

CHAPTER III

RESEARCH METHODOLOGY

A. Research of Method

Method of the research is a quantitative method. According to Creswell that quantitative research is testing objective theories by examining the relationship among variables by using research instruments that produce data with analyzed by statistics.¹ It means the variable of the research can be measured and analysed to see the effect among variables. In this research there are two variables, variable X and variable Y. SQ3R method as (X) variable while reading comprehension as (Y) variable.

Moreover, in this research uses experimental research the researcher choose an experimental research because this research using treatment by the purpose to search the effect of certain treatment on others with controlled conditions.² Then, the researcher wants to know the effect SQ3R method on student reading comprehension. In addition, this research using Quasi Experimental by using the pre-test and post-test design by taking one of class as an experimental class which given pre-

¹ John W Creswell, *Rsqesearch Design (Qualitative, Quantitative and Mixed Methods Approaches)* (India : Sage Publication, 2014).

² Sugiono, *Metode Penelitian Pendidikan (Pendekatan Kuanititaif, Kualitatif dan R&D)*, (Bandung : Alfabet, 2015), 107.

test, the treatment by time SQ3R method and given post-test to measure the treatment is influence or not. And the researcher take second class as a control class, the class is given pre-test, treatment without SQ3R method and post-test.

B. The Place and Time of Research

research was conducted in Madrasah Tsanawiyah Sabilul El-Muhtadin. The time for this research on august until September 2021. The researcher chooses this school because the researcher ever teach at its school as English teacher.

C. Population and Sample

1. Population

The population in this research is students of ninth grade of Madrasah Tsanawiyah Sabilul El-Muhtadin that consists 60 students divided into two classes.

2. Sample

The sample consists of two classes from the second grade. Class IX A consist of 30 students as experimental class and Class IX B consist of 30 students as a controlled class.

D. The Technique of Data Collecting

For collecting the data, the researcher used classroom observation, test (pre-test and post-test) and interviews.

a. Observation

The researcher conducted observation directly to the place where the research will going on. The reason was to analyze students' condition in the class and also to know their problems and difficulties in learning English. The purpose of this observation was to get information about students capability in English subject especially in reading comprehension.

b. Pre-test

After getting data from classroom observation, the researcher conducted the pre-test both experimental and control classes. This step was conducted to know the students' reading comprehension before conducting the research and as measurement between two classes. The writer gave students equal text related to subject matter based on the syllabus and lesson plan for the student of first grade. The researcher instructed them to do an exercises on paper given which was related to improving students' reading comprehension.

c. Treatment

During treatment process was used lesson plan. The purpose was to make systematical learning process. This lesson plan was attached. Based on the lesson plan the control class only received the traditional teaching reading while the experimental class

received treatment of SQ3R method in improving students' reading comprehension.

d. Post-test

Both experiment and control class have the post-test after giving the treatment for experimental class. It is used to measure the effect of SQ3R method toward students' reading comprehension.

e. **The technique of Analysis Data**

The technique of analysis data in this research uses t-test. According to Anis Sudijono t-test is used for testing the null hypothesis of the mean differences of two samples.³ Because the quasi experiment use pre-test and post-test then the researcher uses this test to measure the final test between experiment class and control class.

The steps for statistic analyze that are⁴ :

1. Determining mean of variable X1 with formula :

$$M_1 = \frac{\sum X_1}{N_1}$$

2. Determining mean of variable x2 with formula :

$$M_2 = \frac{\sum X_2}{N_2}$$

3. Determining derivation score variable x1 with formula :

$$x_1 = X_1 - M_1$$

³ Anas Sudijono, *Pengantar Statistik Pendidikan* (Jakarta: PT Raja Grafindo, 2014), 278.

⁴ Sudijono, *Pengantar Statistik Pendidikan*, 317.

4. Determining derivation score variable x_2 with formula :

$$x_2 = X_2 - M_2$$

After collecting the data from pre-test and post-test, the researcher analyze it by using statistic calculation of t-test by using fisher formula with significance degree 5% and 1%. The formula is as follow :

$$t = \frac{M_1 - M_2}{\sqrt{\left(\frac{\sum x_1^2 + \sum x_2^2}{N_1 + N_2 - 2}\right) \left(\frac{N_1 + N_2}{N_1 \cdot N_2}\right)}}$$

Notes :

M_1 = Mean score of the experiment class

M_2 = Mean score of the control class

$\sum x_1^2$ = Sum of square deviation score in experiment class

$\sum x_2^2$ = Sum of square deviation score in control class

N_1 = Number of students of experiment class

N_2 = Number of students of control class

2 = Constant number

df = Degree of Freedom (df = $N_1 + N_2 - 2$)

f. Research Procedure

In general, the procedure of this research can be described as follows :

1. Observation the English teaching activity.
2. Provide pre-test of the experimental class and control class.

3. Provide treatment to the experimental class using SQ3R method and control class without SQ3R method as follow :

a. Experimental Class

- 1) Preparation
 - a) Preparing the lesson plan
 - b) Preparing the material
 - c) Preparing the token for students' reading comprehension
- 2) Implementation
 - a) Teacher explain the material
 - b) Teacher gives the example
 - c) Teacher guide students to make group and discuss the material and give them the token
 - d) Teacher guide students to speak the result of discussion by using the token

b. Controlled Class

- 1) Preparation
 - a) Preparing the lesson plan
 - b) Preparing the material
- 2) Implementation
 - a) Teacher explain the material
 - b) Teacher gives the example

- c) Teacher ask the students to speak in front of class
4. Provide post-test of the experimental class and control class.
5. Analyzing the data from pre-test and post-test
6. Drawing the interpretation based on the result of test and making conclusion.