CHAPTER 3
RESEARCH METHODOLOGY

This chapter details the methodology that was employed to carry out the study. It consisted of seven components of the research process, including the research design, research variables, population and samples, data collection, data analysis, steps of research, time and place of the research. Further details were provided below.

A. Research Design

This study used a quantitative method with a correlation design. The quantitative approach requires researchers to collect data through numerical and statistical analysis using established instruments (Dornyei, 2007). Meanwhile, the correlation design was used to assess the relationship between the variables within a group of subjects (Ary et al., 2019). This study aim to determine whether there is a correlation between two measurable variables: reading for pleasure and students' writing ability in composing narrative text.

B. Research Variables

This research consists of the independent variable (X) and the dependent variable (Y). According to Sugiyono (2013), an independent variable is a variable that affects or causes changes in or the occurrence of dependent variables, while a dependent variable is a variable that is affected or that becomes the result of the independent variable. In this case, the independent variable refers to reading for pleasure, while the dependent variable refers to students' writing ability in composing narrative text. Reading for pleasure was an independent variable because this variable affects a dependent variable, which was students' writing ability in composing narrative text. Meanwhile, students' writing ability in composing narrative text was a dependent variable because this variable was affected by an independent variable, which was reading for pleasure. The variables of the research can be presented in the figure below:

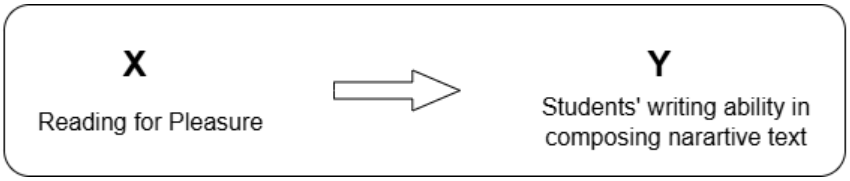

Figure 3. 1 ***Variables of the Research***

C. Population and Samples

The population in this study was all 8th grade students at a junior high school in Tasikmalaya. The researcher selected 8th grade students based on the consideration that students at this level had studied various types of texts in English language learning, including narrative texts. Therefore, they were considered to have sufficient basic knowledge to understand and produce narrative texts, which was the focus of this study. There were 10 classes and 350 students in this population. The population specifications can be seen in the following table:

Table 3. 1 ***The Population of the Research***

No	Class	Number of students
1	VIII A	35 students
2	VIII B	35 students
3	VIII C	35 students
4	VIII D	35 students
5	VIII E	35 students
6	VIII F	35 students
7	VIII G	35 students
8	VIII H	35 students
9	VIII I	35 students
10	VIII J	35 students
Total Population		350 students

In this study, the researcher used the cluster random sampling technique to obtain a sample. According to Ary et al. (2019), cluster random sampling is a

sampling technique in which the unit selected is not an individual but a natural group (cluster) of individuals with similar characteristics. The population in this study consisted of 10 classes that had a relatively homogeneous number of students and characteristics, so this technique was considered appropriate. The researcher applied the “spin the wheel” randomization method to determine the sample. This technique involves spinning a virtual wheel that includes the names of classes, ensuring that each class has an equal chance of being selected.

As a result of the randomization process, class VIII E was selected as the sample. However, all of the students in this class were included in the study. The sample specifications in this study can be seen in the following table:

Table 3. 2 ***The Participants of the Research***

No	Selected Class	Number of students
1	VIII E	35
Total	1 class	35 students

D. Data Collection

Data were collected through two research instruments, a questionnaire and a writing test.

1. Questionnaire

To collect data on students' reading for pleasure, the researcher used a questionnaire. According to Sugiyono (2013), a questionnaire is a data collection technique that is done by giving a number of written questions to respondents to answer. This questionnaire was specifically designed to identify reading for pleasure activities in junior high school students. The instrument was prepared based on the indicators of reading for pleasure developed by Nell (1988), which includes reading as a form of play, motivational analysis of leisure reading, frustration index, reading span, and vehicle of reading habit. These indicators are used to describe the extent to which students engage in voluntary activities based on their interest and pleasure.

The questionnaire in this study consists of 20 statement items that have passed the validity and reliability tests from a total of 35 items compiled previously (see The Validity and Reliability Test Section). This questionnaire used a Likert scale (1-4) without a neutral option, which allows respondents to provide more detailed, clear, and unambiguous answers. Therefore, the data obtained can better describe respondents' attitudes, opinions and perceptions towards reading for pleasure, reflecting their beliefs and experiences (Sugiyono, 2013). The questions in this questionnaire were prepared in English; however, the version distributed to participants used Indonesian to facilitate easier understanding and response. The questionnaire was provided in printed form to ensure accessibility for all participants. The rating scale used was as follows:

Table 3. 3 ***The Likert Scale Rating***

Statement	**Score**	
	Favorable	**Unfavorable**
Strongly Agree	4	1
Agree	3	2
Disagree	2	3
Strongly Disagree	1	4

Before the instrument was used, researcher conducted validity and reliability tests to ensure that it is relevant in measuring respondents' reading for pleasure accurately and consistently, which can reflect the aspects being studied:

a. Validity Test

In this study, the researcher distributed questionnaires with specific objectives to be achieved. To achieve these objectives, we must ensure that the instruments used can measure what should be measured (Sugiyono, 2013). To determine the validity of the instrument, the researcher distributed the questionnaire to 30 students who were not part of the research sample (non-sample). The questionnaire consisted of 35 statement items based on indicators from Nell (1988). In addition, to

determine whether each item was suitable for used, a testing process was conducted using SPSS v24. According to Siregar (2013), an item is considered valid if the calculated r-value is greater than the r-table at a significance level of 5%. On the other hand, if the r-value is less than the r-table at a significance level of 5%, the instrument is invalid.

The table value in this study was obtained based on the degree of freedom (df) using the formula df = N – 2, where N is the number of respondents. With 30 respondents, df = 28, so the table value at a significance level of 5% is 0.361. Based on the validity test that has been conducted, the results were presented in the following table:

Table 3. 4 ***Validity Test of The Student's Reading for Pleasure Questionnaire***

No Item	R-Value	R-Table	Criteria
1	0.653	0.361	Valid
2	0.140	0.361	Invalid
3	0.507	0.361	Valid
4	0.239	0.361	Invalid
5	0.313	0.361	Invalid
6	0.556	0.361	Valid
7	0.508	0.361	Valid
8	0.549	0.361	Valid
9	0.424	0.361	Valid
10	0.604	0.361	Valid
11	0.591	0.361	Valid
12	0.399	0.361	Valid
13	0.126	0.361	Invalid
14	0.111	0.361	Invalid
15	0.284	0.361	Invalid
16	0.183	0.361	Invalid
17	0.123	0.361	Invalid

No Item	R-Value	R-Table	Criteria
18	0.450	0.361	Valid
19	0.748	0.361	Valid
20	0.631	0.361	Valid
21	0.177	0.361	Invalid
22	0.175	0.361	Invalid
23	0.363	0.361	Valid
24	0.341	0.361	Invalid
25	-0.191	0.361	Invalid
26	0.476	0.361	Valid
27	0.533	0.361	Valid
28	0.234	0.361	Invalid
29	0.637	0.361	Valid
30	0.230	0.361	Invalid
31	0.429	0.361	Valid
32	0.628	0.361	Valid
33	0.572	0.361	Valid
34	0.414	0.361	Valid
35	0.246	0.361	Invalid

Based on table 3.4, it can be concluded that there were 20 valid statements, because each item had a significance value (sig. value > r-table) greater than 0.05, which means that the question item qualifies the validity criteria. While 15 statements were declared invalid, because it has a significance value (sig. value < r-table) less than 0.05, so that the question item does not qualify the validity criteria.

b. Reliability Test

In this study, the reliability of the instrument was tested using Cronbach's Alpha technique. Siregar (2013) stated, an instrument can be considered reliable if its reliability coefficient is greater than 0.60. Meanwhile, if the instrument has a reliability coefficient of less than 0.60,

then the instrument cannot be considered unreliable. The researcher used SPSS v24 based on the Cronbach Alpha technique to determine whether the instrument was reliable. The following were the results of the reliability test:

Table 3. 5 ***The Result of Reliability Test***

Cronbach's Alpha	N of Items
0.820	35

Based on Table 3.5, the reliability test results of the instrument showed a value of 0.820. The instrument was considered reliable because its reliability coefficient value was greater than 0.60.

2. Writing Test

In this study, the researcher used a test to determine students' writing ability in composing narrative text. Brown (2004) states that tests measure a person's ability and knowledge in performing certain tasks in a particular field. In this test, students were asked to write a short narrative text based on one of the types of narrative text, namely fables, legends, or fairytales. Participants were expected to compose the text by following a narrative structure, which includes orientation, complication, and re-orientation. This writing test was conducted in 45 minutes with a minimum length of 200-400 words.

Students' results were measured by using a writing assessment rubric adapted from Oshima and Hogue (2007), which covers five aspects of writing, namely format, punctuation and mechanics, content, organization, and grammar and sentence structure (see Enclosure 9). However, although this rubric is based on a widely used theory, the researcher made some adjustments to the descriptions in the rubric to suit the research context, namely junior high school students. This adjustment was made because the original rubric was designed for advanced English learners, such as university

students, so that some of the descriptions were considered not relevant when used to assess the writing ability of junior high school students.

In addition, adjustments were made by considering the cognitive level and language development of students, as well as the narrative text genre that was the focus of this study. For example, the use of simple sentence structures, the selection of vocabulary appropriate to the students' level, and an emphasis on main ideas and the completeness of narrative elements. The purpose of this adaptation was to ensure that the assessment can be conducted proportionally, fairly, and following the students' abilities, without compromising the essence of the assessment aspects in the original rubric. However, before the instrument was used for data collection, the researcher first conducted a readability test on the writing instructions to ensure that participants can clearly understand the writing task instructions following their ability level.

a. Readability Test

Before the instrument was used, the researcher conducted a readability test. The writing test instructions were tested for readability before being done by students to ensure that the instructions can be understood according to the research subject, especially by 8^{th} grade students. Bamire and Ogunsakin (2025) defined readability as the capacity of students to understand and derive meaning from a text. In this context, readability also refers to the difficulty and ease of understanding the style of reading or writing. The readability test for this research tool used the Flesch-Kincaid Grade Level (FKGL) and Flesch Reading Ease (FRE) techniques. These two techniques were used to determine how easy the text was to read and understand based on sentence length and the number of syllables in each word.

Furthermore, to assess whether the instructions were appropriate for 8^{th} grade students, the researcher used an online readability tool (Readable.com) to calculate the readability scores. The results of the readability test are presented as follows:

$$FKGL = 0.39\ x\ ASL + 11.8\ x\ ASW - 15.29$$

$$FRE = 206.835 - (1.015\ x\ ASL) + (84.6\ x\ ASW)$$

Where:

ASL = Total Words / Total Sentences

ASW = Total syllables / Total words

Table 3. 6 ***Descriptive Categories used in Flesch-Kincaid Grade Level***

Flesch-Kincaid Grade Level	Readability Level	Grade Level
Below 1.0	Below Kindergarten	Preschool
1.0 – 1.9	Beginner	1st Grade
2.0 – 2.9	Early Elementary	2st Grade
3.0 – 3.9	Elementary	3st Grade
4.0 – 4.9	Elementary	4st Grade
5.0 – 5.9	Upper Elementary	5st Grade
6.0 – 6.9	Middle School	7st Grade
7.0 – 7.9	Middle School	8st Grase
8.0 – 8.9	High School	9st Grade
9.0 – 9.9	High School	10st Grade
10.0 – 10.9	High School	11st Grade
11.0 – 11.9	High School	12st Grade
12.0 – 12.9	High School	13st Grade
13.0+	College and Beyond	College and Beyond

Table 3. 7 ***Descriptive Categories used in the Flesch Reading Ease Formula***

Reading Ease Score	Descriptive Categories	Estimated Reading Grade

Reading Ease Score	Descriptive Categories	Estimated Reading Grade
90-100	Very Easy to Read	5th Grade Level
80-89	Easy to Read	6th Grade Level
70-79	Fairly Easy to Read	7th Grade Level
60-69	Standard Difficult to Read	8th and 9th Grade Level
50-59	Fairly Difficult to Read	10th – 12th Grade Level (High School)
30-49	Difficult to Read	College Level
0-29	Very Difficult to Read	Graduate Level

Table 3. 8 ***The Result of The Readability Test***

Aspect	Result	Readability Level/Categories
Flesch-Kincaid Grade Level	6.1	Middle School
Flesch Reading Ease	67.9	Standard Difficult to Read

Based on the results above, the FKGL score of 6.1 indicated that the instructions were appropriate for 7th grade students. Meanwhile, the FRE score of 67.9 falls into the "Standard Difficult to Read" category appropriate for 8th to 9th grade readers. This result indicated that the instruction text was neither too difficult nor too easy for 8th grade students. However, although the FKGL score was slightly lower than the expected range for 8th grade students (7.0 - 7.9), the FRE score confirmed that the instruction was appropriate and could be understood by junior high school students.

In addition to the quantitative readability test, the researcher confirmed directly with the 8th grade students when the validity and reliability test of the questionnaire was conducted. Students were asked to respond to the given instruction text. The confirmation results for all students showed that

the instructions could be understood well and that they did not find any parts difficult to understand. Thus, this written instruction text was feasible and suitable for use as an instrument for this research.

E. Data Analysis

In this study, data analysis was conducted in two stages: descriptive statistics and inferential statistics using SPSS v24. In the first stage, descriptive statistics were used to summarize and describe the main characteristics of the collected data, including measures such as the mean, median, mode, standard deviation, range, minimum, maximum, and sum of each variable. In the second stage, inferential statistics analysis was conducted, beginning with a normality test using the Shapiro-Wilk test to ensure that the distribution of the two variables was normal. Data can be considered normal if the (p-value) greater than 0.05 (Nuryadi et al., 2017). Based on the results of the normality test, it was found that:

Table 3. 9 ***The Result of Normality Test***

Variable	P-Value	Level of Significance	Criteria
X	0.075	0.05	Normal
Y	0.058	0.05	Normal

Based on the table above, the significance value for the variable reading for pleasure was 0.075, and for the variable students' writing ability in composing narrative text was 0.058. Therefore, because the p-value of both variables was greater than 0.05, it can be concluded that both variables were normally distributed. Therefore, because the data met the assumption of normality, the Pearson Product-Moment correlation technique can be used to determine the correlation between the two variables.

F. Time and Place of the Research

This research was conducted at a state junior high school in Tasikmalaya. It is located on RAA. Wiratanuningrat No.10, Empangsari, Kec. Tawang, Kab. Tasikmalaya. The research time was carried out within the period of research implementation stated in the following table:

Table 3. 10 ***Research Schedule***

Description	Oct/ 2024	Nov/ 2024	Dec/ 2024	Mar/ 2025	Apr/ 2025	May/ 2025	Jun/ 2025	Jul/ 2025	Nov/ 2025
Research Proposal Writing									
Research Proposal Examination									
Data Collection									
Data Analysis									
Report Thesis Result Seminar									
Thesis Examination									