Learning Teacher. In this research, the statement items on questionnaire has aims to investigate the research objectives. So it could be concluded that the content validity was fulfilled.

Before being tested to the sample of the research, the researcher distributed the questionnaire to the 30 students of 8C class as the tryout class. The questionnaire consists of 25 statements with five alternative answers by using Likert Scale. The researcher calculated the score of tryout class by using SPSS 16.0 application. The data would be "valid" if the indicator score of each question has a significant correlation to the total score of the construct. The results of the validity test were carried out for each item. The basis for decision making, if significance value < 0.05

the item is valid. Meanwhile, if significance value > 0.05 the item

is not valid. Here the results of validity testing of tryout class:

Table 3.3 Validity Testing

Item	Sig. Value	Result
1	0.005	Valid
2	0.000	Valid
3	0.007	Valid
4	0.000	Valid
5	0.055	Not Valid
6	0.001	Valid
7	0.001	Valid
8	0.000	Valid
9	0.000	Valid
10	0.002	Valid
11	0.000	Valid
12	0.005	Valid
13	0.000	Valid
14	0.001	Valid
15	0.110	Not Valid
16	0.090	Not Valid
17	0.000	Valid
18	0.064	Not Valid
19	0.000	Valid
20	0.001	Valid
21	0.001	Valid
22	0.000	Valid
23	0.002	Valid
24	0.000	Valid
25	0.100	Not Valid

Based on the table above, it can be concluded that 20 items

statement was considered as valid because the significant value <0.05.

so, it can be tested to gather the data for this research.

2. Reliability Testing

   Reliability deals with the influence of the measurement error in the consistency of the score. According to Creswell (2012), reliability means an individual score of an instrument should be almost the same or stabilized in the provision of recurring instrument and that they should be free from sources of measurement error and consistent. This means that a study is considered reliable if the results were consistent for the same measurement. If it shows different results, this study means it is not reliable. Researchers used SPSS 16.0 to test the reliability. According to Triton (2006:248), the value of Cronbach's Alpha can be interpreted as follows:

Table 3.4 Cronbach's Alpha Interpretation

Cronbach 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

  To know the items was reliable or not it can be seen from Alpha Cronbach's column. If the Alpha Cronbach's is under 0,06, it means that the test was not reliable. But, if the Alpha Cronbach's is

upper 0,06, it means that the test was reliable. The result of reliability of this test would be seen as follows:

Table 3.5 Reliability Testing

Reliability Statistics

Cronbach's Alpha	N of Items
.756	20

The result of Alpha Cronbach's score was 0.756, it means that the test was reliable and ready to test for subject of the research.

F. **Data Collecting Method**

Data collection is looking for, recording, and collecting everything objectively and as it is in accordance with the results of observations. According to Sugiyono (2012: 224), data collection techniques are the most strategic steps in research. This technique is used to obtain the required data in the study. In this study, the researcher distribute the data questionnaire to students class 8A and 8B. The researcher distributed the data questionnaire by using google form with share the link on WhatsApp group includes 50 students' of 8A and 8B class at SMPN 1 Sumbergempol. Then the researcher gave instructions to fill in the name and absent number as class identity. The questionnaire consists of 20 questions containing students' perceptions of online assessment during the pandemic.

G. Data Analysis

Data analysis is used by researchers to prove the data is accurate or not. According to Sugiyono (2017:207) In data analysis, data is grouped into several types based on variables and respondents, tabulates data based on variables from all respondents, presents data for each variable studied, performs calculations to answer the problem formulation, and performs calculations.

The following are some steps to analyze the data carried out by the researcher. First, the researcher collected the results of student questionnaires and then analyzed them using SPSS 16.0. Second, the students' mean scores were compared with the table interpretation of the mean scores. Finally, determine the type of student response based on the average score which then draws conclusions based on the results of data analysis.