

## **CHAPTER III**

### **METHOD OF RESEARCH**

#### **A. Research Design**

This is a correlational research. Correlational research indicates an association between two or more variables. Creswell (2008, p.358). Furthermore, in conducting the research, the researcher uses quantitative method. Quantitative research is essentially collecting numerical data to explain a particular phenomenon. Muijis (2004, p.2). In the research, the researcher uses multiple choice questions to score students' reading comprehension and their vocabulary mastery. The questions are based on the syllabus of second grade of mts Darul hijrah Putra. The test consists of 20 items of reading comprehension and 20 items of vocabulary test. After that, Pearson Product Moment formula is used to correlate two variables and to find out the significance correlation between students' reading habit and their vocabulary mastery. The independent variable of this research is the students' reading habit (variable X) and the students' vocabulary mastery is the dependent variable (variable Y).

#### **B. Research Setting**

This research takes place at Darul Hijrah Islamic Boarding School for Boys which is in Cindai Alus Martapura, South Kalimantan. This school gives a full action in educating its students in term of their religious, knowledge, life skill and students'

study. They settle its students' activities in full 24 hours a day in all aspect from the dawn until the late night. This school has two things that they had in priority; discipline and foreign language (English and Arabic). In this research, the writer tries to observe Darul Hijrah Islamic boarding school for boys. It is a private school that exists for learning English and Arabic. This research conducts the data on Mei to June.

### **C. Subject and Object**

#### **1. Subject of the study**

The subject of this research is taken from second grade students of MTs Darul Hijrah Putra. The students are divided into four classes. These classes are II A, II B, II C, and II D. There are 112 students in this grade on this year.

Table 3.1  
Distribution of the Classes

No	Class	Population
1.	II A	29 students
2.	II B	30 students
3.	II C	28 students
4.	II D	25 students
Total		112 students

According to Arikunto(2006, p.51), if the population is more than 100, the researcher can take 25% from it. Furthermore, proportional random sampling method is used in determining the sample of this research.

Table 3.2

Subject of research

No.	Class	Population	Sample
1.	A	29	7
2.	B	30	8
3.	C	28	7
4.	D	25	6
	Total	112	28

Based on the sampling theory, the researcher takes 25 % every class data of student. This consists of 4 classes, namely A, B, C and D. So, the student's total who will be sample in this research is 28 students and they are taken from four class.

2. Object of the study

The object of this research is the correlation between students' vocabulary mastery and their reading comprehension ability of the second students of MTs

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**D. Techniques of Data Collecting**

In collecting the data, the instruments of this research are vocabulary test to measure the students' vocabulary mastery (variable X) and reading test to measure the students' reading comprehension (variable Y).

Test of this research was used as primary data. This instrument was used to answer the question from the researcher. Multiple choice questions to score students' reading comprehension and their vocabulary mastery. The test consists of 20 items of reading comprehension and 20 items of vocabulary test. The researcher check the answer sheet from 28 students who were selected based on the theory of purposive sampling. This test conducted for two week from the 20<sup>th</sup> May until 31<sup>st</sup> May 2019.

### **E. Data Analysis**

To find out the influence of the students' vocabulary to their reading comprehension ability, the researcher uses a Pearson product moment correlations. This technique correlation is used to find out connection between two variables (Sugiyono. Bandung : 228).

The formula of product moment correlations is :

$$r_{xy} = \frac{\sum xy}{\sqrt{\sum x^2 \sum y^2}}$$

$r_{xy}$  = correlation between variable x and variable y

$\sum xy$  = Accumulative score of multiplication of variable x and variable y

$\sqrt{\sum x^2 \sum y^2}$  = Accumulative score of multiplication of variable x<sup>2</sup> and variable y<sup>2</sup>

$x$  =  $(x_i - \bar{x})$

$y$  =  $(y_i - \bar{y})$

Considering high or low the significant correlation between those two variables should be consulted to the interpretation table of significant level from Sugiyono as below :

**Table 3.3**  
**An Interpretation Toward A Correlation**

Interval	Correlation Degree
0,00 – 0,199	Very Low
0,20 – 0,399	Low
0,40 – 0,599	Moderate
0,60 – 0,799	Strong
0,80 – 1,00	Very Strong

Sugiyono (2015 p : 231 )

$H_0$  = There is no a significant correlation between vocabulary mastery and reading comprehension ability of the second grade students of MTs Darul Hijrah Putra Martapura.

$H_a$  = There is a significant correlation between vocabulary mastery and reading comprehension ability of the second grade students of MTs Darul Hijrah Putra Martapura.

a. Statistic Hypothesis

$XY$  = The correlation between vocabulary mastery and reading comprehension ability of the second grade students of Mts Darul Hijrah Putra Martapura.

$H_0$  =  $XY = 0$

$H_a$  =  $XY \neq 0$