CHAPTER III

RESEARCH METHODOLOGY

This part of the research examines the research design that is used in the research, the number of respondents that participate, the research data and instrument, and lastly the data analysis activity.

3.1 Research Design

Research design performs the beginning step in constructing and planning the beginning steps of research once the idea and hypothesis have been clearly defined (Toledo-Pereyra, 2012). Research design refers to the overall plan or framework that guides the entire research process. It outlines the specific methods and procedures employed to collect and analyze data in order to address research questions or objectives. In this study, researcher implemented mix methods to analyze the student perceptions of using podcast as media in improving listening skills.

The mix methods combining the qualitative and quantitative methods to analyze the data. According to Hammarberg et al. (2016), qualitative methodology is employed to address questions according to participants' experience, perspective, and most often from the point of view of the participants. Based on Neuman (2014) qualitative research focuses and developing an in-depth understanding of a concept that is experienced in a certain setting. The researcher implementing the qualitative analysis

to investigate the data acquired from interview. In addition, the quantitative methodology aims to acquire precise and dependable measurements that enable statistical analysis on the obtained data (Almeida et al., 2017). Quantitative method measures the result and finding during the process of the study to get the most relevant result. Quantitative research emphasizes objectivity and is particularly suitable when there is a potential to gather quantifiable measurements of variables and draw inferences from population samples. It employs structured procedures and formal instruments for data collection (Almeida et al., 2017). In this study the quantitative analysis is implemented in analyzing the questionnaire data.

3.2 Research subject

The subject of this research is focused on the 4th year students of the English Learning and Education Department of Muhammadiyah Malang who use podcasts as the media for their listening skills improvements. The population are acquired from the 4th year students of the English Language and Education Department. The subject of this research is 31 students which is taken with probability sampling using the questionnaires. Probability sampling refers to the process where each individual of the population is given an equal chance of being chosen for the study (Acharya et al., 2013). Besides, the researcher used simple random sampling to collect the interview data with students. Simple random sampling chooses random members of the sampling population regardless of the strata of the population.

3.3 Data collection

In this study, the instrument to collect the data is a questionnaire. To obtain the major data research use a self-administered questionnaire. A self-administered questionnaire designed to be completed by respondents without direct involvement or guidance from a researcher (Fischer et al., 2014). Respondents will be given the questionnaire in Google Forms and answer the questionnaire on their own. The questionnaire would be in Likert Scale form questionnaire to investigate respondents' perceptions.

3.3.1 Research instrument

Research instrument refers to tools for data collecting, processing, and systematically and objectively presenting that aim to solve a problem or test a hypothesis (Nasution, 2016). The researcher used a questionnaire and interview to acquire the data for this research.

3.3.3.1 Questionnaire

A questionnaire is a research instrument consisting of a set of written or electronic questions designed to collect data from respondents. It is a structured data collection tool that allows researchers to gather information on specific topics or variables from a large number of participants in a standardized manner. Fischer et al. (2014) said that later studies have indicated that the questionnaire demonstrates greater sensitivity in examining the assessments of strength and sensitivity. The questionnaire used using Likert scale as the defining method. The Likert scale (LS) is a widely

employed method for expressing participants' agreement levels with statements of interest. The ratings are whole numbers within a specified range, and the overall results are usually derived by summing or averaging the scores of individual items (Cheng et al., 2021). The given questionnaire consists of 15 questions that must be filled by respondents. The questionnaire balances standardized questions with an in-depth study of themes, allowing for a better grasp of the participant's experiences and viewpoints. The questionnaires were constructed adapting to acquire a detailed perception and further data about the topic regarding the reviewed literature. There are 4 options that respondents can choose to represent their perceptions about the use of podcasts that are noted as; strongly Agree, Agree, Disagree, And Strongly Disagree. The questionnaire was distributed to respondents from 4th of December 2023 to 21 December 2024.

The form of questionnaire used in the research is a self-administered questionnaire. A self-administered questionnaire designed to be completed by respondents without direct involvement or guidance from a researcher (Fischer et al., 2014). A self-administered questionnaire is a survey tool that respondents can complete alone, with no direct intervention or instruction from a researcher. This type of data collecting is commonly utilized in a variety of sectors, including social sciences, market research, health investigations, and educational assessments (Czaja & Blair, 2005).

3.3.1.2 Interview

Furthermore, to collect further data research conducted an interview. The interview involves 5 representatives of the respondents based on their answers to the

interview. The respondent's answers to the interview were analyzed to construct further data on the object. This data investigates students' perceptions of the use of podcasts to develop listening skills. The researcher used semi-constructed interviews to collect the data. The research object is given prepared questions but also given time to elaborate and construct explanations on the issues with the aid of open-ended questions (Mann, 2011).

3.3.2   Data collection procedure

Below are the steps to collect the data:

a) Designing the questionnaire to investigate students' perception of podcasts in developing listening skills.

b) Distributing the questionnaire to respondents. The questionnaires are distributed online to respondents via WhatsApp.

c) Gathering the data from respondents' answers to the questionnaire.

d) Adjusting the data of the collected answers from the questionnaire.

e) Select the representative respondents to do the interview.

f) Build the interview question as a further question of the questionnaire.

g) Interview to collect further data.

h) Analyze the data from the interview.

3.4 Data Analysis

According to Mezmir (2020), qualitative data analysis involves categorizing and interpreting linguistic or visual content to articulate both implicit and explicit measures of the information and structure of meaning within the material, elucidating what it represents. In this study researcher uses Miles & Huberman's (1994) method in analyzing the research data applied by describing the data that is obtained from the questionnaire. The method consists of three steps; data reduction, data display, and conclusion drawing and verification (Miles & Huberman, 1994). To analyze the data researcher, conduct the following steps:

- Data reduction. This step involves selecting, focusing, simplifying, and transforming the data that appear during the data collection process (Miles & Huberman, 1994). The researcher proceeding the representative of the data summary regarding the pattern of the data. The data from the questionnaire will be restricted to scan the pattern and the high point of the data.

- Data display. Data display refers to data that are organized and compressed and thus can provide the information that can lead the conclusion-drawing process (Miles & Huberman, 1994)

- Conclusion drawing and verification. The last step is to draw conclusions and verify the information that is collected from the data display. Researchers conclude subtly to preserve openness and skepticism, additionally, also involve

verification such as short idea crossing between researchers to affirm the

validity of the research findings (Miles & Huberman, 1994)