

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter contains four sections. The first is research design. The second is population and sample. The next section is data collection which followed by three subsections which are technique, instrument and procedure. The last section is data analysis.

#### 3.1 Research Design

The research design used in this study is qualitative research. The researcher uses this to measure how big the effect of songs with academic stress levels on students by doing questionnaire and observation. The measuring instrument uses Student-Life Stress Inventory (SSI) and Subjective Units Distress Scale (SUDS) from Wolpe. Student-Life Stress Inventory is a standard measurement instrument used to measure sources of stress (frustration, conflict, pressure, change, and self-imposition) and reactions to stress (physiological, emotional, behavioral, and cognitive) developed by Bernadette M. Gadzella. (1991) in (Pragholapati et al., 2021). Subjective Units of Distress Scale (SUDS – also called a Subjective Units of Disturbance Scale) is a scale ranging from 0 to 10 measuring the subjective intensity of disturbance or distress currently experienced by an individual. The SUD-level was developed by Joseph Wolpe in 1969 at (Kircanski et al., 2014).

### 3.2 Population and Sample

#### 1. Population

The population refers to a defined group of subjects possessing specific qualities and characteristics as identified by the researcher for study and subsequent conclusion (Sugiyono, 2017). In this particular study, the population comprises all students attending SMA Muhammadiyah 1 Malang, totaling 92 individuals distributed across different grades: 36 students in grade 10, 36 students in grade 11, and 20 students in grade 12.

#### 2. Sample

For the sample selection, the researcher focuses on grade 11, which consists of 36 students. Since there are only two classes for grade 11, with 11 students in one class (M1) and 25 students in the other (M2), the researcher selects participants from both classes.

The sampling technique employed is Cluster Random Sampling, wherein all individuals or groups in the population have an equal chance of being chosen as sample members, as outlined by Arikunto (2006:124). In this study, the researcher utilizes a lottery method to select the sample. Three pieces of paper labeled "Class 10," "Class 11," and "Class 12" are folded and placed in the lottery. The researcher randomly selects one, which turns out to be "Class 11."

### 3.3 Data Collection

### 3.3.1 Technique

The techniques that used in this research are observation and questionnaire.

#### 1. Observation

In this research, the researcher uses observation which is a systematic process of viewing and recording a person's behavior for the purpose of to make decisions for certain interests. The researcher uses a behavioral checklist observation. The purpose of the observation is to see student's behavior when studying English while listening to songs.

#### 2. Questionnaire

“Questionnaire is a number of written questions used to get information from respondents” (Arikunto 2002: 151). The researcher chose the questionnaire because in addition being practical and flexible, questionnaire also did not take much time as Burns 1999: 129 stated, “Questionnaire has the advantage of being easier and less time consuming to administer than interviews and the responses of larger number of informants can be gathered”. The researcher also chose questionnaire because generally it is relatively quick to collect information using a questionnaire.

### 3.3.2 Instrument

#### 1. Song

Researcher have chosen several songs that have a slow beat, fun beat and easy listening and also have meanings that are suitable for teenagers. Slow beat songs will make students feel more enjoy and make the class atmosphere more comfortable. The songs chosen by the researcher are; Pharrel Williams (Happy), Zara Larsson (Lush Life), NIKI (Every Summertime). The researcher will played the songs using speaker while students learning in the class.

## 2. Questionnaire

The questionnaire that the researcher made contains 10 statements related to symptoms of academic stress that students may experience during English learning in class. There are 4 choices of the answer such as (1) as never, (2) as sometimes, (3) as often, and (4) as always. The students will checklist the questionnaire according to the circumstances they experience.

## 3. Behavioral Checklist

(Pratiwi et al., 2023) suggests that there are 5 methods of observation, namely anecdotal records, behavioral checklists, participant charts, rating scales, behavioral tallying, and charting. The researcher chose a behavioral checklist, which is a method of observation that provides information about whether or not the observed behavior appears.

In this observation sheet, the researcher made 8 statements related to symptoms of academic stress that could occur to students in class with

4 answer choices, namely never, sometimes, often, and very often. Researchers will fill in 4 answer choices with the number of students who experience symptoms of academic stress according to the statements provided.

### 3.3.3 Procedure

The procedures in this research are:

1. Research Preparation Stage

The researcher will prepare several things before obtaining the data and the researcher also prepares several procedures. To collect the data, the researcher needs observation sheets, questionnaire sheets, and speakers to play the song.

2. Implementation Stage

In this stage, learning will be carried out as usual. The teacher will give lessons to students and when students do the learning activities, the song that has been prepared by the researcher will be played. The song that will be played has already been chosen by the researcher, namely a song that has a slow and fun beat and has a meaning that is appropriate to the age of the students in the class. After that, the researcher will observe how students deal with it. Do students feel comfortable learning while listening to songs, are they actually disturbed? After observing, the researcher will give a questionnaire to the students at the end of the lesson.

### 3. Data Collection Stage

Researchers collected data that had been obtained from observations through a behavioral checklist and also a questionnaire. After the data is collected, the data will be rewritten for analysis.

### 4. Data Analysis Stage

At this stage, all the data that has been obtained will be analyzed and classified.

### 5. Completion Stage

At this stage, all data has been analyzed and the data is ready to be presented.

## 3.4 Data Analysis

Data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and documentation, by organizing data into categories, describing them into units, synthesizing, compiling them into patterns, and choosing which ones are important and which will be. Studied and made conclusions so that they are easily understood by themselves and others (Sugiyono, 2017). The process of data analysis carried out in this study used three steps, namely:

#### 1. Data Reduction

Reducing data means summarizing, choosing the main things, focus on the things that are important, look for themes and patterns. So, the researcher

will just gathering the important data and reduce the data that are not important to make it easy to use.

## 2. Data Display

The presentation of data in qualitative research is carried out in the form of brief descriptions, charts, relationships between categories, flowcharts, and the like (Sugiyono, 2016). The researcher will use narrative text and also pie chart for the data display. In this case, Miles and Huberman stated that "the most frequent form of data display for qualitative research data in the past has been narrative text" which is most often used to present data in qualitative research with narrative text by displaying data will make it easier to understand what is happening and plan further work based on what is understood (Sugiyono, 2016).

## 3. Concluding Drawing / Verification

The third step in the data analysis process is drawing conclusions or verification. The initial conclusions put forward are still temporary and will change if no strong evidence is found that supports the next stage of data collection (Sugiyono, 2016).