CHAPTER III
RESEARCH METHODOLOGY

A. Research Design

In conducting this research, the researcher used descriptive research. Kothari (2014:37) states that "Descriptive research studies are studies related to describing the characteristics of certain individuals or groups". Therefore, this study seeks to study a phenomenon where the researcher then describes the characteristics of the individual being studied. Descriptive research can be either qualitative or quantitative. The researcher employed a descriptive quantitative design for this investigation. According to Creswell (2012:535), the generation of specific numbers that can be statistically evaluated can produce findings to assess the frequency and amplitude of trends and can provide important information if you need to describe trends concerning a huge number of people. From this opinion, it can be concluded that the descriptive method is a problem-solving procedure by providing a clear picture of something at the time research is conducted to obtain accurate data from the subject of statistical calculations.

The researcher used a descriptive research design because this research design is suitable for this study. The researcher seeks to identify the variables that affect students' speaking confidence, which takes place at SMA N 1 Tumbang Titi.

B. Population, Sample, and Sampling Technique

As for the importance of research quality, there are some considerations to select the population, sample, and sampling technique in this research. The researcher presents a related explanation below:

1. Population

The population is all items in any field of investigation. A population is a group of individuals who have the same characteristic. A group of individuals with the same trait that sets them apart from another group is referred to as the

population (Cresswell, 2012:381). Students of SMA N 1 Tumbang Titi's tenth grade during the 2021–2022 academic year as the population of this study.

Table 3.1

Population of Research

No	Class	Number of Students
1.	X IPS I	38
2.	X IPS II	33
3.	X IPS III	30
Total		101

2. Sample and Sampling Technique

The suitability of the sampling strategy also supports the quality of the research. Cresswell's (2012: 381) sample is a part of the number of characteristics the population has. This can be seen by what is meant by the sample as part of the object, the number, and characteristics taken from the population. Researchers adjusted the sample size based on the descriptive survey method, which is to collect quantitative data in small-scale research.

In conducting the research, the researcher was taken the sample using the cluster random sampling technique. Cluster random sampling is a sampling technique that is carried out randomly without seeing and paying attention to the strata or similarities that exist in the population because the population is in a group and considered homogeneous. The name of each class is written on a small piece of paper, then rolled up and put into a glass. The researcher used X IPS I Class of SMA N 1 Tumbang Titi as the sample of the research which was 38 students.

C. Technique and Tools of Data Collection

1. **The technique of Data Collection**

   This part discusses how the researcher collected primary data from the students. Primary data are known as fresh and original data because the data are collected for the first time (Kothari, 2014: 95). These data obtain combined through indirect communication. Indirect communication is a possible method to gather data of students' perceptions, opinions, attitudes, or others. Certainly, this method is appropriate to find trends and impacts of online learning use strategy among the students. To administer an effective indirect method, the researcher applies an online questionnaire as a tool for collecting data, consisting of a close-ended questionnaire Online questionnaire facilitates students to complete the instruments online by accessing Google Forms.

2. **Tools of Data Collection**

   Inline with the discussion above, the questionnaire and interview is a data collection tools in this study. (Khotari, 2004: 100), support this tool, he states that the questionnaire to be sent to the sample questionnaire is expected to be able to read and understand the questions and answers on their own. For a variety of the data, the researcher apply a questionnaire based on the needed data namely a close-ended questionnaire. The researcher used 20 points of the questionnaire with indicators such as Lack of Confidence, Lack of Motivation, Shyness, Fear of Mistakes, Anxiety. Meanwhile, The interviews were conducted with teachers. The interview, consisting of 8 questions, aims to find out the level of students' confidence in speaking skills.

D. The technique of Data Analysis

   In analyzing the data of this research, the researcher used Ms. Excel 2007 for windows. Cohen *et.al* (2007: 501) stated that "numerical analysis can be performed using software". Furthermore, performed the data into charts. The result would have shown the factors that influence students' self-confidence in speaking skills. The researcher created From a questionnaire sheet that has been filled out

by the students. The raw data from the questionnaire sheet editing by transforming text data into numerical data and displayed in a table.

Based on adjustments to the tool of data collection, the researcher is treating the data by applying calculation the technique of the Likert scale. The researcher completed the analysis with :

1. Score Determination

In this research, the researcher analyzed the data quantitatively with descriptive statistics analysis. The researcher applies the Likert scaling technique. A Likert scale (a summated rating scale assesses attitudes toward a topic by presenting a set of statements about the topic and asking respondents to indicate for each whether they strongly agree, agree, neutral, disagree, or strongly agree (Ary et al., 2010:210).

Modify the Likert scale to eliminate weaknesses contained by a four-level scale, modified Likert scale the middle answer category is based on three reasons, namely: (1) the category has a double meaning, usually, it means that you have not been able to decide or provide an answer, can be interpreted as neutral, agree or not, disagree or not, or even doubt. (2) the availability of answers in the middle answers the tendency towards the middle. (3) the purpose of the Strongly Agree, Agree, Disagree, and Strongly Disagree categories is mainly to see the tendency of opinion respondents, toward agreeing or towards disagreeing.

This study uses four alternative answers, namely: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The Likert scale is used to measure attitudes, opinions, and the perception of a person or group of social phenomena (Sugiyono, 2014: 93).

The researcher gives a score of 4 (Strongly Agree), 3 (Agree), 2 (Disagree), and 1 (Strongly Disagree) for positive questions. For negative questions, then the value is reversed to 1 (Strongly Agree), 2 (Agree), 3 (Disagree), and 4 (Strongly Disagree).

The researcher specific score of the Likert scale in this research are described below:

Table 3.2

The score of the Likert Scale

Scale	Score
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

Taken from Sugiyono, (2014:93)

a. Determination Ideal Score

An ideal score is used to find the rating scale and total answer. The researcher calculates 38 responses (n=38) for each scale to know the high score and the low score of each scale in the total score. To count the ideal score for all items, the analysis needs the following formula :

Ideal Score = Likert Score x *Number of Respondents*

Taken from Sugiyono, (2018:137)

With 38 students as a participant in this research, the highest score is given 4 and the lowest score is 1. The formula of the ideal score is shown below :

Table 3.3

The formula of ideal score

Ideal Score	Scale
4 x 38 = 152	Strongly Agree
3 x 38 = 114	Agree
2 x 38 = 76	Disagree
1 x 38 = 38	Strongly Disagree

b. Rating Scale

A rating scale was needed to discover the result area of questionnaire data. The rating scale grouped the data into the four Likert scales based on the respondent's answers. The rating scale is described in table 3.4 below:

Table 3.4

Rating Scale of Students' perception in online learning

Rating	Scale
115 – 152	Strongly Agree
77 – 114	Agree
38 – 76	Disagree
0 – 38	Strongly Disagree

2. **Measurement of Frequency and Percentage**

To calculate the scale score of each strategy specification, the researcher analyzed the data into percentages. To compute the score of five main categories, the researcher averages all item's scores in each category. After that, the average score transforms to be a percentage.

The formula is adopted from Sugiyono (2018: 137) as below :

$$P = \frac{\text{Total score}}{Y} \times 100\%$$

Where :

P = Percentage

Y = Maximum of Likert score

(Adapted from Sugiyono, 2018: 137)