

CHAPTER III

METHODOLOGY

A. Research Design

Quantitative research uses research techniques, such as experiments and surveys, and gathers data from predetermined methods that provide statistical data and the use of distinct structures that may involve methodological premises and theoretical frameworks that can be predictive, clarifying, and validating.³² The goal of quantitative research is to create relationships, affirm or validate them and to build generalizations that contribute to theory.³³ Quantitative analysis requires data collection so that information can be quantified and statistically processed for the purpose of supporting it.³⁴ Furthermore, in this study, the researcher used a descriptive quantitative method because this research investigated from the quantitative side and generate statistics on the most effective media between podcast and song that can be used to improve students' listening skill.

B. Research Setting and Sample

B.1. Research Setting

This research was be conducted online via zoom at Madrasah Aliyah Negeri 1 Medan which is located on Jalan Williem Iskandar No.7 B, Sidorejo, Kec. Medan Tembung, Kota Medan, Sumatera Utara

³² John Creswell, (2014), *Research qualitative, quantitative, and mixed methods approaches design*, (Sage Publications, 2014), p. 25.

³³ Paul Leedy and Jeane Ellis Ormrod, *Practical research: Planning and design*, (Sage Publications, 2001), p. 21.

³⁴ John Creswell, (2014), *Research qualitative, quantitative, and mixed methods approaches design*, (Sage Publications, 2014), p. 27.

20222. The reasons for the researcher choosing Madrasah Aliyah Negeri 1 Medan as the research location were as follows:

1. Based on interviews conducted with English teachers at Madrasah Aliyah Negeri 1 Medan, the lecture method used in the English teaching process was considered boring so that learning activities became passive and students were less enthusiastic about participating in English learning activities in class.
2. Depend on my title.

B.2. Population and Sample

The population of this research was be taken from the twelve grade students of Madrasah Aliyah Negeri 1 Medan in the academic year 2021/2022 with total population of 500 students and consisting of 16 classes. Moreover, in this study, the technique used to choose the sample is simple random sampling technique. Simple random sampling is a sampling technique that provides equal opportunities for the population to be sampled.³⁵ The researcher was be conduct simple random sampling to select two classes that will be used as the research sample.

³⁵ Sugiyono, *Metode penelitian kuantitatif, kualitatif, dan R&D*, (Bandung : Alfabeta, 2017), p. 27.

C. Research Procedure

The following is a detailed research procedure that will be carried out:

1. The researcher will prepare the zoom link, teaching materials and lesson plan before starting the class.
2. The researcher will distribute the zoom link to students via WhatsApp chat.
3. After starting the class and doing introductions, the researcher will play the podcast audio for the first time without being paused.
4. The researcher will ask students about the theme of the podcast that has just been played.
5. After that, the researcher will play the audio podcast by giving a pause in some parts to be discussed with the students.
6. The researcher will give the students time to ask questions.
7. After answering all of the questions, the researcher will play 2-3 audio podcast depending on the remaining time available in class and perform the same steps before.
8. The researcher will close the teaching and learning activities by asking what students have learned in class.
9. The researcher will repeat the previous steps in another class and use the song as a learning media.

D. Technique of Collecting Data

The test is the data collection technique used in this study. The results of the test will be used as research data by producing quantitative data. The

researcher will carry out the test at the third and fourth meetings after teaching in the classroom. There are two kinds of test given by the researcher which are test using podcast and test using song. The test questions are from the internet which had been compiled by the researcher so that they were easy to understand. The researcher will use google form as a media for test questions to make it easier for the researcher to obtain research data. The following are the steps for data collection:

1. The researcher will prepare zoom link and audio podcasts to be used for the test.
2. The researcher will distribute the zoom link and google form link containing test questions.
3. The researcher will explain how to fill out the google form to do the test.
4. The researcher starts playing the audio podcast while the students fill out the google form link.
5. After the podcast audio has finished playing, the researcher will give students 2-3 minutes to check their answers.
6. After playing all the podcast audio, the researcher closes the class and asks the students to leave the zoom.
7. The researcher will take the same steps by using song media for test questions on the next day.

E. Technique of Analyzing Data

The researcher analyzed, examined, and concluded the study's findings after collecting the data. The following are the steps that will be taken to analyze the data:

1. The researcher will check each student's correct answer.
2. After getting the number of correct answers, the researcher will calculate the score each student has using the formula:

$$X = \frac{Y}{N} \times 100$$

Information:

X: Student score.

Y: Number of correct answers.

N: Number of test questions given.

3. After getting each student's score, the researcher will find the average of all students through the following formula:

$$M = \frac{X_1 + X_2 + \dots + X_n}{P}$$

Information:

M: The student's overall average.

X: Student score.

P: Total number of students.

4. The researcher will carry out the previous steps on the test using podcast and the test using song.

5. After getting the total average scores on podcast class and song class, the researcher will compare those average scores and see which one has the highest scores.

