

## CHAPTER III

### RESEARCH METHOD

This chapter will describe the method used in this research, which includes the research design, research subject, data collection, and data analysis.

#### 3.1. Research Design

A research design refers to a systematic approach that a researcher uses to provide legitimate answers to research questions. It is accurate and highly objective. Typically, a research design will specify the kind of analysis you need to perform to obtain the intended outcomes. Research design may be defined as an organized system of approaches and strategies selected by a researcher to integrate different aspects of the study in a relatively coherent way to effectively address the research challenge. This offers valuable perspectives on the "how" of conducting research with a specific technique (Khanday & Khanam, 2019).

This study's design was quantitative, and a survey was employed. Using instruments, the quantitative approach measures variables such that a statistical procedure may be used to examine the numerical data (Aisyah, 2020). When gathering actionable insights, quantitative research is employed since statistical results are crucial to the researcher's work. It is a technique for gathering a lot of data, typically in statistical form, from a lot of individuals in a short amount of time by asking closed-ended questions, (Asenahabi as quoted from McNeill and Chapman, 2005). Asenahabi, cited in Mugenda & Mugenda (2003), the survey method is the process of gathering information from a sample group to ascertain that group's current state with regard to one or more variables. It focuses on the here

and now and makes an effort to ascertain the current state of the phenomenon under investigation (Asenahabi as cited from Singh, 2006).

### **3.2. Research Subject**

The population subject of this research is all students of Muhammadiyah Malang University in English education in the 1st semester. The total number of students at Muhammadiyah University majoring in English Education for the academic year 2024 is 58 students. The reason why the researcher chose all first-semester students in the academic year 2024 in English education, was to seek generalizations of the phenomenon. The advantages of choosing the entire population as the subject is that the researcher can obtain complete data so as to validate the accuracy of the findings. The researcher can also conduct more detailed analyses and potentially uncover insights that may be missed.

### **3.3. Data Collection**

In this section, the researcher will discuss data collection, including instruments and data collection procedures.

#### **3.3.1. Instrument**

##### **1. Questionnaire**

As part of a questionnaire process for gathering data, the respondents receive a set of written questions that the researcher has organized. Each study participant fills out a questionnaire, which is a self-reporting tool for gathering

research data. Researchers used a questionnaire as an assessment tool to gather information on research participants' attitudes, perceptions, beliefs, feelings, ideas, personalities, and behavioral intentions (Aisyah, 2020).

In this study, researchers used an online questionnaire as an instrument for data collection. An online questionnaire is flexible because participants can access it wherever they are. The questionnaire can be administered to many respondents simultaneously, which makes it efficient to obtain data from a large number of people. A questionnaire is distributed to participants using a Google form link and participants only need approximately 10-15 minutes to complete the questionnaire. In this study, the researcher used a closed-ended questionnaire.

**Table 1** *Questionnaire Questions*

No	Question	Answer		
1.	Do you listen to English songs?	Often	Seldom	Never
2.	Do you listen to music as a part of your daily routine?	Often	Seldom	Never
3.	How long do you usually listen to English songs in a day?	More than 3 hours	1,5 hours - 3 hours	1 minute - 1 hour
4.	How often do you listen to English songs in a week?	More than 4 days	1 day - 3 days	No more than 1 day
5.	Do you enjoy listening to English songs?	Often	Seldom	Never
6.	Do you think English songs are fun?	Often	Seldom	Never

7.	Do you feel comfortable when you listen to English songs?	Often	Seldom	Never
8.	For entertainment, do you listen to English songs?	Often	Seldom	Never
9.	Do you listen to English music from different platforms (e.g., Spotify, JOOX, YouTube music, etc.)?	Often	Seldom	Never
10.	Do you actively look up the lyrics of the songs you listen to?	Often	Seldom	Never

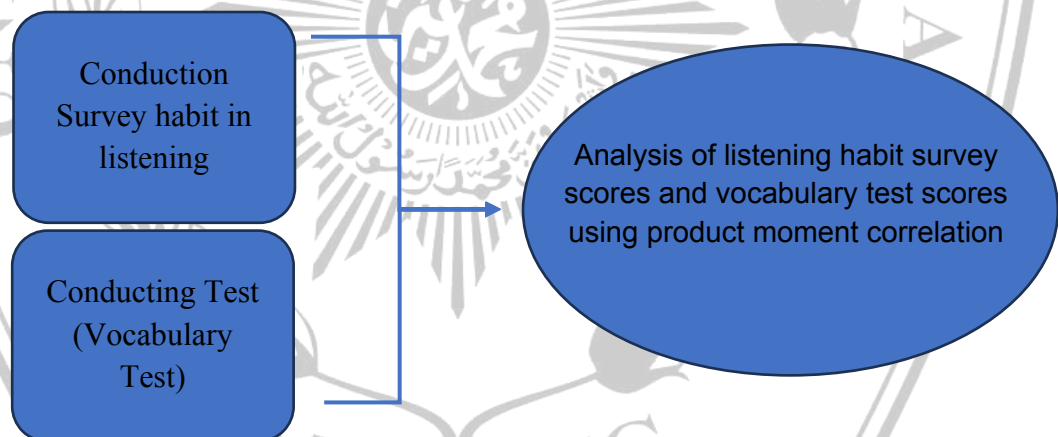
## 2. Song Using Test of Vocabulary

Apart from questionnaires, researchers also use tests as an instrument to collect data. The test was given to participants who had been given a questionnaire about their listening habits to English songs. The test itself aims to investigate the relationship between students' listening habits to English songs and their vocabulary level. From the results of the test, we can judge whether students who have a habit of listening to English songs master more vocabulary than students who do not like listening to English songs. Students will be given 5 song lyrics and asked to highlight "yellow" in the vocabulary they understand. The test will be conducted 3 times. The test itself will be distributed by researchers with the help of lecturers from related classes that will be used as samples of research subjects. In this study, researchers used manual tests not using the application. This is because written tests make it easier for researchers to give direct corrections to student worksheets. In addition, if the test uses the application, there is a potential for the application to

error, slow down, or server down during the test, which disrupts the test. A test is a methodical process for observing someone's behavior and characterizing it using numerical tools or a category system, according to Rahmatullah, who referenced Cronbach (quoted in Syakur, 1995:5). Assessing students' success, tracking their progress, inspiring and guiding their learning, and assessing the effectiveness of the teaching process are all made easier for teachers by administering tests. The investigator employed a reading comprehension assessment to gather information regarding the student's aptitude for comprehending narrative texts.

### 3.3.2. Data Collection Procedure

Following is an explanation of the procedures the researcher follows when gathering data:



### 3.4.Data Analysis Product Moment Correlation

Researchers used Pearson Product Moment correlation analysis because they wanted to find out if there was a significant relationship between listening song habit and student vocabulary capacity. This method was chosen because both

variables are numerical and allow statistical measurement of linear relationships. Pearson product moment analysis itself can be done in two ways, namely manually according to the formula and by using the spss application. In this study, researchers used the spss application to analyse the pearson product moment correlation. According to Asri, Hashim, and Desa (2016), to determine the intensity or degree of a relationship between samples, a simple statistical analysis of Pearson Product Moment Correlation (PPMC) is frequently utilized. The r values (produced by PPMC) often fall between -1 and 1, with a correlation of 1 denoting an ideal positive linear relationship and a correlation of -1 denoting an ideal negative linear relationship. Among the many widely used statistical techniques are correlation methods, which are used to ascertain the degree of the linear relationship between two or more variables. Theoretically, numerous branches of statistical research are developed from the foundational idea of correlation (Sobri, Midi, Ibrahim, Ismail, Yacoob & Malik, 2016). In this research X variables for listening song habit and Y variables for student vocabulary capacity. The Pearson product moment correlation analysis formula is as follows:

$$r_{xy} = \frac{\sum(x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum(x_i - \bar{x})^2 \sum(y_i - \bar{y})^2}}$$

Explanation:

- The Pearson correlation coefficient ( $r_{xy}$ ) is used.
- $x_i$  and  $y_i$  are the individual values of variables X and Y respectively.
- $\bar{x}$  and  $\bar{y}$  are the average of variables X and Y variables respectively.