

CHAPTER III

RESEARCH METHODOLOGY

A. The Research Methodology

In this research, the researcher used quantitative research with quasi experiment to know the effectiveness of using Hyponymy game in teaching speaking for the first grade students. So, the researcher has taken two classes as an experimental class and control class. The class been given pretest continuing with treatment and it finished by post-test.

B. Research Variables

According to Sugiono, “research variable is basically everything in any forms of which is determined by the researcher to be studied so that will be obtained information about it, then drawn the conclusion”¹.

In this research, there are two variables included, which are: Hyponymy game as (X) variable or Independent variable and Students’ Speaking Skill as (Y) variable or dependent variable.

C. Place and Time of Research

The researcher will conducted this research at MTs AL-ISLAM Serang. Because, the students has lack of confident to speak English and they are have lack vocabulary then they are confused what should they speak without vocabulary. Then the students get difficulties in their speaking cause lack of vocabulary. From that the researcher hope, by this method the students can be develop their speaking also their vocabulary. The observation and research was allocated on February 2019.

¹ Sugiyono, *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R & D* (Bandung: Afabeta, 2015), 60.

D. Population and Sample

1. Population

According to Sugiyono “Population is a generalization region consisting of the object/subject that have certain qualities and characteristics defined by the researchers to learn and then drawn conclusion”².

The researcher can conclude from the definition above that population is a generalization of the subject or the object to qualities and characteristics by the researcher to know and learn the conclusion of the research.

Ali said that “The population is defined as a collection or the whole object to be examined”³.

In this research the population was all the seventh grade students of MTs AL-ISLAM Serang. There were three classes there were 73 students. In VII A there were 25 Students, VII B there were 25 students and VII C there were 23 Students. Then for sample the researcher has taken two classes from three classes. One experiment class and one control class. Which each class consist of 25 students, so total sample is 50 students.

2. Sample

According to Sugiyono “Sample is part of the number and characteristics of the population”⁴ while for sample the researcher determine research sample by using clustering purposive sample by taking students of VII A and VII B as the sample which groups, with 25

² Sugiyono, *Metode Penelitian Pendidikan*, 117.

³ Muhamad Ali Gunawan, *Statistik Penelitian Bidang Pendidikan, Psikologi, dan Sosial, di Lengkapi Dengan Contoh Secara Manual dan SPSS* (Yogyakarta: Parama Publishing, 2015), 45.

⁴ Sugiyono, *Metode Penelitian Pendidikan*, 118.

students each. One group has been given the treatment using Hyponymy to the effectiveness of speaking, and another group without giving the treatment.

E. Technique of Data Collecting

In this research, the researcher using quasi experimental method with two variables, this research using quasi experimental to know the effectiveness using hyponymy in teaching speaking for the seventh grade students. It involves two group there are experiment group and control group. The experiment group used teaching hyponymy game and control group was not used hyponymy game. Before doing experiment the students were given a pre-test. Meanwhile the control group was not given the treatment, after the treatment, the students were given a post-test. And this research consisted of two variables, independent variable was Hyponymy game and dependent variable was students' speaking skill.

In order to get the data for this research,

For collecting the data the researcher used pre-test, treatment, post-test and observation.

1. Observation

The researcher choose observation as the data collecting to aim analyzing the students' condition in the class and to get an information about how effective using hyponymy game in the English class room for the seventh grade of MTs AL-ISLAM.

2. Pre-test

The students were given pre-test both experimental and Control classes before treatment. One of the purpose of giving this kind of test is to measure the sample respondent speaking by using hyponymy.

- a. The score of pre-test

After the pre-test was collected from the students, the researcher analyze the data. The data research was analyzed by using t-test to know the score of students learning speaking.

b. Treatment of using Hyponymy game in teaching speaking.

3. Post-test

Both experimental and control classes the researcher gave the posttest. It aimed to know the increasing of the students' speaking by using Hyponymy game. After scoring the test both two classes the researcher analyzed the data to know the score of the students' speaking using hyponymy game.

F. The Technique of Data Analysis

In this technique of data analyzing the researcher used T-test. According to Supardi quoted directly to Sudijono "T-test is one of the statistical tests used to test the truth or the falsity of the null hypothesis which states that between 2 samples taken randomly from the same population, there is no significant difference"⁵. The aim of t-test was to comparing mean score for two groups. To get know the result when taking the same test has the same score or not has the same score.

The researcher analyzed the data based on collected score data from pre-test and post-test of experimental class and control class.

The researcher has used the formula as follow:

$$t_0 = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

t_0 = The result of "t" to be finding

M_i = Average of X_1

M_2 = Average of X_2

⁵ Supardi, *Statistik Penelitian Pendidikan*, (Depok: Rajawali Pers), 268.

$SE_{M_1-M_2}$ = Standard average of error

X = Sum of the squared deviation score of Experiment class

Y = Sum of the squared deviation score of Control class

Calculation step:

- a. Determining mean of variable X_1 and X_2 with the formula : $M_x = \frac{\sum X}{N}$

$$M_y = \frac{\sum Y}{N}$$

- b. Determining Standard Deviation (SD)) of Mean X_1 and X_2 :

$$SD_1 = \sqrt{\frac{\sum \chi^2}{N}} \quad SD_2 = \sqrt{\frac{\sum y^2}{N}}$$

- c. Determining Standard Error of Mean X_1 and X_2 :

$$SE_{M_1} = \frac{SD_1}{\sqrt{N_1 - 1}} \quad SE_{M_2} = \frac{SD_2}{\sqrt{N_2 - 1}}$$

- d. Determining Standard Error, Difference of Mean between X_1 and X_2

using the formula : $SE_{M_1-M_2} = \sqrt{SE^2_{M_1} + SE^2_{M_2}}$

- e. Determining value of “t” using the formula : $t_o = \frac{M_1 - M_2}{SE_{M_1-M_2}}$