

## CHAPTER III

### RESEARCH METHODOLOGY

This chapter consists of several parts, such as the research design, the place and time of the research, the population and sample of the research, the instrument, method of the data collection, method of the data analysis, and the statistical hypothesis.

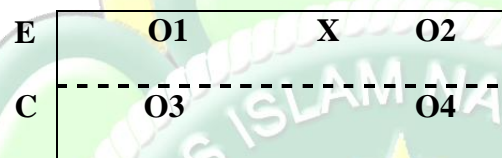
#### **3.1. Research Design**

This research design is a process which involves of defining a problem stating an objective and formulating an hypotesis. The study is design in form of experimental research. As stated by Mubarok (2015:88) that “experimental research is a research method used to find a specific treatment effect against the other in uncontrolled conditions”. This experimental research is mainly concern with teaching writing through grammar translation method.

This research the writer conducted by quasi experimental design. The writer used nonequivalent control group design. In this design, the experimental group and the control group is not chosen at random. In this design, both the experimental and control group are compared, although the group is selected and placed without randomly. The writer want to know the students’ improvement in teaching writing skill by using grammar translation method. The writer gave pre-test and post-test for experimental group and control group. The writer given a pre-test before applying the treatment to the experimental group and control group. Then the writer was applied the treatment only for one class that is

experimental group. The control group did not get a treatment (they taught by their own teacher by using the other media). Next, the writer given a post-test after applying the treatment to experimental group and control group. The writer given the pre-test to the students to find out their writing skill before using grammar translation method. And giving post-test to the students to find out their improvement in writing skill after using grammar translation method.

It can be formulated as follows:



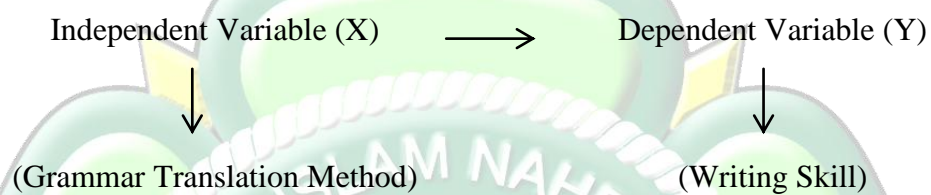
Where,

- O1 = pre-test of the experimental group
- O2 = post-test of the experimental group
- X = treatment
- O3 = pre-test of the control group
- O4 = post-test of the control group

(Mubarok, 2015:101)

This research has two variables. They are independent variable and dependent variable. An independent variable is presumed to effect (at least partly cause) or somehow influence at least one other variable. Then, the dependent variable depend on what the independent variable does to it, how it effect it (Mubarok, 2015:89).

In this research, independent variable is Grammar Translation Method. It called independent variable because Grammar Translation Method can give influence to the other variable, it is writing skill. Dependent variable is writing skill, because writing skill affected by using Grammar Translation Method. The symbol of independent variable is usually “X”, and the symbol of dependent variable is usually “Y”.



### 3.2. The Place and Time of the Reseach

The research was held at MTs Miftahul Huda Dongos which is located in RT 01/04 Jl. Dongos-Sukosono KM 01 59463. This research was carried out for several weeks, start from August 27<sup>th</sup> 2018 to September 13<sup>th</sup> 2018 in the uneven semester 2018/2019.

MTs Miftahul Huda Dongos was established on 1992 and founder by KH. Zuhdi Abdurrohman. In the journey of this school, MTs Miftahul Huda Dongos got accreditation A.

### 3.3. Subject of the Research

#### 3.3.1. Population

Population is a unit of the object or subject that has certain qualities and characteristics which are studied by the researchers then be deduced (Mubarok, 2015:38). Then, Kaplan (1974) mention that a population is the set of all the possible objects or units which might have been included in the collection.

In educational research, population can be students, teachers, staff, curriculum, school, and others. Its mean that population is not only people in research, but also it is object or things in this world. The population of this research was all of the seventh grade students of MTs Miftahul Huda Dongos in academic year 2018/2019 which was divided into 2 classes. The total population was 68 students.

**Table 3.1**  
**Total Population of the Seventh Grade Students of MTs Miftahul Huda Dongos in Academic Year 2018/2019.**

<b>CLASS</b>	<b>STUDENTS</b>
VII A	32
VII B	36
<b>TOTAL</b>	<b>68</b>



### 3.3.2. Sample

Mubarok (2015:39) stated that sample is part of the quality and characteristics of the population. While, Arikunto (2013:174) mention that sample is a part or representative of research population. In determining the sample, first step that must be taken is to limit the types of pupolations or determining the target population.

Therefore, this research took two classes VII A and VII B as a sample. The writer takes the sample by using simple random sampling, and the writer used lottery for taking the sample randomly. Class of VII A served as a control class and class of VII B as an experimental class.

The steps for taking the sample as follows:

1. The writer wrote all the name of the class (VIIA and VIIB) in a little paper.
2. The writer put the paper into the bottle.
3. The writer shook the bottle for a while.
4. The writer took one paper from the bottle as an experimental group, and one paper residue set as a control group.

### 3.4. Instrument

Wilkinson & Birmingham (2003) state that research instruments are simply devices for obtaining information relevant to research project. Before the test used, the instrument test has to be done on the test to see whether the instrument meet the requirement of validity and reliability.

a. Try out

In this study, try out was a test for the instrument of the research. Try out was held before the instrument applied. The purpose of Try out is to find the reliable instrument to be experimented in the research. Try out was given to the other sample of the research or given to the expert. So, two (2) expert were chosen as an assessor of trying out the validity.

b. Validity

Arikunto (2013:211) stated that validity is a measurement that shows the level of validity or truly of instruments. Validity is one of crucial requirement which have to be tested in a research instrument. To gain the validity of the instrument, the writer used *content validity*.

To achieved the content validity of the instrument the writer asked to the expert lecturer help to check the appropriateness of the instrument whether it is proper to give to the students or not. More importantly, the researcher would be made sure that the instrument is valid by making the relevance of the objective of the test, the instruction of the test, and the indicator with KIKD (Kompensi Inti dan Kompetensi Dasar) which is based on 2013 curriculum. The calculation of validity in the tryout test as follows:

**Table 3.2**

**The Validity of Test**

Tabulation 2 x 2	Rater 1	
		Less relevant score 1-2

Rater 2	Less relevant score 1-2	A	B
	Very relevant score 3-4	C	D

Formula :

$$V_i = \frac{D}{A+B+C+D}$$

Where,  $V_i$  = Construct validity

A = Both rater disagree

B = Rater 1 agree, rater 2 disagree

C = Rater 1 disagree, rater 2 agree

D = Both rater agree

(Herawati Sugiarto, 2014)

$$V_i = \frac{D}{A+B+C+D}$$

$$V_i = \frac{4}{0+0+2+4}$$

$$V_i = \frac{4}{6} = 0,6$$

Valid

Criteria of content validity :

0,8 – 1 = Very high validity

0,6 – 0,79 = High validity

0,40 – 0,59 = Medium validity

0,20 – 0,39 = Low validity

0,00 – 0,19 = Very low validity

Based on the calculation above that the result of trying out test validity was 0,6. It means that the validity of test has a high validity.

### **3.5. Method of Data Collection**

The collection of data is an important step in deciding what action needs to be taken. In gathering information from the data collected, the writer uses Test to collect the data. The writer conducts a test to know the significant difference in writing achievement between students who are taught by using grammar translation method and those who are not.

In this research, the writer used written test to collected the data. The writer gave the same question for experiment and control classes. In the test, the students are asked to create a dialogue based on the situation given. The scoring system would be based on the Content, Structure, Mechanic, Grammar, and Vocabulary.

The researcher used several stages to get the valid in conducting this research. Those stages which were used in this research are:

#### **a. Pre-test**

Pre-test was given to the sample before they got treatment or in preliminary study. In this study, the researcher gave same pretest toward the experimental and the control group.

#### **b. Treatment**

Treatment is a technique or strategy that was given by researcher to help students solve their problems which are faced in learning process. In



this study, the researcher applied Grammar Translation Method as a treatment for helping students in learning writing skill in the classroom. This treatment was given only to the experimental group. It means that both the experimental and the control group have different treatment in two meetings.

Group	Meeting	Treatment
Experimental	Meeting 1	<ul style="list-style-type: none"> <li>• The researcher engaged students related to materials of greeting and introduction.</li> <li>• The researcher giving the example about the dialogue of greeting and introduction.</li> </ul>
	Meeting 2	<ul style="list-style-type: none"> <li>• The researcher reviewed the previous material.</li> <li>• Students were divided into six groups. Each group arranged puzzle into the correct sentences and after that they translate it into the target language.</li> <li>• Each group presented in front of class.</li> </ul>
Control	Meeting 1	<ul style="list-style-type: none"> <li>• The teacher given the explanation about greeting and introduction, while the researcher just observed it.</li> </ul>



### 3.6. Method of Data Analysis

After the researcher getting students' scores of writing pre-test and post-test between experimental and control class, the researcher had been analyzed the data by using statistical calculation through t-test formula in manual calculation, Microsoft Excel, and SPSS (Statistic Product and Statistic Solution). The gathered data were used to examine and find out the differences of students' achievement in experimental class and control class.

### 3.7. Statistical Hypothesis

Before deciding the result of hypothesis, there are statistical research hypothesis as follows :

$$H_0 : \{ \mu_1 = \mu_2 \}$$

$$H_a : \{ \mu_1 \neq \mu_2 \}$$

Notes :

$H_0$  = Null hypothesis

$H_a$  = Alternative hypothesis

$\mu_1$  = Students' writing achievement, who were taught with Grammar Translation Method

$\mu_2$  = Students' writing achievement, who were taught without Grammar Translation Method

The researcher's assumption of those hypothesis are as follow:

- a. If  $t_o > t_{table}$ , the Null Hypothesis ( $H_o$ ) was rejected and Alternative Hypothesis ( $H_a$ ) was accepted. It was proven that Grammar Translation Method implementation was effective to improve students' writing skill.
- b. If  $t_o < t_{table}$ , the Null Hypothesis ( $H_o$ ) was accepted and Alternative Hypothesis ( $H_a$ ) was rejected. It was proven that Grammar Translation Method implementation was not effective to improve students' writing skill.

