CHAPTER III

RESEARCH METHOD

This chapter discusses about the method used by the researcher in conducting this study. In this research, includes research design, population and sample, research instruments, validity and reliability testing, normality testing, method of collecting data, and data analysis.

A. Research Design

To investigate the effectiveness of diary toward student's achievement in writing recount text, experimental study would be suitable to the purpose of the research. A typical experimental design would be an intervention study which contains at least two groups: the 'treatment' or 'experimental group', which receives the treatment or which is exposed to some special conditions, and the 'control group', whose role is to provide a baseline for comparison (Dornyei, 2007:116). Thus, the purpose of experimental research is to test causality relationship between the variables. Actually, in experimental design, it is necessary to randomly select control or experimental groups. When random selection to control or experimental groups are appropriately assigned, this will lead to a true experimental design.

Based on the real condition in the field that it was impractical to conduct a true experiment, a pre-experimental design, exactly the one group pretest-posttest design was the suitable one as the design of this study. In the simplest pretest-posttest design, researcher gather data about some outcome through a single

pretest, administer a treatment, and then gather posttest data on the same measure. The researcher measures participant behavior repeatedly during at least two different points in time, when a treatment is not present and again when a treatment is present. (Lodico, 2002: 200). The reason of using only one group without any control group was simply because there was only one average ability classroom in eighthgrade. Then, the design of the one group pretest-posttest design typically represented as follows:

Table 3.1 The Procedure of The One Group Pretest-Posttest Design

Pre-test	Treatment	Post-test
YI	X	Y2

In term of variable, there were two variables in this study, (1) Independent variable, and (2) Dependent variable. According to Arikunto (2013:159) a variable is everything that will become that object of research or the influencing factors that will be studied. Variable is everything to which the researcher expects to find the answer. Independent variable is called causing variable. Dependent variable is affected variable(Arikunto, 2013:162). Thus, in this research, the independent variable was the use of diary, whereas the dependent variable was students' achievement in writing recount text.

At first meeting, the researcher gave pretest to the 32 students in VIIIA class of experimental group to measure their ability before treatment process. This test was given to know how far the students' ability in writing recounts text. This test consists of 1 question in the form an essay related with recount text. Time

allocation of the test was 40 minutes. The pretest was conducted on Thursday, April 21[th]2016.

In next day, the researcher does treatment. After getting the scores on pretest, the researcher gave treatment by using diary. At first treatment the researcher explain more about recount text and then ask the students to find some verb and change them to the past form in a group, after that discuss some verb change to the past form. The second treatment the researcher explains about diary and example of diary. And then ask the students to write their activity yesterday. Almost all of students not yet write a diary, but the researcher give instructions to write diary. The third treatment the researcher explains more about diary and how to write diary. Then ask the students to write their activity yesterday again. And the researcher show that the students more interest to write diary. And the last treatment the researcher explains more about recount text and diary in writing. Then ask the student to write a recount text in a paragraph with a title "My bad day" in their own book.

At the last meeting, the researcher does posttest in this class. Give post-test worksheet to the students and ask the students to choose one topics: first impression in Islamic junior high school, my bad experience, or going to somewhere. And then submit the posttest. The time allocation was 40 minutes. The post-test was held on Friday, May 13[th]2016.

B. Population, Sample and Sampling

1. Population

A population is defined as all members off any well-defined class of people, event, or object (Ary, 2010: 148). It means that population is all subjects of the research. The population of this research was eighth grade students of MTs AL Huda Bandung. The total numbers of eighth grade students at MTs AL Huda Bandung are 210 students distributed into 6 classes.

2. Sample and Sampling

From the population above, the researcher takes a sample from a certain population, there was process called sampling. This research used non-probability sampling classified into purposive sampling as the process of taking sample. In purposive sampling also referred to as judgment sampling – sample element judged to be typical, or representative, are chosen from the population (Ary, 2010: 156). It means that the sample as the representative of population.

Sample is part of population of the object research (Arikunto, 2013: 174). The researcher was conducting a sample by using a purposive sampling because in this school only have one average ability class of the eighth grade which had the average score was 75, so it was taken as the sample consisted of 32 students. Thus in this research, the researcher took the VIIIA as a sample which consists of 32 students at MTs AL Huda Bandung. The group of sample was as the control and experimental group.

C. Research Instrument

The research instruments that the researcher used in this study were test. The researcher used test to elicit and collect information on students' writing skill before and after giving treatment. The instrument was validated by the expert, in this study the expert was teacher of English Subject in MTs AL Huda Bandung. After that, the researcher did the try-out to other class on April 08th 2016. Teacher gave comment for the test that the language of test was understandable and the content was suitable with the indicator. In this study, there were two tests, pre-test and post-test.The form of test was writing recount text. After conducting the try out and getting the reliability of the tests, the researcher used this test as appropriate instrument to measure student's achievement in writing recount text in the form of pretest and posttest.

Then, to assess student's writing, the researcher set up analytic scoring rubric which included the criteria such as (1) Content, (2) Organization, (3) Vocabulary, (4) Language Use, and (5) Mechanic. The complete form of the writing scoring rubric can be seen in the   Appendix 3. Then, to assess the validity of the test, the researcher sets up form of validation can be seen in the Appendix 2.

D. Validity and Reliability Testing

Test is a process of measuring students' knowledge and ability of the students, so the writer should make a good test. A good test must fulfill and consider

standardized of test itself. Measuring a good test, there are some aspects to make a good test, those are: reliability and validity.

1. **Validity**

Validity was defined as the extent to which an instrument measured what it claimed to measure. The focus of recent views of validity is not on the instrument itself but on the interpretation and meaning of the scores derived from the instrument (Ary, 2010:225). To measure whether the test has a good validity, the researcher analyzes the test from content validity, construct validity, and face validity.

a. **Content Validity**

According to O'Malley (1996:25) content validity is correspondence between curriculum objectives and objective being assessed. The instrument in this research achieved content validity since the test was designed based on main competence and basic competence in KTSP since the school implements the Kurikulum Tingkat SatuanPendidikan (KTSP) in the time the researcher conducted this research.

Table 3.2 The Main and Basic Competence in the KTSP.

Standard Competence	Basic Competence	Indicators	Item
1.Meng ungkap	12.1. Mengungkapkan makna dalam bentuk teks tulis fungsional pendek sederhana dengan	• Siswadapatm	Writ e a

kan makna dalam teks tulis fungsional dan esei pendek sederhana berbentuk *recount* dan *narrative* untuk berinteraksi dengan lingkungan sekitar.	menggunakan ragam bahasa tulis secara akurat, lancar dan berterima untuk berinteraksi dengan lingkungan sekitar	• elengkapiteks *recount*	recount text consisting of three paragraph including orientation, event and re-orientation !
	12.2. Mengungkapkanmaknadanlangkahretorikadalamesei pendeksederhanadenganmenggunakanragambahasa tulissecaraakurat, lancardanberterimauntukberinteraksidenganlingkun gansekitarberbentuk*recount*dan*narrative*.	• Siswadapatm enyusunteks*r ecount* • Siswa dapat menulis teks berbentuk *recount* teks	

b. Construct Validity

Construct validity deals with the relationship between a test and a particular view of language and language learning (Brown, 2004:75). In this research, the test had high construct validity since it contained prompt in form of guided questions to measure students' skill in writing a recount text.

c. **Face Validity**

A test is said to have face validity if it looks as if it measures what it is supposed to measure (Hughes, 1989:27). In this test there were some aspects are considered from this test to make a good test based on the face validity. They are:

1). The instruction must be clearly for the students, so students are able to understand what they should do in the test.

20. In this test, the students of eighth grade were instructed to do the subjective test (related with writing recount text)

3). The consideration of time allocation must be suitable so that the students are able to supposed, when they finish their task before the time was up.

There are some types of test described by Hughes (1989: 9-14) used to measure the students' ability, such as: proficiency test, achievement test, diagnostic test and placement test. In this research, the researcher conducted the achievement test because the researcher wants to know the students' achievement in the writing ability after it is given a treatment by using diary.

2. **Reliability**

Ary (2010:236) defines the Reliability of a measuring instrument is the degree of consistency with which it measures whatever it is measuring. Reliability is concerned with the extent to which the measure would yield consistent results each time it is used. The researcher conducted the tryout to have the reliable test.

After conducting the try out, the researcher gets result to analyze the reliability of

the test, that is:

Table 3.3 List Scores of Tryout Pre-Test and Post-Test

No	Students	Pre-test Score	Post-test Score
1	T1	64	80
2	T2	63	72
3	T3	52	70
4	T4	69	75
5	T5	75	85
6	T6	68	80
7	T7	59	75
8	T8	54	72
9	T9	68	75
10	T10	53	70
11	T11	68	82
12	T12	63	77
13	T13	52	70
14	T14	50	70
15	T15	60	78
16	T16	72	80
17	T17	64	80
18	T18	69	82
19	T19	59	72
20	T20	60	70
21	T21	72	80
22	T22	55	68
23	T23	60	70
24	T24	52	68
25	T25	63	72

To find out the reliability of the score obtained either from the try out's score corrected by the researcher and try-out's score corrected by the expert. Then, the researcher calculated two sets of score to get the correlation between them. The formula to find the correlation was Person Product-Moment in IBM SPSS Statistics 16. Table 3.2 shows the result of the try-out gained from the two raters, and followed by Table 3.3 showing the statistical calculation of Person Product-Moment from IBM SPSS Statistics 16.

Table 3.4The Statistical Correlation of Pearson Product-Moment from IBM SPSS Statistics 16

Correlations

		VAR00001	VAR00002
VAR00001	Pearson Correlation	1	.837[**]
	Sig. (2-tailed)		.000
	N	25	25
VAR00002	Pearson Correlation	.837[**]	1
	Sig. (2-tailed)	.000	
	N	25	25

**. Correlation is significant at the 0.01 level (2-tailed).

Perfect correlation, either positive or negative one, is respectively denoted with +1 or -1. Thus, the closer to 1, the stronger the correlation is (Choyimah, 2014:63). If it is closer to +1, it has strong positive correlation. On the contrary, if it is closer to -1, it has strong negative correlation. Referring to Table 3.4, it can be seen that the result of Pearson Correlation is 0.837. Thus, it indicates that the instrument had the strong positive correlation. To sum up, based on the result of statistical correlation either from try-out's score corrected by two raters indicating that the correlation was strong respectively positive, it could be concluded that the instrument in try-out was reliable.

E. Normality Testing

Normality testing is needed to find out whether the data is in normal distribution or not. Choyimah (2014, 24) tell that the normality of data is important because the data can be considered to represent the population when it is in normal distribution. Therefore, the researcher intended to test the normality of the data by using SPSS 16.0 with One Simple Kolmogrov-Smirnov method. The normality testing was done towards the pretest and posttest scores.

The hypotheses for testing normality are:

a. H_0 : Data is in normal distribution

b. Ha : Data is not normal distribution

The hypotheses for normality testing explain that the data is normal distribution if H_0 is accepted and the data is not in normal distribution if Ha is

accepted. The H_0 is accepted when the significance value is higher than 0.05 (α = 5%), while H0 is rejected when the significance value is lower than 0.05 (α = 5%).the researcher calculated normality of test by using SPSS 16.0 and the result for normality testing can be seen as follows.

Table 3.5The Result of Pretest and Posttest in Normality Testing

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		32
Normal Parameters[a]	Mean	.0000000
	Std. Deviation	5.54273309
Most Extreme Differences	Absolute	.117
	Positive	.097
	Negative	-.117
Kolmogorov-Smirnov Z		.660
Asymp. Sig. (2-tailed)		.776
a. Test distribution is Normal.		

Based on the output of One Sample Kolmogorov-Smirnov test in SPSS 16.0 at table 3.4 above, it is known that the significance value is 0.776. As stated previously, the hypotheses for normality testing explain that the data is normal distribution if H_0 is accepted and the data is not in normal distribution if Ha is accepted. The Ho is accepted when the significance value is higher than 0.05 (α = 5%), while H0 is rejected when the significance value is lower than 0.05 (α = 5%). Based on the data above, the significance value is 0.776 and it is higher than 0.05 (0.776> 0.05). It means that H0 is accepted and Ha is rejected. From the interpretation above, it can be concluded that the instruments in this research are in normal distribution.

F. Method of Collecting Data

Data collecting method is the method to obtain data. Data of this research is collected by administering test. The data was collected by using two writing tests; pre-test, post-test. The technique of collecting the data was clarified as follows:

1. Pretest

A pretest provides a measure on some attribute or characteristic that you assess for participants in an experiment before they receive a treatment (Creswell, 2012: 297). At first meeting, the researcher gave pretest to the 32 students of experimental group to measure their ability before treatment process. This test was given to know how far the students' ability in writing recounts text. It determined the readiness for instructional program, and to diagnosed individual's specific strengths and weakness in writing recount text. This test consists of 1

question in the form an essay related with recount text. Time allocation of the test was 40 minutes. The pretest was conducted on Thursday, April 21[th]2016.

2. Posttest

A posttest is a measure on some attribute or characteristic that is assessed for participants in an experiment after a treatment (Creswell, 2012: 297). Posttest was also given for 32 students of experimental group. The researcher conducted post-test after conducting the teaching writing through outlining technique as the treatment in the eighth grade students. It was done in order to know the student's development in writing recount text after having the treatment. The posttest was in the form of an essay related with recount text that consists of 1 question. Time allocation was 40 minutes. The post-test was held on Mei 13th 2016.

Since the data was in the form of students' ability in the writing recount text, the data was collected by using two writing tests: pre-test and post-test. In this research, the researcher used test by gave diary to measure the students' writing ability especially in recount text. The test was given through an activity in doing the exercises related with the recount text in the form of an essay. The both student's score from pretest and posttest were analyzed to know their ability whether experimental class which is conducted a treatment has a significant score or not.

G. Data Analysis

In this research, the researcher used a quantitative data analysis technique using statistical method. This technique is used to find the significance differences

on the students' scores before and after being taught by using diary. To know the effectiveness of diary in teaching writing, the data was collected from students' scores in pretest and posttest. Then, the data which was gained from those two tests was analyzed by using Paired Samples T-test at SPSS 16.0. Paired Samples T-test is used when the samples are paired or correlated where each individual results in two data. In other words, the scores for pretest and posttest are correlated because those scores are got by one individual. If the result of t_{table} was bigger than $t_{obtained}$ at the level of significance 0.05, the null hypothesis could not be rejected indicating that diary was not effective to increase students' writing skill in recount text. By contrast, if $t_{obtained}$ was bigger than t_{table} at the level of significance 0.05, the null hypothesis could be rejected indicating that diary was effective to increase students' writing skill in recount text.