

CHAPTER III

RESEARCH METHOD

This chapter discusses about type of the study , place and time of the study, population and sample, instrument of the study, data collecting procedure, instrument try out, validity of data, instrument reliability, data analysis procedures.

A. Type of the Study

The study used descriptive quantitative approach of the study. Ary et al, Stated that quantitative research is Inquiry employing operational definitions to generate numeric data to answer predetermined hypotheses or questions.⁵⁰ According to Nawawi descriptive quantitative tries to find out the facts systematically in numeral and take conclusion after the numeral are measured.⁵¹ And type of the study is descriptive as Sukardi states that the writer effects to describe the research activity on the certain object systematically and clearly in quantitative descriptive approach.⁵² In the present study, the writer measure the students' ability in reading and comprehending recount text at eight grade of Class in MTs Islamiyah Palangka Raya.

B. Place and Time of the Study

The study was conducted in academic year 2013/2014. The writer conducted the research until see the complete data. To collect all the data

⁵⁰Donald Ary, Jacobs Lucy Cheser and Chris Sorensen, Introduction to Research in Education Eighth Edition, © Wadsworth Cengage Learning, 2010. p. 648.

⁵¹Hadari Nawawi, *Metode Penelitian Bidang Sosial*, Yogyakarta:penerbit Gadjah mada University Press,1995, p.

⁵²Sukardi, *Metodologi Penelitian Pendidikan Kompetensi dan Praktiknya*, Jakarta: Bumi Aksara, 2003, p.23

accurately and briefly, the writer needed two months from 18 October 2013 until 18 December 2013. This study took a place at MTs Islamiyah Palangka Raya located on DR. Murjani No.75 Street.

C. Population and Sample

1. Population

Population is defined as all members of any well-defined class of people, events or objects.⁵³ It means population is all individuals from whom the data are collected. The population of this research is the eight grade students of MTs Islamiyah Palangka Raya. There are 9 classes in this grade and the amount of students is 234 students.

2. Sample

Sample is the small group that is observed.⁵⁴ Getting sample is very important in scientific research because the total number of population is usually too many. Because of the large number of population, the researcher took samples as the representative of the population. The writer used purposive sampling to take the sample. In this case, the writer took the subject using purposive sampling. Purposive sampling is a nonprobability sampling technique in which subjects judge to be representative of the population are included in the sample.⁵⁵ By purposive sampling, the writer selects a specific number of samples of the test are thirty the students in those select class, where the class has been determined by the school. The example of class is:

⁵³Donald Ary, Jacobs Lucy Cheser and Chris Sorensen, Introduction to Research in Education Eighth Edition, © Wadsworth Cengage Learning, 2010. p.138

⁵⁴*Ibid*, p. 637

⁵⁵*Ibid*, p. 648.

Table 3.1
The number of the Subject

No	Class	The number of Samples
1	VIII C	25

D. Source of Data

Source of data was the subject where the data found. In this study, the source of data consists of the students' scores which were got from the test.

E. Instrument of the Study

Instruments of the study are very needed in the research. It is because the instruments are tools to get the data of study, in which the data are the important things to help the writer in answering the problem of study and also to prove the hypothesis. The data also needed to find the aim of study.

According to Arikunto that "test is a group of question or exercises which individual or groups use to measure the mastery, which is owned".⁵⁶

In this study, the data of the students' reading and comprehending recount text. The writer gave them test in the multiple choice form consist of 30 items. The level of reading and comprehension test consist of 60 % literal and 40 % inferential questions or 18 items were literal question and 12 items were inferential questions. The test was given to the students on Tuesday, November 26, 2013 at 07:00 am class VIII C MTS Islamiyah Palangka Raya. Scores were taken such as in test. Before doing the test, the writer explained about the instrument of the test. The specification of test items is:

⁵⁶ Arikunto, S. *Procedure Penelitian Suatu Pendekatan Praktek*, P.139.

Table 3.2

The Specification of Test Items

No.	Question and Alternative Answer	Level	Key Answer	Position in Text
1.	When the story happened? a. When the writer was in senior high school b. When the writer was in junior high school c. When the writer was in elementary school d. When the writer was in kindergarten	Literal	a. When the writer was in senior high school	Line 1
2.	“Why did <u>he</u> say sorry?” (line8) The word “he” refers to a. The writer b. The writer’s friend c. The tourists d. The tourist’s sister	Inferential	c. The tourists	Paragraph 1 line 8
3.	Where the writer met the tourist? a. In a zoo in Bukit Tunggal b. In a zoo in Bukit Batu c. In a zoo in Bukit Pinang d. In a zoo in Bukit Tinggi	Literal	d. In a zoo in Bukit Tinggi	Line 3
4.	Which of the statement is NOT TRUE based on the text? a. The writer not have	Literal	a. The writer not have conversation chat with	Line 2

	<p>conversation chat with foreigners</p> <p>b. The writer visited a zoo in Bukit Tinggi</p> <p>c. The writer met tourist</p> <p>d. The writer confused with the tourist statement</p>		foreigners	
5.	<p>“... and admit a mistake.” (paragraph 3)</p> <p>What is the synonym of the word ‘mistake’?</p> <p>a. Correct</p> <p>b. Error</p> <p>c. Right</p> <p>d. True</p>	Inferential	b. Error	Paragraph 3 line 2
6.	<p>Who broke mother glass?</p> <p>a. The writer</p> <p>b. The writer’s Brother</p> <p>c. The writer’s Sister</p> <p>d. The writer’s Friend</p>	Literal	a. The writer	Line 2
7.	<p>What made the writer afraid to tell the fact of the accident?</p> <p>a. Because the glass was one of her mother’s favorites</p> <p>b. Because the glass was one of her sister is favorites</p> <p>c. Because the glass was broken</p> <p>d. Because the glass extensive</p>	Literal	a. Because the glass was one of her mother’s favorites	Paragraph 2 line 1

8.	She played with her doll and straightly (paragraph 5) The word “She” refers to.... a. The writer b. The writer’s sister c. The writer’s brother d. The writer’s mother	Inferential	b. The writer’s sister	Paragraph 5 line 2
9.	“It was my <u>fault</u> ” The underlined word means a. Error b. Terror c. Fear d. Forgive	Inferential	a. Error	Paragraph 6 line 2
10.	Which of the statement is NOT TRUE based on the text? a. The writer has younger sister b. The glass was one of the writer’s mother favorites c. The writer admitted her fault d. The writer felt guilty.	Literal	c. the writer admitted her fault	Paragraph 4 line 3
11.	Where did the writer meet his/her father? a. In the classroom b. Outside the classroom c. Outside the school gate d. At the bus stop	literal	c. outside the school gate	Line 1

12.	<p>Why did the writer's father scold the writer?</p> <p>a. Because he/she woke up late</p> <p>b. Because he/she skipped school</p> <p>c. Because he/she didn't do his/her homework</p> <p>d. Because he/she forgot to bring some items to school</p>	Literal	d.Because he/she forgot to bring some items to school	Paragraph 2 line 3
13.	<p>Which statement is NOT TRUE according to the text?</p> <p>a. The writer met his/her father before the class began</p> <p>b. The writer's father met the writer before he went to work</p> <p>c. The writer lost his/her money on his/her way back to class</p> <p>d. The writer would take part in the Track and Field Training Camp</p>	Literal	b. the writer's father met the writer before he went to work	Paragraph 3 line 1
14.	<p>"I just kept silent ..." (paragraph 2)</p> <p>What is the antonym of the word 'silent'?</p> <p>a. Quiet</p> <p>b. Angry</p>	Inferetial	a. Quiet	Paragraph 2 line 4

	c. Noisy d. Busy			
15.	“ <u>he</u> handed a consent ...” (paragraph 2) The word “he” refers to ... a. The writer b. The writer’s father c. The teacher d. The writer’s friend	Inferential	b. The writer’s father	Paragraph 2 line 2
16.	Where did the writer live? a. In a big town b. In a small country town c. In a big country town d. In a downtown	Literal	b. in a small country town	Line 1
17.	How old was the writer’s sister? a. Less than one year old b. One year old c. More than one year old d. Two year old	Literal	a. less than one year old	Paragraph 2 line 1
18.	With whom did the writer go? a. The writer’s sister b. The writer’s nephew c. The writer’s brother d. The writer’s neighbor	Inferential	b. the writer’s nephew	Paragraph 2 line 1
19.	What did the old man finally do? a. He drove his truck away b. He horned the writer several times	Literal	d. He took the bootie and returned it to the writer	Paragraph 5 line 1

	<p>c. He got out of his truck and scolded the writer</p> <p>d. He took the bootie and returned it to the writer</p>			
20.	<p>“Then, he returned it to me.” (paragraph 5) What does the word ‘it’ refers to?</p> <p>a. The truck</p> <p>b. The bag</p> <p>c. The bootie</p> <p>d. The car</p>	Inferential	a. The truck	Paragraph 5 line 2
21.	<p>When did the tour start?</p> <p>a. On holiday of the first semester</p> <p>b. On holiday of the second semester</p> <p>c. On holiday of the half semester</p> <p>d. On holiday of the last semester</p>	Literal	d. On holiday of the last semester	Line 1
22.	<p>How long does it take to Pandaran beach?</p> <p>a. 3 hours</p> <p>b. 4 hours</p> <p>c. 5 hours</p> <p>d. 6 hours</p>	Literal	c. 5 hours	Paragraph 2 line 2
23.	<p>What time did the writer return his home town?</p> <p>a. at 02.00 am</p>	Literal	c. at 04.00 am	Paragraph 5 line 1

	<ul style="list-style-type: none"> b. at 03.00 am c. at 04.00 am d. at 05.00 am 			
24.	<p>“ ... it took 5 hours riding to Pangandaran Beach” (paragraph 2 line 2)</p> <p>What does the word ‘it’ refers to?</p> <ul style="list-style-type: none"> a. The tour b. The holiday c. The vacation d. The adventure 	Inferential	a. The tour	Paragraph 2 line 2
25.	<p>How did the writer feel about his journey?</p> <ul style="list-style-type: none"> a. He felt enjoy b. He felt nice experience c. He felt boring d. He felt happy 	Inferential	b. He feels nice experience	Paragraph 5 line 3
26.	<p>Who lives in Surabaya?</p> <ul style="list-style-type: none"> a. The writer b. The writer’s big sister c. The writer’s big brother d. The writer’s young sister 	Literal	b. the writer’s big sister	Line 1
27.	<p>Why did not the writer feel comfortable on the train?</p> <ul style="list-style-type: none"> a. It was crowded b. He had to stand on the train c. There was no empty seat d. It was very noisy and hot 	Literal	d. it was very noisy and hot	Paragraph 2 line 4

28.	<p>How long has the writer's elder sister lived in Surabaya for study?</p> <p>a. 23 months</p> <p>b. 24 months</p> <p>c. 25 months</p> <p>d. 26 months</p>	Inferential	b. 24 months	Line 2
29.	<p>How did the writer feel about his/her trip?</p> <p>a. The writer felt tired</p> <p>b. The writer felt happy</p> <p>c. The writer felt sad</p> <p>d. The writer felt confuse</p>	Inferential	a. the writer felt tired	Paragraph 2
30.	<p>Which of the following statements is NOT TRUE?</p> <p>a. The writer's sister was waiting for the writer in Gubeng station</p> <p>b. The writer took a taxi to reach her sister's boarding house</p> <p>c. The writer went to Surabaya with his/her mother</p> <p>d. The writer felt tired after the trip</p>	Literal	b. the writer took a taxi to reach her sister's boarding house	paragraph 3

F. Data Collecting Procedure

Data collecting procedure is one of important things in this study to answer the problems of the study. In the study, the writer uses several procedures in collecting the data, as follows:

1. The writer observed the class.
2. The writer gives test to the eight grade students at MTs Islamiyah Palangka Raya. The test was the multiple choice questions about recount text which has given by the writer. However, the test was given after the material about recount text has been done. The scores were taken such as in test.
3. The writer explains about instrument that given to the students at MTs Islamiyah Palangka Raya.
4. The writer gives 1 hour 20 minutes for students to answer the test.
5. The writer gave attention when the students do the test.
6. The writer collected the data of the students test results.

G. Instrument Try Out

The writer tried out the test instrument before it applied to the real sample in this study. The writer gained the information about quality that consists of instrument validity, instrument reliability, and index of difficulty. The procedures of the try out were:

- a. The writer tried out the test instruments to the respondents.
- b. The writer gave score to the respondents' answer.
- c. The analyzed the obtained data to know the instrument validity, instrument reliability, index difficulty, and the test of data normally.

H. Validity of Data

Validity is defined as the degree to which evidence and theory support the interpretations of test scores entailed proposed uses of tests.⁵⁷ Validity is also defined as the extent to which an instrument measured what it claimed to measure.⁵⁸ Simply, it can be said that a test will be valid, if it measures accurately what intended to measure. In this study, the test is aimed to measure the students' ability in reading and comprehending recount text at second grade of MTS Islamiyah Palangka Raya.

1. Content Validity

Content validity is essentially and of necessity based on the judgment, and such judgment must be made separately for each situation.⁵⁹ It refers to whether or not the content of the manifest variables is right to measure the latent concept that is trying to measure. In this study, the instrument tests were suitable with the syllabus used MTS Islamiyah Palngka Raya. It meant, the test items are arranged based on the material in the syllabus that used for the second grade students in the school.

2. Construct Validity

Construct validity is concerned with the extent to which a test measures a specific trait or construct.⁶⁰ It is related to the theoretical knowledge of the concept that wants to measure. The meaning of the test scores is derived from

⁵⁷Donald Ary, Jacobs Lucy Cheser and Chris Sorensen, Introduction to Research in Education Eighth Edition, © Wadsworth Cengage Learning, 2010. p.225

⁵⁸*Ibid.*

⁵⁹*Ibid*, p. 215

⁶⁰Donald Ary, *Introduction to research in Education*; third edition,.... 1985, p 218

the nature of the tasks examines are asked to perform.⁶¹ In this study the writer will measure the students' ability in reading and comprehending recount text. The genre of the test is reading test where the material was about recount text. The writer will examine their reading comprehension from their understanding based on the text.

3. Criterion-related Validity

It refers to the extent which test scores are systematically related to one or more outcome criteria.⁶² It emphasizes on the criterion because the writer will use the test scores to infer performance on the criterion. The type of criterion-related validity was used in this study was concurrent validity. It refers to the relationship between scores on a measure and criterion scores obtained at the same time.⁶³ The formula of coefficient correlation that was used to know the instrument validity in this study as follows;⁶⁴

$$r_{xy} = \frac{\sum XY - (\sum X)(\sum Y)/n}{\sqrt{[\sum X^2 - \frac{(\sum X)^2}{n}][\sum Y^2 - \frac{(\sum Y)^2}{n}]}}$$

Where:

r_{xy}	= coefficient correlation
X	= score of the component rater X
Y	= score of the component of rater Y
n	= the total of the subject

⁶¹Mohammad Adnan Latief, *Tanya Jawab Metode Penelitian Pembelajaran Bahasa*, Malang: Universitas Malang Press, 2010, p.134

⁶² Donald Ary, *Introduction to Research in Education, Eight Edition*, p.228

⁶³*Ibid*

⁶⁴Saifuddin Anwar, *Reliabilitas dan Validitas*, Yogyakarta:Pustaka Pelajar, 2008, p.19

Interpretation:

$$r_{xy} > r_t = \text{valid}$$

$$r_{xy} < r_t = \text{invalid}$$

The criteria of interpretation the validity:⁶⁵

0.800 – 1.000 = Very High Validity

0.600 – 0.799 = High Validity

0.400 – 0.599 = Fair Validity

0.200 – 0.399 = Poor Validity

0.00 – 0.199 = Very Poor Validity

I. Instrument of Reliability

One of the requirements of the instruments try out is instrument reliability. Related to the reliability, Heaton states:

Reliability is necessary characteristic of any good test: for it to be valid data all, a test must first be reliable as measuring instrument. If the test is administrated to the same candidates on different occasions (with no language practice work taking place between these occasions). Then, to extent that it produces differing result, it is not reliable.⁶⁶

The writer uses the Kuder Richardson' frame. The formula as follow:

$$r_{11} = \left\{ \frac{k}{k-1} \right\} \left\{ 1 - \frac{M(k-1)}{k Vt} \right\}$$

Where:

r_{11} = instrument Reliability

k = The total number of the test item

M = Mean of score

⁶⁵Riduwan, *Metode dan Teknik Menyusun Thesis*, Bandung: Alfabeta, 2004, p.110

⁶⁶J.B. Heaton, *Writing English Language*, England: Longman, 1974, p. 155.

Vt = The total variants

a. Index of Difficulty

Heaton states:

The index of difficulty (or the facility value) of an item simply shows how easy or difficult the particular item proved in the test. The index of difficulty (F.V) is generally expressed as the fraction (or percentage) of the students who answered the item correctly.⁶⁷ It is calculated using the formula:

$$F.V = \frac{R}{N}$$

Where:

F.V = Facility Value

R = Represent the number of correct answers

N = The number of student taking the test

To interpret the index of difficulty, the writer will use Robert L. Thorndike and Elizabeth Hagen's interpretation.

P < 0.30 = Difficult

PO. 30 – 0.70 = Fair

P > 0.70 = Easy

J. Data Analysis Procedures

To answer the problem of the study about whether students' ability in reading and comprehending recount text by the eighth grade students of Palangka Raya, The writer will follow some procedures to analyze the obtained data as follows:

1. The writer gave score the students test results by using the scoring guide.

⁶⁷ J.B. Heaton, Writing English Language, England: Longman, 1974, p. 172

2. The writer tabulated the data into the distribution of frequency of the score table, and then found out the mean, median and modus of students' score.
3. The writer calculate the data by formulation of mean, median and modus. The writer used mean, median and modus formula as follows:

a. Mean

$$M_x = \frac{\sum X}{N}$$

Where;

M_x : Mean

$\sum X$: The total of the students' scores

N : Number of the Students

b. Median

$$N = 2n + 1$$

Where;

N : Number of the Students

$2n$: Number of median

4. The writer makes the conclusion of data analysis that obtained
5. Discussion and conclusion the result of data analysis.