# CHAPTER III RESEARCH METHODOLOGY

## A. Research Design

The method used in this research is descriptive. Descriptive research is conducted as a type of research that gives an idea or description as clearly as possible on without object-selected behavior (Kurniawati, 2016:229). Descriptive research is defined as a research method that describes the characteristics of the population or phenomenon studied.

The research method only describes variables, indications, or events, not tests several hypotheses (Arikunto,1990:309). In descriptive studies, no treatment was required. The research only explains the variables and phenomena that occur in schools. The researcher has described the students' difficulties in comprehending English reading text eleven graders SMK Negeri 1 Pontianak.

In this research, the researcher used descriptive quantitative as the research. Descriptive quantitative research is a scientific investigation that explains phenomena by using numbers (Hidayati, 2018:18). Descriptive quantitative research is a scientific investigation that explains phenomena by involving statistical processes in analyzing data (Saraswati et al, 2021:36). In this case, quantitative descriptive research is research that describes a picture of the phenomenon under study, and the data obtained are analyzed statistically. To get the data, the researcher used a reading test and a close-ended questionnaire.

#### B. Population, Sample, and Technique of Sampling

# 1. Population

The population is the whole object to be studied. The population element is the entire subject to be measured, a precise unit (Sugiyono, 2020:126). In this study, the population is all eleventh graders of SMK Negeri 1 Pontianak in the Academic Year 2021/2022.

# 2. Sample and Sampling

The sample is part of the number and characteristics of the population that have been analyzed. The sample is a subgroup of the target population that the authors plan to generalize to the target population (Creswell, 2012:141). Because the population is too large, the researcher must do sampling. The researcher used a random sampling technique. The researcher chooses 1 class XI BDP 2 as the sample. The random sampling technique is one of the sampling techniques where all individuals in the population both individually and in groups are given the same opportunity to be selected as members of the data sample (Sohibun & Ade, 2017:122). The random sampling technique is the process of selecting several samples at random from a larger group (sampling population) which is the basis for predicting a sample taken.

# C. Technique of Data Collection

Data collection techniques are very important in research because the purpose of this study is to collect data. In this study, the researcher used measurement and indirect communication as data collection techniques.

The first is the measurement technique is a technique that is carried out by identifying how data is collected and collecting data that can be evaluated (Creswell, 2012:52). This study used a reading test as an instrument to collect data about students difficulties in reading comprehension.

The second is indirect communication techniques. Indirect communication is a communication process that is carried out indirectly or requires the help of a communication tool whose function is as an intermediary. This technique allows the collection of data about the perceptions, opinions, and attitudes of students or others (Creswell, 2012:51). In this study, the researcher used a closed questionnaire as an instrument to get data about the factors of students' difficulties in reading comprehension.

#### D. Tools of Data Collection

The tool is something needed to conduct the research. The instrument of research is the equipment used by the researcher to collect the data. In which it is important to get accurate data. The researcher used a test and closed-ended questionnaires to collect the data.

# 1. Reading Test

The researcher gave a reading test to students to measure students' ability to understand reading texts in English. By giving the reading test, the researcher tried to find out whether the students can answer the test well or not. In individual work, the right and the wrong answer from the students were used as an indicator of whether the students found the difficulties (Hidayati, 2018: 18). The test questions adopted from the English textbook of class XI students at SMK Negeri 1 Pontianak. This test used multiple choice. Students must answer 25 questions and students had 40 minutes to answer these questions. The 25 questions with 5 indicators of reading comprehension, such as determining the main Idea, detailed information, making inference, locating reference, and understanding the meaning of words (vocabulary). The type of test is the objective test, where the students only have to choose the right answer from the option a, b, c, d, and e based on the reading text given in the test. The score for each question is if the correct value is 1 while the wrong value is 0.

#### 2. Close-Ended Questionnaire

The questionnaire is data collection which is done by giving written agreement to respondents to answer questions. This questionnaire is an efficient data collection if the researcher knows with certainty the variables to be measured and knows what to expect from the respondents (Sugiyono, 2018:124). The instrument used in this research contained 15 closed-ended questions. Questionnaires are used to determine the factors of students' difficulties in reading comprehension. In this study, the researcher choose a closed-ended questionnaire, and the answer is chosen by the respondent. The researcher adopted a questionnaire from Yolanda Melandita, (2019:63).

The questionnaire has been validated by the researcher. For subjects who were asked to check a five scale consisting of answers strongly disagree, disagree, neutral, agree, and strongly agree.

# E. The Technique of Data Analysis

The process of data collection techniques in this study started by contacting participants who needed to be studied, then determining the time of giving reading tests and questionnaires to participants. Information collection is done by asking questions related to difficulties in comprehending English reading texts in the form of tests and questionnaires.

#### 1. Reading Test

Identification of data: First, from the test, the researcher identified and determined the correct and incorrect answers from the students in comprehending English reading text. Students' correct and incorrect answers will use as an indicator of difficulty. First, the researcher looks for the results of the individual test scores by using the formula below:

$$= \frac{The \ number \ of \ right \ answer}{The \ number \ of \ question} X100$$

Cited in: Hidayati, (2018:21)

Then the researcher categorizes the students' scores on students' tests based on their interval according to Harris, (1969).

Table 3.1 Criteria of Test

Interval	Category
80-100	Excellent
66-79	Good
56-65	Average
30-55	Poor
< 39	Fail

(Taken from Harris, 1969)

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After getting the results of students' scores, the researcher calculated the mean scores of students' tests. According to Creswell (2012:160), a means is the total of the scores divided by the number of scores:

$$X = \frac{\Sigma x}{N}$$

Where:

X = the mean score

 $\Sigma x$  = the sum of individual

N = the number of students

Cited in: Creswell, (2012:160)

To find out what difficulties are experienced, the researcher calculated the percent error of the 5 aspects of reading comprehension using the Arikunto, (2006:172) formula:

$$S = \frac{R}{N} X 100\%$$

Where:

S = Incorrect Percentage

R = Incorrect Answers

N = The total Sample

Cited in: Arikunto, (2006:172)

# 2) Questionnaire

This study used a closed-ended questionnaire, where the answers are chosen by the respondents themselves. The questionnaire consists of 15 statements. From the answer to the questionnaire, the researcher organized the data. Then, there used simple descriptive statistical analysis to answer the research question. Descriptive statistics are used to summarize data in an organized manner by describing the relationship between variables in a

sample or population (Zaluchu, 2020:29). To get the percentage the researcher used the following formula:

$$\mathbf{X} = \frac{F}{n} X 100\%$$

Where:

X = Percentage of each category

F = Frequency

N = The total number of the respondents

*Cited in: Sugiyono, (2012:109)* 

Then, the researcher described the data in the form of a description. The last, the researcher concluded.

#### F. Research Procedure

To simplify and streamline the situation, preparations need to be made to collect data so that it can be organized properly. The things that need to be done before viewing the data are:

### 1. Prepared the Tools of Data Collection

Before giving test questions and questionnaires, the researcher to prepared materials in advance, such as prepared a laptop to type questions and prepared materials to compile questions that are by the research objectives.

#### 2. Excused to the Teacher and Participants

In the next step after prepared the research tools, the researcher arranged a schedule with the teacher at the school, started distributing the test, and then the researcher asked for a briefing from several students or participants who are willing to take part in this research.

## 3. Carry Out the Research

The procedure for collecting data is by going through 5 steps as follows:

a) The researcher distributed the reading test to the participants, and then the researcher explained how to fill out test questions.

- b) The researcher gave time to work for 40 minutes.
- c) After doing the reading test, the researcher shared the linked questionnaire with participants, and then the researcher explained how to fill out a questionnaire. The time given by the researcher is 30 minutes.
- d) The researcher received the results of the test questions and questionnaires that was filled out.
- e) After all participants finished filling out the test questions and questionnaires, the researcher thanked the participants for their willingness.

# 4. Data Analysis Stages

The data analysis stage is an attempt to find the research problem. The researcher processes the data, analyzes data, and then makes conclusions.