CHAPTER III

RESEARCH METHODOLOGY

1. Research Design

The researcher used the descriptive research design. The researcher intended to describe an analysis of students' difficulties in reading comprehension viewed from learning styles. Descriptive research is a form of research in the survey. Albino, M. G. and Albino, F. S (2021) state that descriptive research involves collecting data to answer questions. It is that determines and reports the way thing are. Where the research aims to collect opinions or data from the respondents on the questions in tools of collecting data.

In other words, by using descriptive research, the researcher wanted to describe phenomena that occur in the surrounding environment or events that are currently happening. The researcher used quantitative and qualitative data. Process or ways to get data, quantitative focus on gathering numerical data and generalizing in it across. Meanwhile, qualitative focus on social phenomena, which involves collecting and analyzing non-numerical data to understand concepts and results.

In conclusion, the researcher used a descriptive research design to describe or explain related about students' difficulties and students' learning styles, the researcher used quantitative data, where the researcher presents the results of the data using charts or figures while the researcher presents the results of the analyzed data using short text.

2. Population, Sampling, and Sample

a. Population

A population is all research subjects or the particular category wish to study. A population is any group that has more characteristics in common that are interesting to the study. The total number of research subjects who have the characteristics that the researcher wants to know or study. Majid (2018:3) states that the population is the target of research

the subject where the researcher is interested in studying the population and recruiting representatives from the population. It is called a sample.

On the other hand, a subject that has a quantity or characteristics determined by the researcher to be studied, analyzed, and drawn conclusion based on the results of the process carried out. The subject of this study is the Second-Semester Students of English Education Study Program at IKIP PGRI Pontianak.

Table 2.1
The population of research

No	Class	Number of Students	
1	A Morning	33	
2	B Morning	29	
3	A Afternoon	32	
4	B Afternoon	31	
TOTAL		125	

Based on the table above, it is can be concluded that the population in this research includes all Second-Semester Students of English Education Study Program at IKIP PGRI Pontianak in the Academic Year of 2021/2022 consisting of 4 classes namely A Morning B Morning, A Afternoon, and B Afternoon. Therefore, the total population is 125 students.

b. Sampling

Sampling is a technique used to take some of the objects in the population. Procedure for sampling so that it is efficient in its implementation. A sampling technique that does not select all members of the population to be a sample. Therefore, the researcher employs Non-Probability Sampling, which is a purposeful sampling technique for

choosing the sample. The choice of the sample is based on the consideration of the researcher and the researcher determines certain characteristics.

Therefore, the researcher must choose the sample with judgment to be able to represent the entire population. Bernard, H. R (2002) cited in Etikan, *et al* (2015) states that a technique without a theory that underlines the researcher to decide that the sample can provide information based on the knowledge and experience of the sample and also the sample can work together with the researcher until the research is successful.

On the other side, several things that need to be considered before choosing a sample. in other words, characteristics of the sample are considered the choosing a sample in this study. The characteristics of the samples are the same as the characteristics of the population, namely the second-semester students, English Education Study Program, the scope of IKIP PGRI Pontianak, and in the academic year of 2021/2022.

The researcher chose class B Afternoon as a sample, because the researcher conducted Pra-observation with all populations to obtain information about the problems raised in the study, where students have different styles in reading, when reading students make sounds. Then, there are some students in silent mode in reading. While, other students reading loudly and moving body language. In addition, it is known that students who feel difficulties in other aspects of reading comprehension.

c. Sample

A sample is part of the population. Looking for information only from the part of the population. It is called a sample. In other words, a sample has certain characteristics of the population. By sample, the researcher can generalize and expect results that are following the researcher's description. The process of taking the sample from the population is called sampling.

The number of individuals in a population that is selected and analyzed to find out something related to research. Siyoto and Sodik (2015) state that the sample is taken the number of population characteristics so that the sample can represent the entire population. The sample of this research is students of class B Afternoon which consists of 31 students.

3. Technique of Data Collections

The technique of data collection is a method or an important part of a process for collecting data or information about a sample of researchers. To collect data, the researcher used two kinds of techniques in collecting the data, there are direct communication technique and indirect communication technique. Indirect communication techniques by deploying several questions to the sample of research through a questionnaire as a tool for data collection. While direct communication technique uses the interview as a tool for collecting data where the researcher establishes direct contact orally with samples to obtain information. (Okianna, 2016:4).

In conclusion, this research used qualitative data in the form of words and quantitative data that is expressed in numerical terms. The researcher applied two tools for collecting data, namely a questionnaire as a direct communication technique and an interview as an indirect communication technique.

4. Tools of Data Collections

a. Questionnaire

A questionnaire is a tool of data collection consisting several of questions to gather information from a sample of the research. On the other hand, a questionnaire is a tool for collecting data indirectly. That means the researcher gives a set of questions using writing to obtain information that determines the students' difficulties in reading comprehension. A questionnaire was conducted online using Google Form. There are 30 items about learning styles (Seen in Appendix II page 51). 15 items about difficult in aspects of reading comprehension

(Seen Appendix IV page 55). Likewise, the researcher used a close-ended questionnaire. Which students' answers are limited. That means the researcher has provided a fixed set of responses or answers to questions and students choose an answer by choosing options. One question only has one answer. All statements in the questionnaire to score.

Table 3.1
The Scala Likert

Value	Strongly Disagree	Disagree	Agree	Strongly Agree
Positive	1	2	3	4
Negative	4	3	2	1

The researcher used a Scala Likert such as strongly disagree, disagree, agree, and strongly agree. There are two items namely positive items and negative items have different scores, it can be seen in the table above. Questionnaire to know students' learning styles that were modified and adapted from Fatmawati (2017) the researcher used SPSS with the value of > 0.60 namely 0.685, therefore, this questionnaire was feasible to be used as a research instrument to be carried out.

There are several steps in collecting data through a questionnaire, as follows:

- 1) The researcher made a list set of questions based on indicators.
- 2) The researcher distributes a questionnaire using google forms.
- 3) The students complete to answer a questionnaire.
- 4) The researcher collected a questionnaire.
- 5) The researcher analyzed the data from a questionnaire.

b. Interview

The second tools in this research are interviews. An interview is a tool of data collection consisting several of questions but an interview refers to a direct conversation between an interviewer and an interviewee (Creswell, 2012:239). In the research, the interview was conducted by the researcher after getting students' answers to the questionnaire questions or after the students give a response to a questionnaire, and then the researchers will ask six students some questions in the interviews related to the students' difficulties in reading comprehension.

According to Alamri (2019:65), there are three types of interviews. As below:

- 1) Unstructured Interview, unstructured is not a planned process in detail or this type requires no question guide. The interviewer asks an open-ended question based on a specific phenomenon.
- A Structured Interview, is a method that relies on asking the question in a set order. In other words, the interviewer asks the same questions to all respondents.
- 3) Semi-structured interview, where the questions are formulated but the interviewer may change or add the pre-planned questions during the interview process.

Based on the explanation of the types of interviews above, the researcher used the semi-structured interview as a tool for collecting data to get deep data (Seen Appendix VI page 58).

In an interview, there are several steps below:

- 1) The researcher made a list of interview questions.
- 2) The researcher agreed with the student to meet for it interview.
- 3) The researcher interviewed students.
- 4) The researcher analyzed the data from the interview.

5. The technique of Data Analysis

Data analysis is the final process of data to find useful information and getting conclusions from the process of research. In this research, a

technique of data analysis is the descriptive statistic method. Include presenting information and data displayed in the form of graphs, charts, circles diagrams, and calculating percentages (Sugiyono, 2015).

Quantitative technique analyzing the data from a questionnaire used Ms. Excel for analysing the data and the formula to analyze the data percentage. Data from the interview used Miles and Huberman's model. The researcher used the triangulation method to get deep from participants' responses to a questionnaire or the data validity test.

a. Quantitative

In quantitative, the researcher analyze the data from a questionnaire, the questionnaire is used to know students learning styles and also to know the dominant learning styles in the class. There are 30 items which divided into three elements of learning styles. There are 10 items for visual learning style, auditory learning style as well as kinesthetics learning style.

In analysing quantitative, the researcher took several steps to get the results from the questionnaire data, as follows:

- 1. The researchers calculated the results of students' scores from each learning styles using Ms. Excel. (Seen Appendix IX, X, XIV, XV).
- The researchers group each student separately based on the highest score of each learning styles to analyze the data. (Seen Appendix XI and XVI).
- 3. The researcher calculates the final results, namely calculating the percentage of the dominant learning styles in the class.

Formula:

$$P = \frac{F}{N} \times 100$$

Note:

P = Percentage

F = Frequency

N = Total number of samples

The Formula adopted by Sudijono (2018) is cited in Nabi & Suryawan (2021:40).

b. Qualitative

After the researcher gave a set of questionnaires and then the researcher transferred the collected data into a descriptive form, where the data relates to students' difficulties in reading comprehension. The researcher conducted semi-structured interviews and asked questions related to respondents' responses to the questionnaire. In other words, this interview is to make sure respondents' answers to the questionnaire so that the researchers can get valid data from data of questionnaire about students' difficulties in reading comprehension.

Therefore, to increase valid data, the researcher used triangulation methods. Triangulation is to describe two or more methods that are used or mixed methods. Triangulation methods are Combining both quantitative and qualitative data to explain aspects of the same phenomena or the qualitative data to develop an understanding of a phenomenon. (Honorene, 2017).

To analyze the data from an interview, the researcher used Miles and Huberman Models as cited in Sugiyono (2013) there are three steps or processes in analyzing qualitative data.

1) Data Reduction

Data reduction refers to the process of selecting, simplifying, or abstracting. in other words, the researcher reduces data that have be get from interviews. In steps, the researcher focuses on summarizing and choosing the important things or main things during the interview process. Throw away the point that is not important. Thus, the reduced data will provide better data and makes it easier for the researcher the next collect data.

2) Data Displays

After the reduced data, the researcher will display the data and organize the data. in the quantitative presentation of data in forms

such as graphs, charts, or diagrams. While in qualitative, the researcher presentation of data forms such as narratives, short texts, or shorts chart. This step makes it easy to understand what happened.

1) Conclusion Drawing/Verifications

The last step is conclusion drawing/verification. The researcher draws conclusions based on the data obtained and the data that has been analyzed using the two steps previous and assesses it concerning the question. Verification reviewing or re-examining existing conclusions to ensure accurate results.

Based on the explanation above, there are three steps in the analysis of interviews as tools of collecting data. Namely, data reduction, where the researcher chooses, to simplify words or sentences in the form of information obtained from the source. Data displays, the researcher presents the data or information that has been selected previously by summarizing it so that it is easy to understand. Then, drawing conclusions, make a conclusion based on data or information that has gone through 2 steps and verify the data obtained, in other words, verification data to get accurate results based on existing data.