CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

The researcher used a correlational research. According to Cresswell (2012),a correlation is a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently. The purpose of correlational research is to determine the relationship among two or more variables.

In this research, the researcher used Pearson product-moment correlation coefficient, in order to measure the strength and direction of the linear relationship between two variables. There are two types or directions of a correlation. In other words, there are two patterns that the correlation can follow. These are called positive correlation and negative correlation. In this research, the researcher chose positive correlation.

There are two variables in this research, one independent variable and one dependent variable. The independent variable (X) of this research is the students' reading attitude, it is indicated by the students' score of the questionnaire. The dependent variable is the variable which was observed and measured to determine the effect of the independent variable. The dependent (Y) is the student's writing ability, it is indicated by the students' score of the writing test.

B. The Subject and The Object of The Research

The subject of the study was the second year students of Islamic Senior High School Al-Ma'arif Mantiasa Meranti Regency. The object of the research was the correlation between reading attitude and writing ability.

C. The Location and Time of The Research

This research was conducted from July to August 2017 at Islamic Senior High School Al-Ma'arif Mantiasa Meranti Regency. This school is located at Taman Siswa street Mantiasa Meranti Regency.

D. The Population and Sample of the Research

According to Syafi'i (2015), population of the research refers to total number of subjects (sources of data) from which or whom you obtain the data person/s, animal/s, thing/s, or the like.The population of this research was all students at the second year of MA Al-Ma'rif Mantiasa Meranti Regency. There were two classes of the second year, class XI IPS A (25 students) and XI IPS B (25 students), so the number of population was 50 students.

Creswell (2005) states that sample is the group of participants in a study selected from the target population. Arikunto in Erna's thesis (2010) said that if the amount of the subject is fewer than 100, because the number of population was fewer than 100, then the researcher took all of population as sample (respondents) or total sampling.

E. The Technique of Collecting the Data

To collect the data from the sample, the researcher used test. Tests are assessments instruments that pose problems for students' solving. In collecting the data, the researcher gave tests to the students. There are two sets of test:

a. Questionnaire (Reading Attitude)

In order to get the data, the researcher used questioners as the technique of collecting the data. According to Syafi'i (2015), questionnaire is a research instrument consisting of a series of questions to be answered by the respondents. Creswell (2012) stated that there were scoring data that the researcher assigns a numeric score (value) to each category for each question on the instrument used to collect data.

A questionnaire was used to collect the data about the students' Reading Attitude at Islamic Senior High School Al-Ma'arif Mantiasa Meranti Regency. This questionnaire was adopted from Tullock-Rhody R. & Alexander, J.E. A scale for assessing attitudes toward reading in secondary schools. *Journal of Reading,* 23 (2), 609-614. © 1980 International Reading Association. The questions in the questionnaire were presented in likert scales; they were strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (1).

Table.III.1
Blue Print of Questionnaire

NO	Component of Reading Attitude	Number of Questionnaire
1	Affective Component	3, 5, 7, 8, 19, 25
2	Behavioral Component	2, 9, 10, 11, 12, 13, 15, 16, 17, 20, 23
3	Cognitive Component	1,4,14, 18, 22, 24

b. Test (Writing Ability)

In this research, the data were obtained by measuring the students' ability in writing. According to Cohen et al (2007) test is subject to the item analysis. The test was used to measure the students' achievement, to know the students' progress, to motivate and direct student learning, whether it is good or not.

The test was used to measure all kinds of abilities, interests, attitudes, and works. In this case, the students were instructed to write an analytical exposition text in English about certain topic that was given by the researcher.

F. The Technique of Analyzing the Data

In order to get information whether there is a significant correlation between students' reading attitude and their writing ability at the second year of MA Al-Ma'rif Mantiasa Meranti Regency, the data were analyzed statistically. Because there are two variables, the independent variable (X) and dependent variable (Y) which are both scale.

The researcher used the score of questionnaire of variable X and score of writing ability test of variable Y. To analyze the data of students' reading attitude (variable X), the researcher used the formula. (Sudjiono, 2006):

$$P = \frac{f}{N} \times 100\%$$

Where:

P = Number of percentage
F = Frequency
N = Number of sample

To measure the correlation between two quantitative variables, several statistics can be used. According to Neil A. Weiss (2012), the statistic most commonly used is the linear correlation coefficient, r, which is also called the Pearson Product Moment Correlation Coefficient. Product–moment correlation coefficient is a statistic that expresses a correlation statistic as a linear relationship (Cresswell, 2012).

The t-table was employed to see whether there is a correlation between students' reading attitude and their writing ability at the second year of Islamic Senior High School Al-Ma'arif Mantiasa Meranti Regency. The t-obtained value was consulted with the t-table at the degree of freedom (df) = N − 2. Statistically the hypotheses are:

Ho   : $t_0 <$ t-table

Ha   : $t_0 >$ t-table

Ho is accepted if $t_0 <$ t-table or there is no correlation between students' reading attitude and writing ability, Ha is accepted if $t_0 >$ t-table or there is a correlation between students' reading attitude and writing ability.

G. Validity and Reliability

1. Validity

Arikunto (2011) stated that validity is the individual's score from an instrument that makes sense, meaningful, enables you, as the researcher, to draw good conclusions from the sample you are studying to the population. It means that validity is the extent to which inferences made from assessment result are appropriate, meaningful, and useful in

terms of the purpose of the assessment. An instrument is valid if it is able to measure what must be measured.

To analyze the validity of questionnaire data, the researcher used SPSS 16.0 program for Windows. The following table is the criteria of item validity.

Table III. 2
The Criteria of Item Validity

R	Interpretation
0.80 < r < 1.00	Very High
0.60 < r < 0.79	High
0.40 < r < 0.59	Average
0.20 < r < 0.39	Low
0.00 < r < 0.19	Very Low

Based on the try out result of the instrument validity to the 25 items, it shows that 24 items were valid, and 1 items was invalid, it means that there were 24 items that could be used in this research. The following table is the result of the instrument validity.

Table III. 3
The Analysis of Reading Attitude
Questionnaire Validity

Item	R_{11}	Interpretation of Validity	R_t	Status
1	0.44	Average	0.284	Valid
2	0.37	Low	0.284	Valid
3	0.17	Very Low	0.284	Invalid
4	0.44	Average	0.284	Valid
5	0.64	High	0.284	Valid
6	0.32	Low	0.284	Valid
7	0.48	Average	0.284	Valid
8	0.43	Average	0.284	Valid
9	0.29	Low	0.284	Valid
10	0.48	Average	0.284	Valid
11	0.32	Low	0.284	Valid
12	0.32	Low	0.284	Valid
13	0,40	Average	0.284	Valid
14	0,44	Average	0.284	Valid
15	0.72	High	0.284	Valid

Item	R_{11}	Interpretation of Validity	R_t	Status
16	0.56	High	0.284	Valid
17	0.33	Low	0.284	Valid
18	0.63	High	0.284	Valid
19	0.69	High	0.284	Valid
20	0.48	Average	0.284	Valid
21	0.69	High	0.284	Valid
22	0.47	Average	0.284	Valid
23	0.40	Average	0.284	Valid
24	0.33	Low	0.284	Valid
25	0.39	Low	0.284	Valid

The data above were consulted with r_{table} with significance level of 5% ($\alpha = alpha = 0.05$). There were 50 students; meaning that N = 50 with df = N – 2 = 50 – 2 = 48. The writer took df 48, so r_{table} acquired was 0.284. From the table above, the items were valid because $r_{11} > r_{table}$.

2. Reliability

Reliability has to do with accuracy of measurement. This kind of accuracy was reflected in obtaining the similar results when measurement was repeated on different occasion or with different instruments or by different person. The characteristic of reliability is sometimes termed consistency (Brown, 2003). And this research is internal consistency reliability.

According to Creswell (2012), internal consistency reliability is the instrument administered once; using one version of the instrument and each participant in the study completes the instrument. The table below is the categories of reliability test used in determining the level of reliability of the tests.

Table III.4
The Level of Acceptable Reliability

No	Reliability	Level of Reliability
1	>0.90	Very High
2	0.80-0.90	High
3	0.70-0.79	Reliable
4	0.60-0.69	Marginally/Minimally
5	<0.60	Unacceptably Low

(Cohen, Manion, &Morrison, 2007)

a. Questionnaire

To obtain the reliability of the questionnaire given, the researcher used SPSS 16.0 program to find out whether the questionnaire is reliable or not.

Table III.5
The Realibility Level of the Reading
Attitude Questionnaire

Cronbach's Alpha	N of Items
.842	24

From the table above, it can be seen that the value of cronbach's alpha is 0.963. The value is higher than the standard cronbach's alpha which is 0.60. Therefore, it can be concluded the questionnaire is reliable, and the level of reliability is very high.

b. Writing Analytical Exposition Test

Based on rubric of writing from Jacobs (et al, 2002), inter-rater reliability formula was used because the researcher used two raters in assessing the writing of the students. According to Creswell (2012), the researcher compared scores from the two raters (rater 1 and rater 2) in order to find out if the scores are similar or not.

In order to find out the correlation between the scores given by rater 1 and 2, the researcher used the analysis on SPSS 16.0 version. below is the result.

Table III.6
Reliability Statistics of the Writing Test

Cronbach's Alpha	N of Items
.787	2

The result shows that the value of Cronbach's alpha is 0.787 for the writing scores assessed by the two raters. It can be concluded that the writing rubric is reliable.