CHAPTER III

RESEARCH METHOD

This chapter presents the research method. It focuses on the method used in conducting this study. The decision covers Research Design, Population, Sample and Sampling, Variable of the Study, Data collecting method, Research Instrument, Validity and Reliability Testing, Normality Testing, and Data Analysis.

A. Research Design

This research is conducted in pre-experimental research design. According to Ary (2010:26) experimental research involves a study of the effect of the systematic manipulation of one variable on another variable. This research uses pre experimental using quantitative approach with one group pretest-posttest design because it does not have random assignment of subject to group or other strategy to control extraneous variable. The reason of researcher uses pre-experimental researcher because the researcher can't determine the homogeneity of students' reading comprehension in MTs Sunan Kalijogo Kalidawir.

Therefore in this research the researcher just takes one group or class to use pretest and posttest design to know the result of treatment. This research is classified as pre experimental design because it is little or no control of extraneous variables. In the one group pretest-posttest design, a single group is measured or observed not only after being exposed to a treatment concisely but also before. Pre-experimental

research involved administering pre-test to dependent variable, applying the experimental treatment to the subject, and administering the post-test. The result of the treatment is comparing in the pretest and posttest score. The research designs can be illustrated by Donald Ary and friends (2010: 303-304) as follow

Table 3.1 The Design of One-Group Pretest Post Test

Pre-test	Independent Variable	Post-test
Y1	*X (The strategy)*	*Y2*

Explanation:

Y1 = Pre-test

X = Treatment

Y2 = Post-test

The procedure of pre-experimental design that used one group pre-test and post-test:

1. Administering pre-test with the purpose of measuring reading comprehension in descriptive text in the Seventh grade students at MTs Sunan Kalijogo Kalidawir.
2. Applying treatment in teaching reading by ZIZO (zooming in and zooming out) strategy to the subject in the Seventh grade students at MTs Sunan Kalijogo Kalidawir.

3. Administrating a post-test with a purpose of measuring reading comprehension in descriptive text of seventh grade student at MTs Sunan kalijogo Kalidawir.

In this research, the researcher wants to know the effectiveness of ZIZO strategy in teaching reading by conducting pre-experimental design. Researcher applying one group pre-test and post-test design, researcher wanted to find out there is any significances different score of students reading comprehension before and after taught by using ZIZO strategy in the seventh grade students at MTs Sunan Kalijogo Kalidawir in academic year 2017/2018.

B. Population, Sample and Sampling

This section discusses the population of the study, the sample which was drawn from the population, the sampling technique applied and the variables of the study.

1. Population

According to Ary (2010: 148) population is all members of any well-defined class of people, events or object. From the definitions given by expert above, the researcher takes human population only because the problem solved related with human being. The researcher took the population in this research is all of the students from class seventh grade of seventh grade at MTs Sunan Kalijogo Kalidawir in academic year 2017/2018. The seventh grade Students of MTs Sunan

Kalijogo Kalidawir was divided into three classes. The total number of all population are 82 students in 3 classes. The distribution of the whole students in the school can be seen in the Table 3.2.

Table 3.2 The Number of Seventh Grade

No	Classes	Female	Male	Total
1	VII A	19	12	31
2	VII B	14	9	23
3	VII C	17	11	28
Total	3 classes	50	32	82

2. Sample and sampling

Sample is sub group of target population that the researcher plans to study for generalizing about the target population (Creswell, 2008: 152). Actually sample is part of population that is taken to represent the population in research.

Sampling is the process of taking sample. The researcher uses purposive sampling to take sample from population and it represents the entire population. Ary (2010:169) states "Purposive sampling-also referred to as judgment sampling-sample elements judged to be typical, or representative, are chosen from the population." In purposive sampling, the researcher uses expert judgment to take some representatives or typical cases from population. First, identify

important variation sources of population. Then, choose the cases that are suitable with the variation sources. According to an English teacher, all students have similar characteristics; their mastery on English is average. Furthermore, ZIZO strategy has never been used in teaching reading to the classes. Based on this condition, the researcher took one class of seventh grade at MTs Sunan Kalijogo Kalidawir in academic year 2017/2018. That was class VII A it consists of 31 students, 12 male and 19 female.

C. Variable of the Study

Ary (2010:15) stated that a variable is construct or a characteristic that can take on different values or score. There are two variables in this study. They are independent variable and dependent variable:

1. Independent variable (X)

Independent variable is variable has the influence or the cause of change or make the existences of dependent variable. So, the independent variable in this research is the treatments ZIZO strategy. In this research, ZIZO strategy has the influence or the cause of change or make the existences of student's reading comprehension.

2. Dependent variable (Y)

Creswell (1994: 129) state that the dependent variable is the response or the criterion variable presumed to be "caused" or influenced by the independent treatment condition. In this research the dependent variable is the student's reading comprehension. Student's reading comprehension is variable which is influenced or became effect of the ZIZO strategy.

D. Data collecting method

In this research, the data collecting method is administering test that consists of pre-test and post-test. The procedure of administering test was clarified as follows:

1. Pre-test

At the first meeting, the researcher gives a pre-test to the students. There 20 question; 15 questions are in the form of multiple choices and 5 questions in the form of short answer. It is conducted to know the scores of the students reading before being taught the treatment.

2. Treatment

After gaining the pre-test, the researcher gives treatment by teaching using ZIZO strategy. The purpose of treatment is to help students in understanding English text, especially in descriptive text. The experimental class was taught by using ZIZO strategy.

Table.3.3 Procedure of treatment

NO	STEPS	TEACHER ACTIVITIES	STUDENTS ACTIVITIES
1	Opening	Greeting	➢ Answer greeting ➢ Brain storming
2	Main Teaching	➢ Introduction the material about descriptive text ➢ Giving explanation about descriptive text ➢ Giving the students example of descriptive text ➢ Asking the students to identify the generic structures of descriptive text ➢ Giving the students zooming in and zooming out (ZIZO) strategy of person, place or thing ➢ Asking questions to the students about person, place or thing ➢ Asked students to describe the	➢ Pay attention ➢ Listen the explanation from the teacher ➢ Students answer the teacher's questions ➢ Describing the person, place or thing ➢ Giving responses ➢ Answer the teacher's questions

		facilities and benefits of person, place or thing ➢ Reviewing the previous material ➢ Giving the students about English Competition zooming in and zooming out (ZIZO) strategy ➢ Asking questions to the students about English Competition zooming in and zooming out (ZIZO) strategy ➢ Asked students to describe it	➢ Describing the English Competition zooming in and zooming out (ZIZO) strategy
3	CLOSING	➢ Asking the students about descriptive text ➢ Giving evaluation/feedback about students' errors	➢ Giving responses

3. Post-test

The post-test is given to the students after conducting the treatment of using ZIZO strategy toward students' reading comprehension. Similar to pre-test, the researcher asks students to answer the twenty questions in the form of multiple choices and short answer.

E. Research Instrument

1. Review material

The first step in developing the research instrument is reviewing literatures which consist of instruments material. The purpose of reviewing literature is to get data on the materials used for pre-test and post-test, so that the instrument of test would test what should be tested. Hence, the instrument met the criteria of contents validity.

2. Drafting

The next step is drafting. In process of drafting, researcher starts this step by determining kinds of reading test that would be used and suitable with the students in seventh grade.

3. Validity

To strengthen this instrument, the writer needs to test its validity including content validity. In design quantitative, validity is important point because the main component to collect data is test. If test do not have validity it's also researcher do not have valid data. To do validity,

the writer is going to meet expert validity, to advisor and English Teacher.

4. Expert Validity and Instrument

a. Expert Validaty

In this step, the researcher met an expert of ELT mainly on reading, learning to check of the content, type of test, and level difficulty of the draft of the research instrument the draft consist of 20 items with multiple choice and short answer about descriptive text. The experts that researcher met are an experienced English teacher.

b. Instrument Revision

There isn't some feedback that given after researcher meet the expert of validity.

5. Tryout

Beside the researcher checks the validity of the test. The researcher also conducts a try-out. The purpose of try out is to know the reliability of instrument. The researcher does tryout of the test to the same students of another class. The researchers choose class VII-B. The researcher prepared 20 it ems as the instrument of the test. Before the items were given to the students, the researcher gave tryout test to analyze validity, reliability, difficulty level and also the discrimination power of each item. After finishing the test, the answer sheets were collected in order to be scored. An analysis was made based on the result of test by

using the formula of validity, reliability, the degree of test difficulty and discriminating power.

6. Writing final draft

The last step is final drafting. It is rewrite instrument after researcher checked the reliability of the test. The final drafting is used by the researcher as the instrument to conduct pre-test and post-test.

The test of this study is taken from some students' English books. To score the objective tests the writer treats them without any difference. Means, there was only one correct answer for each items. The scoring guide is as the formula follow:

$$\text{Score} = \frac{\text{number of correct items}}{20} \times 100$$

This test uses to measure the students achievement in reading comprehension before and after they taught by ZIZO Strategy in MTs Sunan Kalijogo Kalidawir.

F. Validity and Reliability Testing

As mentioned above, the writer's instrument is test. The good instrument should be valid and reliable; the more explanation about it will be discussed as follows:

1. Validity

The good instrument must be valid. Validity refers to the precise measurement of the test. Validity is defined as the extent to which the

instrument measures what is suppose. In this research used content validity and face validity.

a. Contents Validity

Content validity is validity in terms of the contents of the test. In this test, the researcher gives the written test to measure students' ability in reading descriptive ext. therefore; this test is valid in terms of the content validity. In this study the use of content validity because the result of test can be representatives of the students for entire course material that has been taught. In order to judge whether or not the test has content validity, we need a specification of the skills or structure being tasted. The researcher made this test based on the course objectives in the syllabus of seventh grade of MTs Sunan Kalijogo Kalidawir. Therefore this test is valid in term of content validity. The Blueprint of pre-test and post-test were presented on the appendix 4.

b. Face Validity

A test it said face validity if it is supposed to measure. Face validity is hardly a scientific concept, yet it is very important. In this study from of the tests was in the form of objective test, consist of multiple choice and true or false test. Then the researchers also consult this test with advisor and teacher.

Beside the researcher checked the validity of the test used content validity, the researcher also conducted a try-out of the test.

To the same students of the groups and the test consisted of 20 multiple choice and short answer of try out test were same with the items of pre-test and post-test.

c. Reliability

Reliability refers to the nation that an instrument can be trusted enough to be used as data collection tool for instrument which has been already good. The reliability is concert with effect of such random errors of measurement on the consistency of the scores. Reliability is the consistency of the scores. Reliability is the consistency of the measurement, or degree to which an instrument the same way each time it is used under the same condition with the same subject.

To measure the reliability of the test item, the researcher firstly gained try-out. It is know whether the instrument suitable or not. In this research, the researcher used SPSS 16.0 for windows to know the reliability of test instrument. The criteria of reliability instrument can be divided into 5 classes as follows:

a. If the *alpha cronbach* score 0.00-0.02: less reliable
b. If the *alpha cronbach* score 0.211-0.40: rather reliable
c. If the *alpha cronbach* score 0.41-0.60: enough reliable
d. If the *alpha cronbach* score 0.61-0.80: reliable
e. If the *alpha cronbach* score 0.81-1.00: very reliable

From the answer of student' respone in tryout test the researcher then analyze using reliability test based on Cronbach's Alpha.

Table 3.4 Reliability Testing for Pretest

Reliability Statistics

Cronbach's Alpha	N of Items
.831	20

Table 3.5 Reliability Testing for Post Test

Reliability Statistics

Cronbach's Alpha	N of Items
.813	20

From the computation in SPSS, the reliability value of pretest was 0.831 Based on the Cronbach scale in table 3.3. It lies on the Cronbach value between 0.81-1.00 so it can be said that the instrument was very reliable. And the reliability pretest was 0.813 based on the Cronbach scale in table 3.4. It lies on the Cronbach value between 0.81-1.00 so, it can be said that the instrument was very reliable.

G. Normality Testing

Normality tests are used to determine whether a data set is well modeled by a normal distribution or not, or to compute how normality testing is used to know whether the instrument has normality or not. Normality intended to show that the sample data come from a normally distributed population. To find the normality of the instrument, the researcher used one sample Kolmogrov Smirnov with SPSS.16.

The instrument can be called as has normality if Asymp sig 0.05, so that Ho (null hypothesis) is accepted and Ha (alternative hypothesis) is rejected. It was also can be concluded as follow:

a. Ho : The data is in normal distribution

b. Ha : The data is not in normal distribution

The result of normality computed by SPSS 16,0 can be seen as follow:

Table 3.6 One Sample Kolmogrov - Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		pretest	Posttest
N		23	23
Normal Parameters[a]	Mean	11.39	12.65
	Std. Deviation	4.629	4.438
Most Extreme Differences	Absolute	.192	.180
	Positive	.159	.107
	Negative	-.192	-.180
Kolmogorov-Smirnov Z		.919	.863
Asymp. Sig. (2-tailed)		.366	.446

a. Test distribution is Normal.

Base on the output of SPSS 16.0 was known that the significant value (2-tailed) is 0.366 and 0.446. As explanation above, that H0 is rejected if the significant value lower than 0.05 (α= 5%). Because the significant value (2 tailed) was bigger than α that are (0.366>0.05) and (0.466>0.05), It means that H0 is accepted and Ha is rejected. So, it can be interpreted that the scores of both pretest and posttest are normal distribution

H. Data Analysis

The result of the data will be compared between the first data (pre-test) and the second test (post-test) to know whether there are any significant student's scores before and after being taught by using ZIZO strategy. The researcher analyzed the collected data by quantitative.

In this research, the researcher used quantitative data analysis technique. The quantitative data was analyzed by using statistical method. This technique was used to find the significant difference on the student's scores after taught by using ZIZO strategy. This technique of data analysis belonged to quantitative data analysis and the data was analysis by using SPSS 16.0.