

CHAPTER III

RESEARCH METHODOLOGY

A. The Research Design

The research was a quasi experimental research which used non equivalent control group design. John Creswell states that quasi-experiment is an experimental situation in which the researcher assigns the participants to groups, but not randomly.¹ Furthermore, Gay and Peter Air Asian state that quasi-experimental design is used when the researcher keeps the students in existing classroom intact and the entire classrooms are assigned to treatments.²The design was non equivalent control groups. Non equivalent control group design includes an existing group of participants who receive a treatment and the other existing group of participants to serve as a control or comparison group.³ It was used because of the availability of the participants of this research which were only two classes. Therefore, this research consisted of two classes; experimental and control classes.

Based on the explanation above, the researcher took two classes; one was as an experimental group taught by using Book Club Technique

¹Jhon. W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (New Jersey: Pearson Education, 2008), p.313

²L. R. Gay and Peter Airasian, *Educational Research Competencies for Analysis and Application*. Six Ed. (New Jersey: Prentice- Hall 2000), p. 394

³Price &Oswald, *Research Method by Dummies*. (California: California State University, Fresno, 2006), <http://psych.csufresno.edu/psy144/Content/Design/Nonexperimental/quasi.html>, Retrieved on 26th march 2014

and another was as a control group taught by conventional way. The researcher administered a pretest to both groups, carried out treatment for experimental group only, and a posttest for both groups to assess the difference between two groups.⁴ The design of this research is illustrated as follows:⁵

Table III.1
Research design

Group	Pre-test	Treatment	Post-test
X1A	T1	✓	T2
X1B	T1	-	T2

Where:

X1B : Experimental group

X1A : Control group

T1 : Pre-test for experimental and control group

✓ : Receiving particular treatment

- : Without particular treatment

T2 : Post-test for experimental and control group

B. The Location and the Time of the Research

The research was conducted at Miftahul Huda Islamic Senior High School, Tembilahan, Indragiri Hilir District. It was conducted from 16January to 17February 2014.

⁴John W. Creswell, Op.cit. p. 313-314

C. The Subject and the Object of the Research

The subject of this research was the second year students of Miftahul Huda Islamic Senior High School Tembilahan. The object of the research was the effect of using Book Club Technique toward students' reading narrative text at Miftahul Huda Islamic Senior High School Tembilahan.

D. The Population and the Sample of the Research

The population of this research was 47second year students at Miftahul Huda Islamic Senior High School Tembilahan. They were in two classes, as described below:

Table III.2
The Total Population of the Second Year Students of
MA Miftahul Huda Tembilahan

NO	Class			Total
		Male	Female	
1	XI social A	8	15	23
2	XI social B	14	10	24
Total				47

Madrasah Aliyah (MA) Miftahul Huda Tembilahan in INHIL District⁶

There were 23 students in class XI social A and 24 students in class XI social B. The total of population was 47.

Technique of sampling was non probability sampling with total sampling type. Non probability sampling is a sampling technique that has different chance for all population of sample⁷ and total sampling is the

⁶Data source from Madrasah Aliyah (MA) Miftahul Huda Tembilahan in INHIL Regency.

⁷Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R & D*. (Bandung: Alfabeta, 2013), p. 84

total of samples the same as the total of population.⁸ The researcher used total sampling because the total of population was relative small. Therefore, the total of sample was 47 students.

E. The Technique of Collecting Data

The data of the researcher were collected by using two written tests, pre and post test. The score from both pretest and posttest of the students in the experimental class was compared to that of those from control class. The result of the posttest was analyzed as the final data of this research. The researcher used written test in the form of multiple choices. The test of multiple choices is a test item in which the test taker is presented with a question along with four or five possible answers from which one must be selected.⁹ According to Nation, Multiple Choice questions can focus on details and on more general aspect of the text.¹⁰ In the other hand, Multiple Choice can be used to measure the students' reading text comprehension.

There were twenty five questions for respondents. The questions were based on indicators of reading narrative text comprehension. The indicators consisted of five indicators and each of which had five questions. It can be seen from the blue print test below:

⁸Sahri Muda, "Pendidikan" Entry Posted 04 July 2009. <http://sahrimudahrp.blogspot.com/2009/07/penelitian.html>. (Retrieved on 04 June 4, 2013).

⁹Jack C. Richards and Richard Schmidt, *Longman Dictionary of Language Teaching and Applied Linguistics*(London: Pearson Education, 2002), p. 346

¹⁰ I. S. P. Nation, *Teaching ESL/EFL Reading and Writing*(New york: Routledge, 2009), p.78

Table III.3
Blue print test

Indicator	Items
a. The students are able to find out main idea of the text.	1, 10, 14, 19, and 22
b. The students are able to identify the generic structure of narrative text.	2, 8, 15, 17, and 23
c. The students are able to analyze the meaning of certain words in narrative text.	3, 7, 12, 20 and 21
d. The students are able to identify the references of certain words.	4, 6, 13, 16, and 24
e. The students are able to find out the factual information of the text.	5, 9, 11, 18, and 25

Based on the table III 3, finding main idea of the text could be found in items number 1, 10, 14, 19, and 22. Identifying generic structure of narrative text could be seen in items number 2, 8, 15, 17, and 23. Analyzing the meaning of certain words in narrative text was in items number 3, 7, 12, 20 and 21. Identifying the references of certain words was in items number 4, 6, 13, 16, and 24. Finding the factual information of the text could be seen in items number 5, 9, 11, 18, and 25.

F. The Validity and the Reliability of the Instrument

1. Validity

Every test should be as valid as the test constructor can make it.

The test must aim at providing a true measure of the particular skill in which it is intended to measure.

Heaton states that the validity of a test refers to appropriateness of a given test or any of its component parts as measure of what it is purposed to measure. It means the test is valid to the extent that is measured what it is supposed to measure. There are four kinds of validity. They are face, content, construct and empirical validity¹¹. This research used content validity. Content validity refers to whether or not the content of the manifestis right to measure the latent concept thatwe are trying to measure.¹²

The test given to students was considered too difficult or too easy. Item difficulty was determined as the proportion of correct responses. This is held pertinent to the index difficulty; it was generally expressed as the percentage of the students who answered the questions correctly. The formula¹³ for item difficulty is as follows:

$$P = \frac{\sum B}{N}$$

P : proportion of correct answer= index difficulties

B : the number of correct answer

N : the number of students taking the test

The formula above was used to find out easy or difficult test items that researcher gave to the respondents. The items did not reach

¹¹J.B Heaton. *Writing English Language Test*. (New York: Longman Group UK Limited, 1988), p. 159

¹² Daniel Muijs. *Doing Quantitative Research in Educaton*. (London: Sage Publications, 2004), p.66.

¹³ Hartono. *Analisis Item Instrumen*, (Bandung: Zanafa Publishing, 2010), p.38.

the standard value of difficulty were modified. the standard value of the proportion of correct can be seen in the table below:¹⁴

Table III.4
Index Difficulty Level of Instruments

Proportion correct (p)	Item category
$P > 0.70$	Easy
0.30 P 0.70	Average
$P < 0.30$	Difficult

The facility value under 0.30 is considered difficult and above 0.70 is considered easy. The items categorised in the level of easy or difficult ($p < 0.30$ or $p > 0.70$) should be modified or removed. Therefore, the standard value of the proportion of correct is between 0.30 and 0.70.

The try out was conducted in order to know the validity of instrument. Instrument for this research was test. The test items of try out consisted of 30 items. There were six questions for each indicator. The result of validity showed that there were five items rejected and twenty five items were accepted. It can be seen in appendix. Therefore there were 25 items for Pre and Post-tests.

2. Reliability

A test must be reliable as measuring instrument. Reliability is a necessary characteristic of any good test. Heaton explains that reliability is of primary importance in the use of public achievement,

¹⁴ *Ibid.*

proficiency and classroom tests.¹⁵The mean and standard deviation of the test must be known for obtaining the reliability of the test. To know the reliability of the test, the writer used the formula KR-20¹⁶:

$$r_{ii} = \frac{k}{k - 1} \frac{s^2 - \sum pq}{s^2}$$

Where:

- r_{ii} : Instrument reliability
- k : Number of items
- S : Deviation standard
- p : The proportion of the students making correct answers was divided by the total number of the students
- q : The proportion of the students making incorrect answers was divided by the total number of the students.

G. The Technique of Data Analysis

1. Normality Test

Before analyzing the data by using t-test formula, the researcher had to find out the normality test of the data. It was used in order to know whether the data are normal or not. If the data have normal distribution, a parametric test should be used and if the data distribution is not normal, a nonparametric test should be used.¹⁷ The

¹⁵*Op.Cit.* p.159

¹⁶Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktek*, (Jakarta: PT Rineka Cipta, 2006),p.187

¹⁷ L. R. Gay and Peter Airasian, *Op.cit.* p. 482-483

normality test of the data was analyzed by using Kolmogorov-Smirnov technique with SPSS 17 version.

Analysis:

H_0 : population with normal distribution

H_a : population with not normal distribution

If the probability > 0.05 H_0 was accepted

If the probability < 0.05 H_0 was rejected

Based on the output of SPSS, the test of normality shows:

Sig or p was $0.491 > 0.05$

Sig or p was $0.232 > 0.05$

It means H_0 was accepted or the data was normal. Therefore, the researcher used T-test formula as a parametric test for analyzing the data.

2. Analysis Data t-test

The technique of data analysis used in this research was T-test formula by using SPSS (Statistical Package for the Social Sciences) 17 Version. For analyzing the data, the researcher used the scores of post-test of experimental as well as control group.

The t-test was obtained by considering the degree of freedom $(df) = (N_1 + N_2) - 2$. Statistically the hypotheses are:

H_0 : $t_o < t\text{-table}$

H_a : $t_o > t\text{-table}$

H_0 is accepted if $t_0 < t$ table or there is no significant effect of using Book Club technique toward students' reading narrative text comprehension at Miftahul Huda Islamic Senior High School Tembilahan

H_a is accepted if $t_0 > t$ table or there is a significant effect of using Book Club technique toward students' reading narrative text comprehension at Miftahul Huda Islamic Senior High School Tembilahan