#### CHAPTER III

## **RESEARCH METHOD**

## 3.1 Research Design

This study is a correlation study. According to Gays (2012), correlation studies aim to determine whether and to what extent two variables are correlated. Therefore, this study's objective is to discover correlations between variables. The correlational design of this study is an explanatory design, which, according to Creswell (2012), is an explanatory study design in which the researcher determines the extent to which two variables (or more) co-vary, he determines where one variable It's a correlated design that we're interested in changing. Variables reflect changes to other variables. This study therefore consisted of two variables. We used X as the explanatory variable representing the student's motivation to write, and Y as the dependent variable for the student's writing ability. The purpose of this study was to determine whether there is a link between eighth-grade writing ability at SMP Negeri 2 Muara Jawa and writing motivation.

## **3.2** Determination Techniques for Research Subjects and Objects

How the subject is determined is often referred to as how the data source is determined. The subjects of this study all of Students of SMP Negeri 2 Muara Jawa for the 2020/2021 academic year. Operationally, this research requires determining the subject, namely population techniques and sampling techniques.

#### **3.3 Population and Samples**

#### 3.3.1 Population

Population includes all parts of the study used as study subjects. As for the data sources in this study is eight grade students of SMP Negeri 2 Muara Jawa.

# 3.3.2 Sampling

In this study, the sampling author used the entire sample to obtain the sample. The researchers used a complete sample because the sample contains the entire population. Classes are used as samples for analysis in this study. The sample was class XIII-D, which has 31 students.

## 3.4 Data Analysis Method

#### 3.4.1 Validity Test

Researchers first analyzed the validity of questionnaires and tests before the questionnaires were given to students. According to Pallant (2011), the effectiveness of a scale refers to the extent to which it measures what it purports to measure. He also mentioned that he has three types of validity. In this study, researchers use construct validity because the instruments are tuned by experts. According to Pallant (2011), construct validity involves testing scales in relation to theoretically derived hypotheses about the properties of the underlying variables or constructs, rather than against a single criterion. To analyze the effectiveness of the questionnaire, the researcher used his SPSS 22 program for Windows. The researcher then compares the  $r_0$  and  $r_{table}$  with the product-moment Pearson correlation.

There are two criteria to determine the validity of an article: The measure is

valid if r0> $r_{table}$  reaches the 5% significance level. The measure is ineffective if r0 reaches the 5% significance level.

## **3.4.2 Reliability Test**

Reliability tests are used to measure the consistency of the meter at different time points and are measured by inter-rater reliability. Creswell (2015), states that inter-rater reliability is a method for observing behavior. This means that an evaluator is someone who evaluates or measures the performance, behavior, or ability of humans or animals. Researchers using inter-rater reliability should ensure consistency of test results on written tests. Researchers used an assessment rubric to assist two evaluators, course-writing instructors, in assessing the students' adequacy process for writing narrative paragraphs.

## **3.5** Technique of Data Collection

In collecting the data, researchers will use two methods: a questionnaire and a written test.

## 3.5.1 Students' Writing Motivation Questionnaire

Surveys are data collected by giving respondents a questionnaire or a written response (Sugiyono: 2010).

Questionnaires distributed to students receive grades for column statements. The questionnaire consists of her 30 items. Writers employ the Writing Motivation Questionnaire from Payne Ashley (2012). In this survey, students answer questions from five categories: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. Data from a Questionnaire on Student Responses to Implementing Process Writing Approaches Analyzed by Calculating as Percentages Using Frequency Responses You will be asked to.

129-160	Very High of Motivation
97-128	High of Motivation
65-96	Medium of Motivation
33-64	Low of Motivation
1-32	Very Low of Motivation

 Table 3.1 Categories of Students' Writing Motivation

Adopt by: Anas Sudjiono, 2016

## 3.5.1 Writing Ability Test

A written test was used by researchers to gather information about writing ability. The students' ability to write stories was evaluated through a written test. After the researcher covered the student, it was given to the students to write a paragraph on the topic provided by the researcher.

To obtain data on students' writing ability, researchers used a writing rubric. In her writing department, five aspects of her were assessed's; content, structure, mechanics, grammar, and vocabulary.

	Max. Score	Actual Score
Format -5 Points		
There is a title	1	
Title is centered	1	
First line is intended	1	
Margins are on both sides	1	
Paragraph is double-spaced	1	
Total	5	
	Max.	Actual Score

**Table 3.2 Scoring Rubric Narrative Paragraph** 

	Score	
Mechanism -5 Points		
Each sentence is followed by a	1	
period, question mark or		
exclamation point		
Capitalization is correct	2	
Spelling is correct	2	
Total	5	

	Max. Score	Actual Score
Content -20 Points		
Paragraph fits the task	5	
Paragraph is interesting to read	5	
Paragraph shows thought and	10	
care		
Total	20	

	Max. Score	Actual Score
<b>Organization -35 Points</b>		
A paragraph begins with a topic	10	
sentence that contains both the		
theme and the central idea		
The paragraph contains several	20	
concrete and factual sentences		
that explain or prove the topic		
sentence, including at least one		
example		
Paragraph ends with a proper	5	
closing sentence		

		Max.	Actual Score
		Score	
Grammar and sentence structure	e -		
35 points			
Estimate a grammar and sentence		35	
structure score			
Grand Total		100	
Total		35	

Oshima and Hogue (2006)

The analysis is based on the scoring rubric proposed by Hyland (2003), where scores are categorized based on performance criteria as follows:

Table 3.5 Criteria of Ability	
Score	Criteria of Ability
91 - 100	Excellent
81 - 90	Very Good
71 - 80	Good
61 - 70	Average
51 - 60	Fair
41 - 50	Poor
Less than 40	Inadequate

Table 3.3 Criteria of Ability

#### **3.6 Technique of Data Analysis**

#### **3.6.1 Description Analysis**

To analyze the quantitative data, we compared the test scores before the writer finished with the data from the post-search test. We then analyzed the data to determine whether the written scores met the minimum standards and whether they were improving. From the comparison, the researchers drew conclusions in the form of explanations about whether the use of animated shorts improved students' motivation, narrative text creation, and writing abilities.

a. Normally test

The goal of normal distribution is to see if the data are normally distributed. Ordinary tests were used to determine whether the population model samples from each variable procedure could still have non-normal standard deviations of the data from the results calculation.

## **3.7 Correlational Analysis**

Questionnaire and written test data are analyzed using Pearson's Moment. Pearson's Moment is a technique for looking for correlations between two variables. (Riduwan: 2004).

SCORE	CRITERIA
0,80 - 1,00	Very High
$0,\!60-0,\!79$	High
0,40 - 0,59	Medium
0,20 – 0,39	Low
0,00 - 0,199	Very Low

 Table 3.4: Category for Correlation

# 3.8 Statistical Hypothesis

1. H1: ro > rt = if ro value higher than rt Ha is accepted. It means that there is correlation between students writing motivation and writing ability.

2. Ho: ro < rt = if ro value is lower than rt Ha is accepted. It means that there

is no correlation of the students writing motivation and writing ability