CHAPTER III

RESEARCH PROCEDURE

This chapter provides an overview of the research methodology employed in this study. It describes the research hypothesis, research procedures, research method, variables of the research, research design, population and sample of the research, data collection technique, research instruments, data analysis technique, steps of the research, and time and place of the research.

A. Method of the Research

This research applied quantitative research. Creswell (1994) defines quantitative research as research that explains phenomena by collecting numerical data and analyzing it using mathematically based methods (in particular, statistics). Quantitative techniques employ various research designs in different studies, including experimental, correlational, and survey designs (Creswell, 2012).

B. Variables of the Research

A variable is defined as something that varies from one case to another. This research had two variables: variable (X) and variable (Y). In this research, the variable (X) is reading interest, and the variable (Y) is reading comprehension.

C. Research Design

Before the writer starts researching, they first make a plan. A research design is a plan or program created by a researcher outlining the activity to be conducted (Arikunto, 2002, p. 45).

In this research, the writer employed a correlational research design. Ary (1985, p. 327) stated that correlation studies determine the extent of the relationship between variables. They enable one to measure the extent to which

variations in one variable are associated with variations in another variable, as determined by the coefficient of correlation.

The writer employed correlational research to measure variables and analyze the data to determine whether they are related or not. This study focused on the relationship between students' reading interest and reading comprehension ability.

D. Population of the Research

Population refers to the people or other entities discussed in the research (Arikunto, 2002, p. 108). According to Arikunto (1996, p. 102), the population refers to the total number of subjects in an investigation. Ary et al. (2010) stated that the population is the larger group about which generalizations are made. A population is all members of any well-defined class of people, events, or objects.

This study's population refers to all eighth-grade students, 352 of whom, at one of the state junior high schools in Tasikmalaya during the 2024/2025 academic year.

E. Sample of the Research

A sample is a small group observed, and a population is defined as all members of any well-defined class of people, events, or subjects. According to Prasetyo & Jannah (2005), a sample is a part of the population and possesses the characteristics that enable investigation. Walliman (2011) stated that samples are a selected number of cases from a population. In conclusion, a sample is a smaller group taken from the population that reflects its characteristics and is used to represent the whole in a research study.

The writer concludes that the process of taking samples involves purposive sampling. According to Arikunto (2010, p. 183), purposive sampling is a type of sample selection that aims to select subjects based on their relevance to specific objectives, rather than on strata, random, or regional considerations. These techniques are employed due to time constraints, cost, and power consumption concerns. Therefore, a large sample cannot be taken. This option

is also supported by Sugiyono (2012, p. 84), who states that purposive sampling is a technique for determining samples with specific considerations.

The writer intentionally selected the eighth-grade class K of the *Cerdas Istimewa* (gifted) program as the sample. These students are categorized as having high academic potential and are placed in a special class designed to meet their learning needs. This class was chosen because it matched the specific characteristics required for the research.

The sample consisted of 32 students (19 males and females) who were not selected randomly but were chosen based on their relevance to the research purpose.

F. Data Collection Technique

A test was used as a data collection approach for this study. In this research, the writer administered a test to the eighth-grade students at Cerdas Istimewa (gifted) of one of the state junior high schools in Tasikmalaya, Indonesia, during the Academic Year 2024/2025, involving 32 students, 19 male and 13 female.

The writer used two types of instruments in this research:

1. A questionnaire to assess students' reading interest.
2. A multiple-choice test to assess students' reading comprehension using a recount text.

The test consisted of 70 items: 40 questions in the questionnaire and 30 multiple-choice questions for the reading comprehension test.

G. Research Instrument

1. Questionnaire for Reading Interest Test

The questionnaire is a tool for collecting data, consisting of a series of questions designed to assess students' reading interests. Arikunto (2006) stated that a questionnaire is a collection of written questions used to gather information from respondents. The writer distributed the questionnaire to the sample to collect information about the students' interest in reading explanations

of English texts while learning the Language, and the questionnaire was written in *Bahasa Indonesia*. This aims to prevent different interpretations of the statement. Therefore, using *Bahasa Indonesia* in the statement will help students comprehend and answer the questions.

The questionnaire used to measure students' reading interest was adapted and modified from Sandika (2020), which applied Skinner's interest theory. The instrument consists of 40 items that measure students' emotional and behavioral responses toward reading, enjoyment, interest in reading materials, motivation, and attitudes toward reading activities.

The items were modified to suit the context of eighth-grade junior high school students and the study's objective to explore the correlation between reading interest and reading comprehension. The questionnaires were assessed using the Likert Scale rating, and each question had five options. There are Strongly Agree (*Sangat Setuju/SS*), Agree (*Setuju/S*), Undecided (*Ragu-ragu/RG*), Disagree (*Tidak Setuju/TS*), Strongly Disagree (*Sangat Tidak Setuju/STS*) by giving a checkmark (✓) to the respondents' choice. The following is the blueprint of the questionnaire reading interest test:

Table 1

The Blueprint of Students' Reading Interest (Questionnaire)

No	Aspect	Indicator	Favorable	Unfavorable	Number Item
1.	Pleasure	Pleasure arises when people are interested in objects or activities that bring them satisfaction and enjoyment.	1, 9, 17, 25, 33	5, 13, 21, 29, 37	10
2.	Willingness	The desire for motivation will develop willpower, attention, and focus on a particular object, sparking the individual's interest in that object.	2, 10, 18, 26, 34	6, 14, 22, 30, 38	10
3.	Consciousness	Individuals process consciousness and demonstrate an active interest in a particular subject or object.	3, 11, 19, 27, 35	7, 15, 23, 31, 39	10

4.	Attention	When individuals observe an object, their perception of it is influenced by what they focus on or find interesting.	4, 12, 20, 28, 36	8, 16, 24, 32, 40	10
Amount					**40**

(Skinner, 1984)

2. Multiple Choice for Reading Comprehension Test

This testing technique is appropriate for assessing reading comprehension. The writer used multiple-choice questions with four options: A, B, C, or D. This testing technique is based on the Theory component of reading comprehension, as outlined in Nuttal (1982), which identifies five components: main idea, specific information, reference, inference, and understanding vocabulary.

This test contained 30 items, each containing questions related to the main idea, specific information, references, inferences, and vocabulary understanding. The writer used a recount text based on the school's curriculum to construct the test. The following is the blueprint of the multiple-choice reading comprehension test:

Table 2

The Blueprint of Students' Reading Comprehension (Multiple Choice)

No.	Aspect	Indicator	Material/Topic	Item Number
1.	Main Idea	The main idea of the entire text.	**Recount Text**	1, 6, 11, 16, 21, 26
2.	Specific information	Detailed information can be found directly in the text to answer questions specifically.	**Recount Text**	2, 7, 12, 17, 22, 27
3.	Reference	Pronouns or terms in the text that refer to characters or objects mentioned previously.	**Recount Text**	3, 8, 13, 18, 23, 28
4.	Inference	Concluding implied information from clues in the text.	**Recount Text**	4, 9, 14, 19, 24, 29

5.	Understanding Vocabulary	Understanding the meaning of words or terms used in the text.	**Recount Text**	5, 10, 15, 20, 25, 30
	Amount			**30**

(Nuttal, 1982)

3. Scoring Procedure

The writer used a formula to get the score of the students' work. The high score is 100. The score of the questionnaire using the rating scale is as follows:

Table 3

Likert Scoring Table

Option	Score	
	Favorable	**Unfavorable**
Strongly Agree	5	5
Agree	4	4
Undecided	3	3
Disagree	2	2
Strongly Disagree	1	1

(Riduwan & Sunarto, 2007, p. 21)

Table 4

Score Classification of Questionnaire

The Score Level	Category
81% - 100%	Very High
61% - 80%	High
41% - 60%	Medium
21% - 40%	Low
0% - 20%	Very Low

(Sugiyono, 2012)

The percentage was calculated using the formula below, as suggested by Sugiyono (2012):

$$\boldsymbol{Percentage} = \left(\frac{\boldsymbol{Total\ Score}}{\boldsymbol{Maximum\ Score}}\right)\boldsymbol{x}\ \mathbf{100}\%$$

This formula is commonly used to convert each student's total score into a percentage value, simplifying the classification of results.

Table 5

Score Classification of Multiple Choice

The Score Level	Category
86 - 100	Excellent
76 - 85	Good
60 - 75	Fair
55 - 59	Poor
< 54	Very Poor

(Arikunto, 2013)

Moreover, the score of the multiple-choice test is calculated by using the formula by Arikunto (2006, p.271):

$$S = \frac{r}{n} \text{ x } 100$$

Note :

S = The score of the test

r = The total of the correct answer

n = The total number of items

4. Validity

In conducting research, a writer needs to use a validity instrument. The validity of the instrument was determined by determining its level of validity. According to Iskandarwassid & Dadang (2009, p. 184), an instrument is considered valid if it accurately measures the desired and can effectively reveal

data from the variables studied. An instrument is valid when it can measure what the writer will measure. In this research, the writer used content validity. Content validity is the degree to which a test measures an intended content area (Gay, 2012, p. 161). The calculation of questionnaire and multiple-choice test validity used Microsoft Excel 2013, with the criteria as follows:

1. If the r value > the r-table at the significance of 5%, it means the instrument is valid.
2. If the r value < r-table at the significance of 5%, it means the instrument is invalid.

Before analyzing the reading interest questionnaire and the reading comprehension multiple-choice test, a validity test was conducted to determine whether each item was valid or not. The validity test was conducted by comparing the r-value of each item with the r-table. The respondents are 32 students from the eighth-grade *Cerdas Istimewa* (gifted) class at one of the junior high schools in Tasikmalaya during the 2024/2025 academic year. According to the r-table value for N (respondent) = 32 at the 5% significance level. The r-table was 0.361; the item can be valid if the result > 0.361, but can be invalid if the result < 0.361.

Table 6

The Result Validity Test of Reading Interest (Questionnaire)

Item	"r" value	'r' table	Criteria
1	0.396	0.361	Valid
2	0.532	0.361	Valid
3	0.545	0.361	Valid
4	0.500	0.361	Valid
5	0.397	0.361	Valid
6	0.531	0.361	Valid
7	0.559	0.361	Valid
8	0.404	0.361	Valid
9	0.451	0.361	Valid
10	0.439	0.361	Valid
11	0.457	0.361	Valid
12	0.362	0.361	Valid
13	0.672	0.361	Valid
14	0.442	0.361	Valid
15	0.599	0.361	Valid

16	0.520	0.361	Valid
17	0.399	0.361	Valid
18	0.389	0.361	Valid
19	0.423	0.361	Valid
20	0.373	0.361	Valid
21	0.449	0.361	Valid
22	0.411	0.361	Valid
23	0.390	0.361	Valid
24	0.653	0.361	Valid
25	0.572	0.361	Valid
26	0.400	0.361	Valid
27	0.391	0.361	Valid
28	0.464	0.361	Valid
29	0.485	0.361	Valid
30	0.574	0.361	Valid
31	0.563	0.361	Valid
32	0.507	0.361	Valid
33	0.575	0.361	Valid
34	0.369	0.361	Valid
35	0.435	0.361	Valid
36	0.445	0.361	Valid
37	0.420	0.361	Valid
38	0.539	0.361	Valid
39	0.490	0.361	Valid
40	0.469	0.361	Valid

The result of the item validity instrument by using Microsoft Excel 2013 can be concluded in the following table:

It can be concluded that all of the questionnaire items are valid, as the r values are greater than the r-table at the significance level of 5%.

Then the validity test of the reading comprehension multiple-choice test is as follows:

Table 7

The Result Validity Test of Reading Comprehension (Multiple Choice)

Item	**"r" value**	**'r' table**	**Criteria**
1	0.522	0.361	Valid
2	0.522	0.361	Valid
3	0.390	0.361	Valid
4	0.401	0.361	Valid
5	0.545	0.361	Valid
6	0.390	0.361	Valid
7	0.451	0.361	Valid
8	0.483	0.361	Valid
9	0.399	0.361	Valid

10	0.429	0.361	Valid
11	0.494	0.361	Valid
12	0.405	0.361	Valid
13	0.447	0.361	Valid
14	0.429	0.361	Valid
15	0.371	0.361	Valid
16	0.422	0.361	Valid
17	0.390	0.361	Valid
18	0.422	0.361	Valid
19	0.371	0.361	Valid
20	0.396	0.361	Valid
21	0.483	0.361	Valid
22	0.429	0.361	Valid
23	0.403	0.361	Valid
24	0.371	0.361	Valid
25	0.422	0.361	Valid
26	0.389	0.361	Valid
27	0.390	0.361	Valid
28	0.414	0.361	Valid
29	0.494	0.361	Valid
30	0.429	0.361	Valid

All the multiple-choice test items are valid, as the r values are greater than the r-table values at the 5% significance level.

5. Reliability

Reliability is the degree to which a test consistently measures whatever it is measuring (Gay, 2012, p. 165). In this research, the writer used SPSS version 27 for Windows with Cronbach's Alpha Formula to measure the reliability of the questionnaire and multiple-choice test. There are two criteria to determine test items, as follows:

1. If *Cronbach's Alpha* > 0.6, the instrument is reliable.
2. If *Cronbach's Alpha* < 0.6, the instrument is unreliable.

A reliability test was conducted using the Cronbach's Alpha formula to ensure the consistency and stability of the reading interest questionnaire and the reading comprehension multiple-choice test. A reliability coefficient of 0.6 or higher indicates that the instrument is considered reliable. The results of the reliability test for the questionnaire and multiple-choice test are presented in the following tables:

Table 8

The Result Reliability Test of Reading Interest (Questionnaire)

Reliability Statistics

Cronbach's Alpha	N of Items
.739	41

Table 9

The Result Reliability Test of Reading Comprehension (Multiple Choice)

Reliability Statistics

Cronbach's Alpha	N of Items
.844	31

In this study, the Cronbach's Alpha value for the reading interest questionnaire was 0.739, which indicates that the instrument is acceptable. Meanwhile, the Cronbach's Alpha value for the reading comprehension multiple-choice test was 0.844, indicating that the instrument is good and reliable.

H. Data Analysis Technique

After collecting the data, the writer analyzes the results, using statistical tests such as the normality test and the hypothesis test.

1. Normality Test

The writer would conduct a normality test to know whether the collected data were normally distributed. Thode (2002) states that the normality test is one of the most common assumptions in developing and using statistical procedures. The primary reason for conducting normality testing is to determine the normality of the data to be analyzed, specifically whether both groups have a normal distribution. The data were from a questionnaire and a multiple-choice test. The writer used SPSS version 27 for Windows to perform the normality test, employing the Shapiro-Wilk test formula, as the sample size was fewer than 50 participants. The variables based on the testing criteria are as follows:

1. A normal data distribution if the significance value (sig) > 0.05.
2. An abnormal data distribution if the significance (sig) value < 0.05.

2. Hypothesis Test

Hypothesis testing was conducted to determine whether a correlation exists between the two variables and to determine the probability that the given hypothesis is true.

Furthermore, the hypothesis testing was computed using the Spearman Rank Order Correlation through SPSS version 27 for Windows to test the significance of the relationship between students' reading interest and their reading comprehension in K eighth-grade of the *Cerdas Istimewa* (gifted) program at one of the junior high schools in Tasikmalaya during the academic year 2024/2025. The criteria used are as follows:

1. If r value > r-table = H_a is accepted, H_0 is rejected. This indicates a correlation between students' reading interest and their reading comprehension in the eighth-grade *Cerdas Istimewa* (gifted) class of one junior high school in Tasikmalaya during the 2024/2025 academic year.
2. If r value < r-table = H_a is rejected, H_0 is accepted. This means there is no correlation between students' reading interest and reading comprehension in the eighth-grade *Cerdas Istimewa* (gifted) class of one junior high school in Tasikmalaya during the 2024/2025 academic year.

I. Time and Place of the Research

The research site is located in one of the junior high schools in Tasikmalaya, specifically in the eighth-grade *Cerdas Istimewa* (gifted) class. This study took place during the Academic Year 2024/2025.

Table 10

Research Schedule

Description	Nov 2021	Aug 2023	Nov 2023	Jul 2024	Mar 2025	May 2025	Jun 2025	Jul 2025
Research Proposal Writing								
Research Proposal Examination								
Data Collection								
Data Analysis								
Telaah Komprehensif								
Examination								
Final Thesis Examination