

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

This chapter consists of variable of the study, method of the study, population and sample, instrument of the study, technique for collecting the data, and technique for analyzing the data.

#### **A. Variable of the Study**

According to Sugiyono (2017) variable defined as an attribute or trait or the value of a person, object or activity that has a variable specified by the researcher to be studied and then conclusion is drawn. So, the writer concluded variable was a concept that can take any form to be studied and tested directly so that it will obtain information as a conclusion.

Furthermore, the operationalization of variables in this study could be explained as following:

##### **1. Independent Variable**

According to Sugiyono (2017) independent variable is :  
“Independent variables are often referred to as stimulus variables, predictor, antecedent. In Indonesian it is often called as independent variable. The independent variable is a variable that influencing or causing change or the emergence of the dependent variable (bound)”.

In this study, the independent variable was students' perception on the use of Android-based Exam Browser.

## 2. Dependent Variable

According to Sugiyono (2017) the dependent variable is often called the output variable, criteria, consequent. The dependent variable is a variable which is affected or which is the result of the existence of the independent variable. So, the dependent variable in this study is the students at SMPIT Tunas Cendikia Baturaja.

### **B. Method of the Study**

The method is the way used by the writer to solve a problem in a study. The method of study is a way to get a solution to a problem. According to Sugiyono (2017) method of study can be interpreted as a scientific way to get data with purpose and use certain knowledge is developed and proven so that in turn it can be used to understand, solve and anticipate problems.

This study was a descriptive qualitative with survey method. Descriptive qualitative study is the form of research with method or case study approach (Sugiyono, 2017).

According to Sugiyono (2017) the survey method is :  
“The method used to find the effect of treatment (treatment) certain. The survey method is used to obtain data from places certain natural (not artificial), but researchers do the treatment in data collection, for example by distributing questionnaires, tests, interviews, structured and so on (treatment not as in experiment)”.

Based on the definition above, the writer used descriptive qualitative and survey method because the data and information collected from

respondents by used a questionnaire. After the data was obtained then the results described descriptively which analyzed the students' perception on the use of android exam browser as the medium to assess final semester exam at SMPIT Tunas Cendikia Baturaja.

## C. Population and Sample

### 1. Population

According to Sugiyono (2017) population can be interpreted as a region generalizations consisting of objects/subjects that have quality and certain characteristics defined by the writer to be studied and then conclusion is drawn.

In this study, the population was the eighth and ninth grade students at SMPIT Tunas Cendikia Baturaja in academic year 2022/2023. It was consist of five classes with total number are 85 students that shown in the table below.

Table 1

Table of Population

No	Class	Total of Population
1	VIII.A " <i>Hijrah</i> "	13
2	VIII.B " <i>Hijrah</i> "	23
3	IX.A "Fathu Makkah"	14
4	IX.B "Fathu Makkah"	21
5	IX.C "Fathu Makkah"	14

Total	85
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*Source: SMPIT Tunas Cendikia academic year 2022/2023*

## 2. Sample

According to Sugiyono (2017) sample is a part of the number and characteristics possessed by the population. So, it means that sample is a part of population.

In this study, the writer used total sampling. According to Sugiyono (2017) the total sampling is a technique where the number of population used as sample.

Table 2

Table of sample

No	Class	Total of Population
1	VIII.A “Hijrah”	13
2	VIII.B “Hijrah”	23
3	IX.A “Fathu Makkah”	14
4	IX.B “Fathu Makkah”	21
5	IX.C “Fathu Makkah”	14
Total		85

*Source : SMPIT Tunas Cendikia academic year 2022/2023*

## D. Instrument of the Study

The instrument of the study used for the data collections was a questionnaire and it is close-ended questionnaires.

According to Sigiyono (2017) research instrument is a tool used to measure the observed natural and social phenomena. In this study, the writer will use questionnaire to collect the data. According to Sugiyono (2017), questionnaire is a technique data collection is done by giving a set of questions or a written statement to the respondent to be answered.

The types of questions in the questionnaire were divided into two, namely: open and closed. Open-ended questions are questions that expect the respondent to write the answer in the form of a description of something. On the hand, closed-ended questions are questions that expect a short answer or expect respondents to choose one alternative answer from each available questions. Every questionnaire question that expects answers in the form of nominal, ordinal, interval, and ratio data, are in the form of closed question (Sugiyono, 2017).

In this study, the questionnaires adopted from a ready-made questionnaire that belong to Fegasanti and Priyatmojo (2020). Then, the writer distributed the questionnaires directly to respondents. The questionnaire were consist of 35 items to reveal the students' perception on the use of android-based exam browser as the medium to assess final semester exam. The specification of questionnaire shown in the table 3 below:

Table 3

## Specification of questionnaire

Objective of the study	Indicators	Item number	Total
The students' perception on the use of android-based exam browser as the medium to assess examination	Intention	1, 5, 12, 13, 14, 15, 16, 17, 18, 19	10
	Perceived Usefulness	2, 4, 20	3
	Perceived ease of use	3, 6, 7, 8, 9, 10, 11, 31, 32, 33, 34, 35	12
	Anxiety	21, 22, 23, 24	4
	Android Attitude	25, 26, 27, 28, 29, 30	6
Total			35

(Fegasanti &amp; Priyatmojo, 2020)

The measuring scale that used in this study was the Likert scale. Measurement for independent and dependent variables used scoring technique to assign a value to each alternative answer so the data could be calculated. Sugiyono (2017) state that Likert Scale is used to measure a person's attitudes, opinions and perceptions or a group of people about social phenomena. The Likert scale has a level of measurement, namely points 1 to 5 which it means the level of measurement of each statement item in the questionnaire. Respondents' Answer on each item of the

questionnaire have a value where the value of 1 was said to be strongly disagree and the score for point 5 was said to be strongly agree.

Table 4

Likert Scale

<b>Answer Choices</b>	<b>Score</b>
Strongly Disagree	1
Disagree	2
Neutral	3
Agree	4
Strongly Agree	5

(Sugiyono, 2017)

#### **E. Technique for Collecting the Data**

The writer collected the data by using a questionnaire. Before distributed the questionnaire to the participants, the writer explained its components to ensure that they understood the questionnaire's meaning and purpose. The data for the questionnaire was gathered in five steps:

1. The questionnaire distributed to the participants by the writer.
2. The writer collected the questionnaire.
3. The writer analyzed the data.
4. The answers were classified by the writer based on the statements.
5. The writer concluded the data.

The writer made a classification based on the questionnaire responses of the students. The data from the questionnaire was used to learn about the students' perception on the use of android-based exam browser as the medium to assess final semester exam. The Likert Scale used to analyze and was classified into five levels. There were two types of statements: positive and negative opinions.

#### **F. Technique for Analysing the Data**

Data analysis is the process of compiling and processing data in order to interpret the data that has been obtained. According to Sugiyono (2017) data analysis is the activities after all respondents or other data sources have been collected.

For analyzed the data, the writer used the formula from Sugiyono (2017). The writer used Likert Scale to measure and analyze the questionnaires. The range of the responses from strongly agree to strongly disagree. There was a score for each degree of responses.

The data obtained was transferred to the data sheet utilizing descriptive static. The researcher analyzed the questionnaires into one formula:

$$P = \frac{f}{N} \times 100\%$$

Where :

$P$  = Percentage

$f$  = Frequency



$N$  = Number of Sample

100% = Constant Value

After analyzed the range of the responses from strongly agree to strongly disagree, the writer classified the result to find out whether the students' perception of the use of android-based exam browser as the medium to assess final semester exam was positive or negative. The writer classified the category of students' perception of use of android-based exam browser as the medium to assess final semester exam scoring category.