

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

Research design plays a very important role in research because it determines how the steps will be taken by the researcher to conduct research. The research design used in this thesis is a descriptive study. Williams (2007) explains that descriptive research is a research method that can determine the situation of a current phenomenon. A descriptive research is an exploration of a phenomenon to answer a problem that focuses on what and how, so the researcher tries to describe the object or subject broadly, deeply, and in detail to get a specific and complex explanation. Specifically, by using descriptive research, the researcher wanted to describe phenomena that occur in the surrounding environment or events that are currently happening.

First, researcher used quantitative research as a process to obtain data. As claimed by Sugiyono (2018:13), quantitative research based on positivistic (concrete) data: research data in the form of numbers that will be measured using statistics as a calculation test tool related to the problem being studied to produce a conclusion. second, researcher used qualitative research as a process to obtain data. In the opinion of Moleong (2017:6) qualitative research is research that has the purpose of understanding the phenomenon of the thing experienced by the subject of the research, such as behaviorism, perception, motivation, action, and others. Qualitative research is based on a hypothesis based on reality, which means that actions and interactions are created and take place continuously and are experienced together subjectively. This means that qualitative research is specific to the general public. Complex and interwoven, there is a primacy of subject matter, and the data collected will consist of an insider's viewpoint (Rovai *et al*, 2014).

In conclusion, the researcher used a descriptive research design to explain, describe, expound, related about students' learning styles in listening comprehension. With quantitative research, the researcher presents the results of this thesis in the form of graphs or figures, while qualitative research the researcher will present the thesis results that have been analyzed in the form of themes and short texts.

B. Population, Sampling, and Sample

1. Population

The population is needed as an object or subject in the research and as a source of data collection according to the characteristics and tendencies of the same situation. Population is all the units or singles in involvement or interest that typically do not have accurate data for all the members of the population (Hanlon and Larget, 2011). In this thesis, the population is the students of English Study Program of IKIP PGRI PONTIANAK, which has 127 active students this semester consists of four classes: Class A Morning (33 students), Class B Morning (28 students), Class A Afternoon (33 students), and Class B Afternoon (33 students).

2. Sampling

Sampling is a selection of the population, which becomes the subject of the research to be studied. Sampling is a technique for collecting research samples that will be processed by researcher later. In this thesis, the researcher used the purposive sampling technique. According to Dana and Hao (2020), purposive sampling is used when researcher want to target an individual with certain characteristics in study. In other words, the researcher wants to know the characteristics of the students learning style in listening comprehension.

3. Sample

The sample is part of the population that has been selected in such a way as to be the object of research. According to Sugiyono (2018: 118), the sample is part of the number and characteristics possessed by the population. The number of individuals in a population that is selected and analyzed to find out something related to this thesis. The sample for this thesis was class B Morning, totaling 25 people in third semester of English Study Program of IKIP PGRI Pontianak.

C. Technique of Data Collections

In the data research technique section, it is to determine the primary or main data that will be processed later. Students as respondents become data in finding problems regarding learning styles and listening comprehension. Researcher used indirect and direct communication to collect data. Indirect communication refers to media, tools, and intermediaries that require the data collection process to be carried out properly. In indirect communication, the researcher used an intermediary, namely internet media in the form of a questionnaire, which distributed to respondents to obtain data. In addition researcher also used direct communication, researcher must collect data face-to-face and interact so that the researcher can collect the desired data; therefore, the researcher used interviews. This allows

participants to see and feel nonverbal responses such as facial expressions, body movements, and tone of voice (Devito, 2011).

D. Tools of Data Collections

1. Questionnaire

The tool used to collect data in this thesis is a questionnaire. In descriptive research, questionnaires are a way to obtain data and information as the basis for compiling relevant research results through respondents. According to Arikunto (2010: 194), the questionnaire is a question that is used to obtain information from the respondent in a personal report or about things that are known to the respondent. In this thesis, the researcher used a closed-ended questionnaire. A closed-ended questionnaire is a questionnaire whose specific questions and answers have been determined by the researcher according to the theme of the research to be studied. Closed-ended questionnaires are often used to describe a person's attributes, beliefs, or attitudes (Dillman *et al*, 2014). Closed-ended questionnaires was conducted online using google form. There are 30 items about learning styles. Students can choose an answer according to the circumstances and situations that the individual experiences. The questionnaires calculated using likert scale. On the authority of Sugiyono (2014: 58), the likert scale is used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. The likert scale used in this thesis has a minimum score of 1 and a maximum score of 4, because the respondent's answer known with certainty. The answers provided are scores: 4 (strongly agree), 3 (agree), 2 (disagree), and 1 (strongly disagree). Respondents were asked to answer and choose among these options that are closest to the students natural conditions regarding the learning styles.

Table 1.1
The Score of Likert scale

Description	Scale
strongly agree	4
Agree	3
Disagree	2
strongly disagree	1

Taken from Sugiyono,(2014: 93)

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

- a. The researcher prepared the questionnaire.
- b. The researcher distributes a questionnaire using a link from google forms.
- c. The students complete and answer a questionnaire.

- d. The researcher collected a questionnaire.
- e. The researcher analyzed the data from a questionnaire.

2. Interview

To collect further data, the researcher will conduct interviews. As believed by Denzin *et al* (2009: 495), interviewing is a form of conversation—the art of asking and listening. Interviews involve two or more people, where one is the interviewer and the other is the resource person. In this thesis, researcher used several types of interviews, including semi-structured interviews. on the report of Arikunto (2010:270) semi-structured interviews are a form of interview which researcher ask structured questions and then have one meeting to deepen further information. Thus, the answers obtained include all variables with a complete and in-depth explanation. In this thesis, 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. After that, the researcher asked three students some questions in the interviews related to the students learning style in listening comprehension.

In an interview, there are several steps below:

- a. The researcher made a list of interview questions.
- b. The researcher agreed with the student to meet for the interview.
- c. The researcher interviewed students.
- d. The researcher analyzed the data from the interview.

E. Technique of Data Analysis

The general purpose of analyzing data, as maintained by Flick (2013: 4), is to explain a phenomenon in several or more details by comparing several cases about the study in common or the differences, then developing a theory about the phenomenon under study from the analysis of empirical material. Data analysis is an important step in all research processes to get the desired final data. In this thesis, data collection and instruments that have been used optimally produce new data when analyzed using descriptive methods. The results obtained are presented in the form of pictures, tables, and graphs, which make it easier to understand the information conveyed (Priadana *et al*, 2021).

In analyzing quantitative data, researcher use Microsoft Excel as a tool for calculating data and making graphs. Microsoft Office Excel is the most familiar and quite sophisticated spreadsheet program that is widely used to process data and numbers (Nurcholisah *et al*, 2011). Researcher will use the formula for calculating the resulting data in the form of a

percentage. While analyzing data in the form of qualitative, researcher using the thematic analysis from Braun and Clarke (2006). Researcher questing data in depth through interviews after getting the results of calculations using the quantitative method to increase the validity of the data obtained.

1. Quantitative

In quantitative, the researcher analyze the data from a questionnaire, the questionnaire is used to know students 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, 10 items aural/auditory learning style as well as 10 items kinesthetics learning style.

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

- a. The researcher calculated the results of the students' scores for each learning style using Microsoft Excel.
- b. The researcher group each student separately based on the highest score of each learning style to analyze the data.
- c. The researcher calculates the final results, namely the percentage of 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).

2. Qualitative

The second method is the qualitative interview method. After the researcher classifies the learning styles that students have and gets answers from the students, the researcher will choose the students according to the learning styles. The researcher will conduct semi-structured interviews to gain in-depth information about the listening comprehension experienced by students with different learning styles. The researcher

collected data through interview sheets, interview, and voice recorders. The researcher transcribed results of the interview to get answers based on the research questions.

In this qualitative data analysis, researcher used a thematic analysis. Thematic analysis is one of the data analysis techniques because it can organize and describe data in detail so that researcher can interpret various aspects under the focus or research questions. Analyzing means starting to identify, analyze, and report thematic patterns in the data and presenting in detail and completely (Braun and Clarke, 2006). In general, thematic analysis is used when field data has been obtained, and then a text coding stage is carried out, which involves the process of segmenting, categorizing, and reconnecting the basic aspects of the data before it is finally interpreted. The aim of research using thematic analysis is to identify themes, i.e., patterns in the data that are important and interesting, and to use these themes to answer research questions.

According to Braun and Clarke (2012), there are six phases of the framework for conducting thematic analysis, as follows:

a. Familiarizing With the Data

The first thing the researcher does is get the data. Before analyzing each item, researcher should get a comprehensive overview because this is important. Researcher immerse in the data obtained and become familiar with the research data. Verbal data, namely voice recorder transcripts, and notes, are written, and the researcher read the data repeatedly to get used to it.

b. Generate Initial Code

In this second step, the researcher will encode the words. Researcher make coding from the text part of the data that has been obtained, which is generally in the form of sentences or phrases, then make labels or abbreviations "code" to describe its content. Researcher conducted coding both manually and using software; manually, researcher recorded important texts that would be analyzed, and software researcher made interview transcripts to be systematically analyzed later and get potential codes and themes. After data is coded, all data identified by the same code must be collected together.

c. Search For Themes

At this stage, the researcher focuses on the broad level of themes and should have a list of different codes. This stage involves sorting the different codes into potential themes. In this thesis, the researcher used a table to sort the codes. A theme

consists of a code; the codes that have been generated are then re-examined, patterns are identified in the codes, and themes are created from the codes.

d. Review Themes

The fourth step is the refinement of the collected themes. Interesting and selected themes may need to be broken down into smaller components, and other themes will be classified. The researcher review the themes that have been collected by reading the themes that have been extracted; this is to ensure that all data fits the pattern and is integral. Researcher create more accurate themes by classifying, grouping, discarding, and even creating new ones. Thus, the resulting themes are more useful and careful.

e. Defining and Naming Themes

The fifth step is to capture the meaning of each theme that has been analyzed. The researcher will make the themes brief, and impactful, and give the reader a sense of impression about the themes that have been determined. The themes are described in several sentences. Researcher formulate the themes obtained appropriately so the researcher appropriate meaning and can be understood properly.

f. Producing the Report

This is the last stage of all stages; researcher presented the final results of the themes that have been analyzed in a final report. In this final section, the researcher write down the analysis data that has been obtained and explain the thematic analysis process that has been carried out.

F. Research Procedures

According to Utami (2013), research procedures are the steps that must be taken to collect data to answer the research questions in this purchase. In this thesis, the researcher show the steps that carried out by the researcher in the process of collecting data to get the expected research results. The steps that must be carried out are planning, data collection, data processing, and data reporting.

1. Planning

In this thesis, the researcher will identify a problem that exists in the environment around. This is the first step for researcher to conduct research, decide on the research to study, and make a plan for how this research should work. In this thesis, the researcher decided to examine An Analysis of students' Learning Styles In Listening Comprehension. Thus, planning is made so that research can be carried out optimally.

Planning can be used to control and evaluate the course of activities because the nature of the plan is to guide the implementation of activities. (Listyangsih, 2014: 90).

2. Data Collection

Data collection is a process in research to get the information needed and useful. According to Williams (2021), data collection is the process of gathering data from internal and external sources. Therefore, researcher need data to be collected from third-semester students of the English study program. In this thesis, researcher collected information through a questionnaire that distributed to students. Then the researcher was conducted interviews by providing writing instruments or recordings to get answers, and then researcher analyzed and transcribed.

3. Data Processing

In this section, the data that has been collected is then followed up and processed in such a way that it conforms to the information that has been obtained. The data processed and selected so that researcher can draw conclusions from it. In this thesis, the researcher used a questionnaire and measure using a likert scale. Through interviews, the researcher concluded the process to get the results.

4. Data Reporting

According to Bahdin (35:2005), a research report is a written work that contains an explanation of the process and results obtained from research activity. After collecting the data and processing the data in such a way, the final result of the research is a research report. The result of this thesis is the researcher explains and interprets how the process of collecting data is done through a quantitative method from the data that has been measured and produces percentages, and then with a qualitative method, namely by explaining the trends of the students because the method used in this research is descriptive, the researcher used two methods so that the data produced is combined and complementary.