CHAPTER III
RESEARCH METHOD

This chapter presents the methods the researcher employs for conducting this study, involving research design, research subject, data collection, (technique, instrument, procedure), and data analysis.

3.1 Research Design

The research design uses mixed-method research. According to (Sugiyono,2009), mixed-method research is a quantitative and qualitative research method to be used together in a research activity so that data is obtained that is more comprehensive, valid, and objective (Azhari et al., 2023).

This type of research has several advantages, including providing a more complete and in-depth picture of the phenomenon being studied. Then it can also produce comprehensive facts when researching a problem, and the freedom is given to researchers to collect data.

In connection with this research, the researcher used a sequential explanatory design, The Mixed Method Sequential Explanatory model research method is characterized by data collection and quantitative data analysis in the first stage, and followed by qualitative data collection and analysis in the second stage, in order to strengthen the results of the quantitative research carried out in the first (Azhari et al., 2023).

3.2   Research Subject

The research subjects are students at the University of Muhammadiyah Malang (ELED Students) for the 2020 academic year. They were specifically selected only for those who use or have a Spotify application account. The number of respondents in this study was 50 students for questionnaires and five respondents for interviews.

This research uses nonprobability sampling, namely snowball sampling. According to (Sugiyono,2014), Snowball sampling is a sampling technique that starts with a small number and then increases in size.

3.3   Data Collection

This chapter contains research techniques and instruments, research procedures, and data analysis:

3.3.1 Research Technique

According to (Sugiyono,2014), the research technique is the most strategic step in the study because of its goal. The main thing of research is getting data. A questionnaire is the method that researchers use to collect primary data. The details are explained below:

1.   Questionnaire

A questionnaire is a means of collecting data using forms with questions to obtain answers (Cahyo et al., 2019). Respondents must answer the questionnaire themselves, created using Google Forms and carried out online by distributing the

questionnaire link to respondents to collect data regarding the use of songs in the Spotify application to increase vocabulary.

The questionnaire consists of two categories of questions: open-ended and closed-ended. Open-ended questions are ones to which the response is expected to be explained in writing. On the contrary, Closed questions are questions that expect a short answer from the respondent to choose one alternative answer from each available question.

In this study, respondents will be provided with a closed-ended questionnaire. The purpose of distributing questionnaires is to obtain comprehensive information from respondents regarding a problem without being concerned if respondents provide answers that do not match the facts when answering the questions.

The purpose of distributing questionnaires is to seek complete information about a problem from respondents without worrying if the respondents give answers that are not real when filling out the questionnaire. Provide answers not by reality in filling out the list of questions (Syarifuddin et al., 2021).

2. Interview

The interview is used to know more about students" perceptions as well as to support the answers to the questionnaire. An interview gives the researcher a chance to spend time learning about the opinions and experiences of the respondents while also offering follow-up questions to go deeper into the subject (Harding,2013). In this study, an interview via WhatsApp was conducted to ask 5 of 50 students as the interview.

Furthermore, the researcher selected a semi-structured interview to get the students' replies. A semi-structured interview is a method of gathering data when the interviewer prepares an interview guide ahead of time but does not strictly adhere to it in terms of the questions' exact wording or arrangement (Braun & Clarke, 2013).

3.3.2 Research Instrument

The questionnaire data is acquired as score values, and a Likert scale is used to determine the scores for the answer choices scale 1 to 4. According to (Sugiyono.2014), the Likert scale is employed to gauge an individual's or a group's attitudes, views, and perceptions regarding a social issue.

The statements that make up the Likert scale are typically ordered sequentially, from strongly disagree to strongly agree. Respondents can provide more detailed and varied assessments by utilizing a Likert scale, making it possible to get more accurate answers about Increasing Students' Vocabulary Through Songs in the Spotify Application. In addition, using a Likert scale facilitates data analysis by offering numerical data that can be analyzed more methodically. This question was created based on a literature review; it can be ensured that the questionnaire questions created have covered important aspects of the research topic. Respondents are presented with four options for answers that are tailored to the specific conditions of the subject.

<p align="center">**Table 3. 1 Options and Score**</p>

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

3.3.3 Research Procedure

The researcher uses questionnaires and interviews to gather data. The researcher used the following procedures to collect the data:

This study used a mixed sequential method strategy to combine data from one approach with another. According to (Creswell, 2018), To complete the problem formulation, quantitative data is collected and analysed in the first step. This research aims to determine students' perceptions of using songs on the Spotify application to improve vocabulary. The respondents used were students from the English Education Department class of 2020.

Researchers used a questionnaire to collect quantitative data. Next, the collected quantitative data was tested for potential use in interview questions. Interview questions that will be given to selected respondents were sent via WhatsApp. Next, data from the questionnaire was collected together with data from interviews.

3.3.4   Data Analysis

Data analysis techniques are the process of collecting data systematically to make it easier for researchers to reach conclusions. This research uses mixed

methods to analyze data. The research data was divided and analyzed based on the methods used to gather the data (Creswell, 2018). The questionnaire data were subject to a quantitative analysis focusing on statistics. In the meantime, the qualitative interview data were subject to a descriptive analysis. Descriptive analysis is the research method employed, which aims to describe the facts, features, and relationships between the phenomena under study (Leavy, 2022).

This data will then be analyzed using the (Miles and Huberman. 1992) theory. This analysis consists of three activity streams, namely, data reduction, data display, drawing conclusions (Ahmad & Muslimah, 2021).

1.   Data Reduction

The first step, namely data reduction, is one of the data analysis processes. This is the process of minimizing the data required. Using data tabulation techniques, classifying or organizing data into one table for analysis purposes. Apart from that, interview data will be calculated to support this research.

2.   Data Display

In the second step, a table format will be used to display the quantitative data. Furthermore, representative sentences will be used to show qualitative data. Thus, just a subset of the complete data for each question is shown in the shown data. The findings from the tables and statements will next be presented by the researcher. The use of data visualization by academics facilitates their conclusion-making.

3.   Drawing Conclusions.

Researchers concluded what students' perceptions about using the Spotify application can increase student vocabulary, and found out the benefits of the Spotify application as a vocabulary learning medium.