

CHAPTER III

RESEARCH METHODOLOGY

This chapter describes the research methodology employed in the study. It includes research design, subject, instrument, data collection procedure, and data analysis technique.

3.1. Research Design

According to (Nayak & Singh, 2019) states the research design describes how the study will be carried out. The researcher applied quantitative approach because the data is presented in numerical and descriptive form. Quantitative is an approach in which the data is numerical and the analysis is statistical. According to (Sugiyono, 2015:14), the quantitative approach is study based on the concept of positivism to examine a certain population or sample and take random samples by collecting data using equipment, with statistical data analysis.

In this research, the researcher applied quasi-experimental research design which involved pre-test, whilst-test and post-test so that with such a situation it is hoped that it can contribute to the level of research validity. According to (Becker et al, 2018), quasi-experimental designs manipulate an independent variable different from randomized experimental designs in that subjects are not randomly assigned to treatment groups. Based on statement above, quasi-experimental design is a type of research design that has a control group and an experimental group that is not randomly selected. The researcher used tests to measure the extent to which participants' abilities started from the first test, namely the pre-test, whilst-test and the post-test. According to (Arikunto, 2018: 33) states the test is a way to gather information, but compared to other tools, this test is more formal because it is full of limitations. Here, the researcher used a test to measure students' ability in vocabulary mastery. The first step is to provide a question paper with instructions on choosing the right vocabulary for participants to assess participants' abilities before watching the John Pare's tiktok video, then applied the whilst test with the same instruction, lastly assess their vocabulary development by conducting a post test.

3.2 Research Participants

According to Walliman, (2019) A research participant is someone who provides information about the study. To investigate the study question, the participants in this study

were students of class VII, VIII and IX at SMP Muhammadiyah 1 Malang who took part in the extracurricular English club. Participant data available were 12 students who took part in English club ekstrakurikuler. The researcher chose students who took part in English club extracurricular activities as participants in this study because based on information from the English teacher at the school that they had a passion for English and had a high willingness to learn English.

3.3 Data Collection

This chapter presents the research technique and instrument, procedure of data collection and data analysis.

3.3.1 Research Technique and Instrument

According to Fraenkel et al (2021), Instrument is a method of collecting data when conducting research. To collect data, researcher must use an accurate instrument and adhere to the study methodology. An instrument is a tool that is used in this study. The research instrument was a written test to collect the data. According to Arikunto (2021:66), A test is a tool or technique used to determine or measure a student's performance by using a set of methods and guidelines. In this study, the researcher gave 10 questions in each test consisting of pre-test, whilst-test and post-test. The pre-test was carried out to measure how much vocabulary students had before watching John Pare's TikTok video. After being given a whilst-test, students will learn the vocabulary on the John Pare TikTok account that has been determined by the researcher. The whilst-test was conducted to measure students' vocabulary development after being instructed to watch John Pare's TikTok video. Last, the post-test was given with questions that were more difficult than the previous test to measure the extent to which the participant's vocabulary mastery had developed.

1. Pre-test

This test was conducted to find out how far the students' vocabulary mastery was before watching John Pare's TikTok video. The test was carried out with the researcher giving 10 questions with instructions for students to choose the right vocabulary among the 3 answer choices.

Question examples :

1. *Pengasuh anak*

- a. Babysister
- b. Babysitter
- c. Babytutor

The appropriate answer is B (babysitter)

2. *Tetap semangat*

- a. Keep spirit
- b. Keep it up
- c. Keep going

The appropriate answer is B (Keep it up)

2. Whilst-test

This test was conducted to test students' vocabulary mastery abilities after being given the John Pare Tiktok video to study within a specified timeframe. The researcher gave question papers containing 10 multiple choice questions then the students answered them within 30 minutes.

Question examples :

1. *Aku menghargai itu*

- a. I appreciate it
- b. I appreciated
- c. I appreciative

The appropriate answer is A (I appreciate it)

2. *Boleh aku masuk?*

- a. May I enter?
- b. May I come in?
- c. Can I entry?

The appropriate answer is B (may I come in?)

3. Post-Test

The post test was carried out so that researchers obtained more valid data to measure the development of students' abilities after being given the John Pare Tik Tok video. the researcher gave question papers containing 10 multiple choice questions to students with instructions on choosing the right answer. the questions are adjusted to the content on TikTok John Pare that the researcher gives to students.

Question examples :

1. *Jangan memotong pembicaraanku*

- a. Don't cut my talk
- b. Don't interrupt me
- c. Don't break my talk

The appropriate answer is B (Don't interrupt me)

2. *Orang yang suka belanja/pecinta belanja*

- a. Shopaholic
- b. Love shopping
- c. Workaholic

The appropriate answer is A (shopaholic)

3.3.2 Procedure Of Data Collection

In this study, data collection refers to the process of gathering information utilizing research equipment. The following approaches were used to collect data for this study:

1. Asking permission to the teacher

The researcher asked permission to the English teacher in Junior High School Muhammadiyah 1 Malang for conducting the written test on students who took part in English club extracurricular.

2. Determining the participants

Before conducting this research, the researcher asked for the willingness of students who took part in extracurricular activities to take part in this study. The researcher distributed a google form that contained student data such as full names and whatsapp numbers of students to make it easier to provide information and tiktok video links that would be given to students for study.

3. Preparing test questions

The researcher prepared 10 questions for each test which was carried out with different questions based on the John Pare's video content to measure students' abilities in each test carried out. So the total questions that will be given to students are 30 questions from the beginning to the end of the study.

4. Conducting a pre-test

Before the participants were given the John Pare Tiktok video link, the researcher conducted a direct test with the aimed of measuring how much vocabulary mastery the students had before watching the John Pare Tiktok video. The pre-test was carried out by giving 10 questions with instructions to students to choose the right vocabulary between the three option choices. Students are given time to do a pre-test for 30 minutes

5. Providing a tiktok video link

After conducted the pre-test, the researcher got an overview of how well the students' ability to master vocabulary, then the researcher provided several John Pare tiktok video links via WhatsApp for students to study before doing the whilst-test.

6. Conducting a whilst-test

After students were given time to study vocabulary from the provided tiktok video link, the researcher conducted a pre-test with 10 written questions, then students answered the questions with a time limit of 30 minutes. After the whilst-test was carried out, the researcher gave treatment to students by discussing each of the questions that had been given. Afterwards, the researcher gave several John Pare tiktok video links again to be studied before doing the post-test.

7. Conducting a post-test

The researcher conducted a post test on students after the researcher gave time to students to study vocabulary through the provided tiktok video. The post test is carried out by giving question papers containing 10 questions to students, then students did the post test with 30 minutes of working time. After the post-test was carried out, the researcher drew conclusions from this study.

3.4 Validity and Reliability Testing

The instruments used in research must satisfy certain criteria in order to be considered good instruments. Good instruments must be valid and reliable. Validity and reliability are two components that should be used in research to assess the quality of a quantitative approach. According to Muijh, (2004:67) states that vailidity is perhaps the most important aspect of designing any measure of educational research instrument. It can be concluded that validity is the process that refers to the extent to which the test measures what it is supposed to measure. Reliability is a key attribute of good testing. According to Sugiyono (2018),

states that reliability testing is used to measure the reliability of research instrument. It means that an instrument is reliable if it produces the same data or results when measured multiple times on the same object. Therefore, this instrument is reliable as a test. In this study, the researcher consulted expert English teacher and utilized evaluators to assess whether the instrument was appropriate or not, and to determine the validity of the instrument. The questions in this research were validated by two experts, there were an English teacher at SMP Muhammadiyah 1 Malang, namely Mr. Nosa and English lecturer from University Of Muhammadiyah Malang, namely Mr. Adityo. Then the instruments in this study have been tested using the Microsoft Translator application. Microsoft Translator application allows people to translate text, speech, images and group conversions in over 100 languages. This application has ratings of 4.8 and gets good of reviews. One of the reviews said that this application gives more accurate, better translation than google translate and easy to use. Also the answers to each question made can be found in the John Pare TikTok video that was given to the participants.

3.5 Data Analysis

Data analysis is a key aspect of this research since it allowed the researcher to draw conclusions from the findings. According to (Sugiyono, 2011: 147) explained that data analysis is an activity after collecting data from all respondents or other sources. Using quasi-experimental research, this study aimed to know the effectiveness of learning English vocabulary through John Pare's video on his TikTok account. The researcher analyzed how the method that is used affects students to improve their vocabulary mastery.

3.5.1 The Technique of Data Analysis

The variables of this research were learning English vocabulary and learning through John Pare's TikTok account. This study used quasi-experimental research to compare the pre-test, middle-test, and post-test results of the same group. These are the step by step for data analysis:

1. Classifying the data

After did the pre-test, whilst-test and post-test, the researcher classified the scores of each student based on the test.

2. Describing the data

After classified the students' score the researcher then categorizes the student's score

3.5.2 The Score Categorize

Score	Category
90-100	Excellent
70-80	Good
50-60	Poor
>50	Very Poor

3. Tabulating the data

Tabulating data is the process of organizing and presenting data in a tabular format. According to (Ahmad, 2012) the main purpose of tabulating data is to organize the information such that it is more comprehensible and understandable. After classified the data, the researcher collects data for each variable and organizes the data systematically. Then, the researcher entered the data that has been collected into the appropriate table sets.

3. Validating the data

After entered the data into the table, the researcher compared the participant data based on the tests that had been carried out. The researcher compared the initial data before being given treatment and after being given treatment through John Pare's tiktok videos.

4. Interpreting the result

The researcher summarizes the findings made in a clear and concise way, by including tables, graphs, or statistical outputs that are appropriate to support the findings.