

CHAPTER III

RESERCH METHODOLOGY

Research methodology is important parts of research to accurately get data. In this case, the setting is outlined and directed to answer the formulation of problems. This chapter discusses about research design research variable, population and sample, instrument, procedure of experiment, data collection technique, data analysis technique.

A. Research Design

The purpose of this study is to investigate whether or not the use of English song is effective for teaching simple present tense for the seventh grade students of MTsN 1 Kediri. Based on that, this research uses quantitative approach with quasi experimental as the research design because quantitative the approach that use numeric data to answer the hypothesis and quasi experimental is the research design that take the participants not randomly. Quantitative research approach is the research approach that uses objective measurement to gather numeric data that are used to answer questions or test predetermined hypotheses (Ary, Jacob, Sorensen & Razavieh, 2006: p.22). Ary, et.al (2006: p.25) also state that the purpose of quantitative research is to study the relationship between cause and effect. In other hand, Have (2004: p.4) states that the result of quantitative research can be in numbers and most often arranged in tables or not or also at least not dominant.

Every research approaches has their own research design. It also applies to quantitative research. Research design is important because it decides the study's internal validity and it is the ability to get valid result about the effect of experimental treatment on the dependent variable (Ary, et.al, 2006: p.301). This research uses quasi experimental as its research design. Quasi experimental design is similar to randomized experimental design which both of them involves manipulation of an independent variable but the different in that subjects are not randomly assigned to treatment group (Ary, et.al, 2006: p.316). To be short, quasi experimental is not randomly assigned subjects to treatment group. In other hand, Creswell (2012: p.309) states that quasi-experiments include assignment, but not random assignment of participants to groups. Experimental group will get English song as the treatment and control group will get board game as the treatment.

Table 3.1
Research Design

Group	Pre-Test	Treatment	Post-Test
Experimental Group	Pre-test	English Song media	Post-test
Control Group	Pre-test	Board game	Post-test

B. Research Variable

Every researchers need to think in term of variables when they conduct a research, especially quantitative researchers. This research has variables. A variable is a construct or a characteristic that can take on different values or scores (Ary, et.al, 2006: p.301). Variable is also an attribute or characteristic from individual or an organization that researchers can measure and observe varies

among individual or organization to be studied (Creswell, 2012: p.112). William (2011: p.11) mentions that variables are components of indicator which can be measured.

This research “The Effectiveness of English Song in Teaching Grammar (Simple Present Tense) For the Seventh Grade Students of MTsN 1 Kediri” has two variables, those are dependent and independent variable where:

- a. The dependent variable: students’ grammar mastery.
- b. The independent variable: English song.

According to Creswell (2012: p.115-116), there are two types of variables; they are dependent variable and independent variable. Dependent variable is an attribute that is influenced by independent variable and Independent variable is an attribute that affects a result of dependent variable. Ary, et.al (2006: p.39) also state that dependent variable is variable that get consequent from other variable and independent variable is variable that give information or act to other variable. Thus, dependent variable is an effect and independent variable is cause.

C. Population and Sample

Population and sample are two things that must be considered by the researchers when conducting research. Population is a group of individuals who has same characteristic and sample is a subgroup of population that the researcher will learn in her/his study for generalizing about the target population (Creswell, 2012: p.142). Shone (2015: p.34) also mentions that population is the potential

respondents of interest and sample is respondents who selected from population to be observed. Population and sample are important to researcher to collect the data.

In this research, the researcher chooses the first grade of MTsN 1 Kediri that consists of 345 students as the population. The 345 students are divided into 12 classes (class A, class B, class C, Class D, class E, class F, class G, class H, class I, class J, class K, and class L). The researcher takes 58 students (class B and class C which is every classes consists of 29 students) as the sample (the subject of the study).

The researcher chooses class B and C as the subject or sample of the research because their score in their rapport on first semester and their characteristic are almost same. Class B as the experimental group that will be taught by using English song media and class C as the control group that will be taught by board game.

English song will show simple present tense structure through lyric song that students will play. Then, board game will be played by students in group where in the board game there are some questions about simple present tense that will be answered by students.

D. Instrument

Instrument is needed by the research because it is a tool to help the researcher collects and analyzes the data. Creswell (2012: p.151) says that an instrument is a tool for measuring, observing, or documenting quantitative data. The instrument may be a test, questionnaire, tally sheet, log, observational

checklist, inventory, or assessment instrument. Considering the validity and reliability in an instrument is a must. In this study, the researcher uses a test as the instrument of the research.

Tests are commonly used in quantitative research to measure attitudes, personality, self-perception, aptitude, and performance of research participant. According to Brown (2004: p.3), test is a method of measuring person's ability, knowledge, or performance in given domain.

Before the researcher makes a test, the researcher makes the blue print. The blue print includes the level of questions where will be showed in the instrument. After making blue print, the researcher arranges the tests. The good test must be valid and reliable. So, the tests must be tried out by researcher. The tests have tried out to the class tryout (Class D of Seventh grade of MTsN 1 Kediri). After that, the tests are checked the validity and the reliability by the researcher using SPSS.

According to Kothari (2004: p.73-74), validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure. In other hand, Kothari claims that the test of reliability is another important test of sound measurement. A measuring instrument is reliable if it provides consistent results. Reliable measuring instrument does contribute to validity, but a reliable instrument need not be a valid instrument.

After checking the validity and reliability of the instrument the researcher chooses the valid and reliable tests. Then, the tests are distributed to the experimental group and control group.

In this test there are two kinds of test that are given to the students. They are as following below:

a. Pre-test

Pre-test is given to control group and experimental group. The material is about grammar especially simple present tense. This pre-test is given to the students before treatment. So here, the students are given test which is consists of 20 questions about simple present tense.

b. Post-test

Post-test is given in control group and experimental group. The material in post-test is still about grammar especially simple present tense. This post-test is given after treatment. So here, the students are given test which is consists of 20 question about simple present tense.

E. Procedure of Treatment

In conducting the research, the researcher uses some procedures. The procedure of treatment can be seen in the table below:

Table 3.2
Treatment Procedures

No	Experimental Group	Control Group
1.	Students get pretest about simple present tense before treatment.	Students get pretest about simple present tense before treatment.

2.	Students get first lyric of song. Then Students pay attention of the lyric song. After that, teacher and students play the first song and get through the function and structure simple present tense from the lyric song. (treatment-1)	Students get explanation about the function and the structure of simple present tense from the teacher.
4.	Students get the second lyric song and do the activity (filling the blank with the correct grammar structure of simple present tense), than teacher and students do correction and sing the song together to remember the structure of simple present tense. (treatment-2)	Students get the activity (filling the blank with the correct grammar structure of simple present tense), than teacher and students do correction together. After that the students also play board game of simple present tense.
5.	Students get the third lyric song and do the activity (filling the blank with the correct grammar), than teacher and students do correction together and teacher explain about structure of to be through the song. (treatment-3)	Students get explanation about to be. After that, students come forward one by one to play the board game of simple present tense and answer 1 question simple present tense from the board game.
6.	Students get posttest about simple present tense after treatment.	Students get posttest about simple present tense.

Table 3.3

The Schedules Treatment

Meeting	Topic	Control Group (Date)	Experimental Group (Date)
First	Pre-test	Tuesday, 4 th February 2020	Thursday, 6 th February 2020
Second	Treatment I	Wednesday, 5 th February 2020	Saturday, 8 th February 2020
Third	Treatment II	Tuesday, 11 th February 2020	Thursday, 13 th February 2020
Fourth	Treatment	Wednesday, 12 th	Saturday, 15 th

	III	February 2020	February 2020
Fifth	Post-test	Tuesday, 18 th February 2020	Thursday, 20 th February 2020

F. Data Collection Technique

The data collection starts from selection of suitable song by considering the previous study. The blank-filling as the design of test is chosen by the researcher. The tests are also tried out to the test to the students. After that, the tests are checked the validity and reliability through SPSS.

After checking the validity and reliability of tests, the researcher makes lesson plans of experimental and control group. Then after that, pretest, treatment, and posttest are given to the experimental group and control group by the researcher.

After all students get pretest and posttest from researcher, the researcher check students' score of pretest and posttest through the ultimate result of the students' score by Sudjana in Ismiyati's research (2018: p.494-495).

Table 3.4

The Ultimate Result of the Students' Score

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

In which:

X= The ultimate result of the students' score

R= The correct answer

N= The number of test items

Then, the score of students pretest and posttest are calculated again by analyzing ANCOVA using SPSS 2.5.

G. Data Analysis Technique

Data analysis is the attempt to arrange systematically the data which is got from giving tests (pre-test and post-test) to the students through song as the media. Based on the research, the research uses procedure of ANCOVA (Analysis of Covariance) because the sample of this research is not taken randomly.

According to Ary, et.al (2006: p.342) Analysis of covariance (ANCOVA) is sometimes used to partially adjust for preexisting differences between groups in an ex post facto design. Specifically, it adjusts scores on the dependent variable for any initial differences on the extraneous variable. Furthermore, analysis of covariance (ANCOVA) is done by using SPSS 2.5 version for window.