CHAPTER III
RESEARCH METHODOLOGY

3.1 Research Method

Correlation studies would be used in this investigation. In order to gauge the degree of correlation between two or more variables, correlation research, according to Kothari (2004, p. 30), examines the joint change of two or more variables. It claimed that two or more variables would be interpreted in this type of research design in the future. According to Kaufman and Marcyzk (2005, p. 3), the objective of correlation study was to ascertain if two or more variables are connected. A relationship between two variables indicates that they are positively connected. Two factors would be linked in this study: students' attitudes toward reading and their reading proficiency.

Therefore, correlation research used data produced from preexisting variables, according to Ary (2010, p. 349). The data come from a single group, and there was no modification. The sample was based on actual facts relating to the variables under investigation, and the results are real. In this study, the data from the students' tests used to fill out the questionnaires about their reading attitudes would be studied since the reading proficiency of the students would be determined by the combined score of the teachers who teach their class. The variables were examined to determine whether there was a correlation between them after receiving both scores for each variable.

3.2 Population, Sample and Sampling Technique

1. Population

The entire population was the focused of investigation. According to Ary (2010, p.142), a population is a collection of people who shared a particular trait. The topic would be studied in its entirety. Students in the eighth grade have taken English classes at SMPN 7 Kotabumi during the academic year 2022/2023 made up the population of this study.

TABLE 1
THE POPULATION OF STUDENTS

No	Class	Gender		Total
		Male	Female	
1	VIII A	12	21	33
2	VIII B	14	19	33
3	VIII C	17	16	33
4	VIII D	18	15	33
5	VIII E	20	13	33
6	VIII F	15	17	32
7	VIII G	16	16	32
8	VIII H	16	16	32
Total		128	133	261

Source: Data Documentation at eighth grade in English classes at SMPN 7 Kotabumi

2. Sample

According to Sugiono (2018, p.118) ample is a part of the whole and characteristics possessed by a population. If the population is large, so that researchers certainly do not allow to study the whole population some of the obstacles that will be faced include limited funds, energy and time, in this case it is necessary to use samples taken from that population.

TABLE 2
THE SAMPLE OF STUDENTS

Class	Gender		Total
	Male	Female	
VIII F	15	17	32

Source: Data Documentation at eighth grade in English classes at SMPN 7 Kotabumi

3. Sampling Technique

Understanding sampling techniques according to Sugiyono, sampling techniques are sampling techniques (Sugiyono, 2001: 56). Because the classes are homogeneous, the sample for this study was taken using a cluster random sampling technique. The classes are selected and named on a piece of paper using cluster random sampling techniques. These pieces of paper are then rolled up and placed. Samples were obtained by shaking the container until the writing was received on a roll of paper brought by one class.

3.3 Data Collecting Technique

Questionnaire was used to collect the data of students' reading attitude while for the students reading comprehension achievement was the accumulation score from the lecturer who taught the class.

1. Questionnaire

The questionnaire was used to measure students' reading attitude. According to Christensen (2000, p.34) a questionnaire is a self-report data-collection instrument that each research participants fills out as part of a research study. Questionnaire was used so that they could obtain information about the thoughts, feelings, attitudes, beliefs, values, perceptions, personality, and behavioral intentions of research participants. In other words, the researcher attempted to measure many different kinds of characteristics in questionnaire. Hence, in this study, to obtain the data of the students' reading

attitude, the questionnaire was used.

The Likert scale was used and mostly the options were in form of "strongly disagree (SD)", "Disagree (D)", "undecided (U)", "agree (A)", "strongly agree (SA)". In doing the questionnaire, the respondents were expected to choose one of those choices that they thought and felt. In this research, the questionnaire was given to the students to find numerical data of students' reading attitude. Each item of the questionnaire had five options (SD, D, U, A, SA) with the scale of scoring from 1 to 5. The questionnaire would adapt from Alexander and Rhody about 25 items and consisted of 5 aspects.

2. Documentation

In case to measure students' achievement, the total score during the students' learning process at the eighth grade reading class which was obtained from the teacher who taught the class was used. The total score was obtained from the accumulation score of: (a) assignment, (b) midterm and (c) final test that determined the students' achievement at the eighth grade in English classes at SMPN 7 Kotabumi academic year 2022/2023.

3.4 Instrument of the Research

3.1.1 Research Instrument of Reading Attitude

a. Conceptual Definition of Reading Attitude

Reading attitude is a psychological construct. It is a mental and emotional entity that inheres in, or characterizes, the person. Attitude is characterized by an individual which emotion has become one of the entity of it. In line, attitude is the

manner on how someone is responding any object shows their attitude towards the object whether favorably or unfavorably.

b. Operational Definition of Reading Attitude

Operational reading attitude is the score obtained by students form working on students' reading attitude. To get data in reading attitude, the researcher was used questionnaire, which adopted by Tullock and Alexander as cited in (Pramita, 2019, p.5). The questionnaire used as an instrument to collect data on students' reading attitude. According to Arikunto (2010, p. 194), questionnaire is a number of written questions that are used to obtain information from respondents in the sense of reports about their personal or known matters. The kind of questionnaire is close-ended question. Close-ended question means that the researcher has prepare the answer and the respondents choose the answer provided. This research was used Likert Scale. According to Tullock and Alexander as cited in (Pramita, 2019, p.5), school related reading, library reading, reading at home, recreational reading and general reading are aspects of the instrument to measure students' reading power, this is the researcher put it in chapter 2 page 16 of paragraph 1, sentence 2.

c. Spesification Instrument of Reading Attitude

From the conceptual and operational definition, there are 50 statements of questionnaire to measure the students' reading attitude. These statements would be calculated the validity before the questionnaire would be distributed to students at the eighth grade in SMPN 7 Kotabumi.

TABLE 3
THE SPECIFICATION INSTRUMENT OF READING ATTITUDE

Dimension	Aspect	Items		Total Items
		Odd	Event	
Reading Attitude	School related Reading	11, 27, 29, 31, 33	18, 26, 28, 30, 32	**10**
	Reading in the Library	9, 39, 41, 43, 45	20, 40, 42, 44, 46	**10**
	Reading in the Home	7, 23, 47, 49	4, 10, 12, 16, 48, 50	**10**
	Other recreational Reading	5, 17, 25, 35, 37,	22, 24, 34, 36, 38	**10**
	General reading	1, 3, 13, 15, 19, 21	2, 6, 8, 14	**10**
Total		**25**	**25**	**50**

Source: Tullock and Alexander as cited in (Pramita, 2019, p.5)

3.4.2 Research Instrument of Reading Achievement

a. Conceptual Definition of Reading Achievement

Reading achievement is the level of success or proficiency a student achieves in reading skills, which is critical to academic success. Factors influencing reading achievement include direct concept instruction, socioeconomic status, maternal education level, and presence of pregnancy. Studies show that direct concept instruction in spatial, quantitative, and temporal concepts has a positive impact on reading achievement.

Based on the reading achievement is a multifaceted concept that is influenced by various factors such as literacy initiatives, literacy environment at home, self-regulation, academic self-concept, and goal orientation.

b. **Operational Definition of Reading Achievement**

Operational Definition of Reading Achievement is the score obtained by students from the learning process in class VIII which is obtained from the teacher who teaches in

that class. The total score was obtained from the accumulated score of: (a) assignment, (b) midterm and (c) final test that determined the students' achievement at the eighth grade in English classes at SMPN 7 Kotabumi academic year 2022/2023.

c. **Specifications Instruments of Reading Achievement**

The specifications instrument of reading achievement instrument have been explained in the operational definition of reading achievement, namely that to measure it, the accumulated scores on assignments, mid-semester exams and final exams are used.

3.4.3 Validity and Reliability of the Instruments

Before the instrument can be used to collect data, the research must be carried out on trials at eight grade of SMPN 7 Kotabumi.

Validity is the degree of accuracy between the data obtained on the object of research and the data submitted by the researcher. In other words, valid data is data that is the same or does not differ from one another. It similarly Sugiyono (2017, p. 125–129) perception who entitled there are 3 kinds of validity to measure, they are content validity, construct validity and external validity. In this case, the researcher would use content and construct validity.

Cresswell (2012, p.159) stated that validity means the score of interpreted with the concept or construct that the test is assumed to measure. A good instrument must have validity, so it can be measured based on aspects in the attitude of reading itself. Construct and content validity would be used to know the instruments were valid or not. According to Best and Khan (2012, p.296), construct validity is the degree to which scores on a test can be accounted for by the explanatory constructs of asound theory. Construct validity is focused on the

aspects of the instruments or questionnaire which can measure the attitudes need to be measured. The questionnaire was adapted from Alexander and Rhody for 50 items and developed by the writer. The aspects were reading in the home, reading in the library, reading related school, other recreational reading and general reading. Construct validity is another type of validation that can be used from the opinions of experts. In this case, after the instrument is constructed regarding the aspects to be measured based on a certain theory, then it would be consulted with experts. In construct validity, the researcher would use experts' judgment to give their opinion and validate the instrument. The researcher would ask two validator to check the instrument and then decide the instrument is acceptable to use or not. Furthermore, the researcher chooses Mrs. Dewi Sri Kuning, S.Pd., M.Pd. and Mrs. Dewi Sartipa, M.Pd.B.I as validator of this instrument.

Another part, Arikunto (2010, p.213) validity is one type of validation which when using instrument in the form of a test, the validity test can be done by comparing the contents of the instrument with the subject matter that has been taught. In content validity, the researcher used formula to measure the validity of instrument. The item validity is measured by employing *Pearson Product Moment* as the following:

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2 \times \{N\sum Y^2 - (\sum Y)^2\}}}$$

Where:

Error! Reference source not found. = Correlation coefficient of each item score

Error! Reference source not found. = Number sum of each item score

Error! Reference source not found. = Number score of item

N = Number of respondent

The levels of validity test are the calculation result of r observed consulted with r table score. If r observed is similar or bigger than that of r table, it means the instrument is valid. In this case, the researcher has presented a table of r value in product moment to be used as a reference and a basis for whether or not an instrument appropriate to used. The calculated r value obtained used to compare with r table so that can be known whether the instrument is valid or not.

According to Sugiyono (2017a, p. 268), the degree of consistency and stability of the data is determined by reliability. In a quantitative view, reliability can be measured if the resulting data are not different. For the technic of reliability would use Split half from Spearman. For the test of the questionnaire, the following of *Alpha Formula* used to find the reliability of instruments by Arikunto (2010, p. 239) as follow:

$$r_{11} = \frac{(k)}{(k-1)}\left(1-\frac{\sum_b^2}{\sigma_t^2}\right)$$

Where:

Error! Reference source not found. = Instrument Reliability

k = Number of question item

Error! Reference source not found. = Sum of item variants

Error! Reference source not found. = Variants Total

Meanwhile, according to Ghozali as cited in Gunawan & Sunardi (2016, p. 3) the level of reliability test are done by comparing r observed and r table. If r observed is similar or bigger than the r table and if give value >0.60 it means the instrument is reliable.

3.5 Data Analysis Technique

In quantitative research, data analysis technique is a way to answer the formulation of the problem or test the hypothesis that has been formulated. After collecting the data, then the data were analyzed by using independent sample t-test. There was two tests done before analyzing the data by using independent sample t-test. There were Normality test and Homogeneity test.

a) Normality Test

The normality is used to know whether the data have normal distribution or not. In this research the writer used statistical computation by using SPSS (Statistical Program for Social Science).The normality test was using Kolmogrov-Smirnov. The hypotheses formulas are :

Ho : The data are normally distributed

Ha : The data are not normally distributed.

While the criteria acceptance or rejection of normality test are:

H_o : is accepted if sig. $\geq \alpha = 0.05$

H_a : is accepted if sig. $< \alpha = 0.05$

b) Homogeneity Test

After the data passed the normality test, the calculation is continued by homogeneity test. The researcher would use F-test. According to Sugiyono (2010, p.140) the formula to calculate homogeneity as follow:

$$F = \frac{\text{The highest variance}}{\text{The lowest variance}}$$

The test criteria are:

a) If $F_{observed} \leq F_{table}$, H_o is accepted (the variance of the data are homogeneous)
b) If $F_{observed} > F_{table}$, H_o is rejected (the variance of the data are not homogeneous)

3.5.1 Hypothesis Test

The hypothesis is very important to find out whether or not the alternative hypothesis (H_a) or null hypothesis (H_o) is accepted in this research. In this case, the writer used statistical computation by using SPSS (*Statistical Program for Social Science*) for hypothetical test. The purpose of using SPSS in this case was for practicality and efficiency in the study. The hypotheses are:

H_o : There is no correlation between Students' Reading Attitude and Their Reading Achievement of Eight Grade in English Classes at SMPN 7 Kotabumi Academic Year 2022/2023

H_a : There is a correlation between Students' Reading Attitude and Their Reading Achievement of Eight Grade in English Classes at SMPN 7 Kotabumi Academic Year 2022/2023

While the criteria acceptance or rejection of normality tests are:

H_o: is accepted if $sig \geq \alpha = 0.05$

H_a : is accepted if $sig < \alpha = 0.05$

The coefficient is between -1 up to +1. The negative coefficient shows contrary correlation, while the positive coefficient shows there is a correlation. Below is the interpretation of coefficient correlation:

a) Between 0.800 to 1.00 : very high correlation.

b) Between 0.600 to 0.800 : high correlation

c) Between 0.400 to 0.600 : medium correlation

d) Between 0.200 to 0.400 : low moderate

e) Between 0.00 to 0.200 : very low correlation.