CHAPTER III
METHODOLOGY OF RESEARCH

1. Place and Time of research

In this research the writer takes at First year of Vocational High School Bismillah (SMK Bismillah) Padarincang Serang. It is located at Barugbug Padarincang Serang and for the time to do this research are since September 14th to 29th, 2017.

2. The Methods of Research

The method that will be applied in this study research is descriptive method. According to Kothari (2004), Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group, whereas diagnostic research studies determine the frequency with which something occurs or its association with something else.[1]

For the measurement the student's Motivation in Learning Reading and Their Achievement, the writer used the correlation

---

[1] C.R Kothari, *Research Methodology (Methods and Techniques),* Second Revised Edition (India:New Age International Publisher, 2004) , p.37.

studies and the relationship degree of two variables was measured by the correlation index knows as "coefficient correlation".

Base on explaining above, the researcher has used person product moment correlation as the statistic techniques in analyzing the data, and to determine the coefficient Correlation between Student's Motivation in Learning Reading and Their Achievement. While the procedure the writer use to collect data as follows:

a. Interview

b. Observation

c. Collecting data

3. Population and Sample

a. Population

The population of the study is the whole students in the second grade of TKJ (*Tekhnik Komputer Jaringan*) Majors of SMK Bismillah Padarincang Serang in the amount of 120 students in two classes. Where as the samples which are classes by random sampling system are only one class 30 students (25% of population) as the informants. The writer hopes that this number can help her make a valid result.

b. Sample

Sample is a part of object researched from all population. The writer takes the sample part of second grade students of SMK Bismillah Padarincang Serang.

4. Technique of Data Collecting

Further more, in completing this data and to know The Student's Motivation in Learning Reading and Their Achievement, the writer will do the following techniques:

a. Test

The researcher conduct reading test to know the student's achievement in reading. The reading test, students are given matter as much 15 points. And the assessment of reading test using the following formula:

$$\text{Assessment} = \frac{\text{Right Answers}}{\text{Maximum Score}} \times 100$$

b. Questionnaire

The research instrument which is used in collecting the data is a reading motivation questionnaire. The questionnaires based on indicators of motivation in reading and they consist of 15 items, and the item has five options according to Likert

Scale from 1 to 5, with 1 *(Strongly agree), 2 (Agree)*, 3 *(Don't know)*, 4 *(Disagree), 5 (Strongly disagree).* [2] Before the students fill the questionnaires, the writer gives the explanation and direction about what the students should do with the questionnaires to conduct motivation test to know the student's motivation.

To interpret the student's score, according to positif-negatif, (A = 5) Extremely good and (E = I) Extremely low/ Fair, the levels to group the students score are as follows:

A = 5

B = 4

C = 3

D = 2

E = 1

c. Observation

Before doing the research, the writer first observes the location of the school and she also observes the population where the research is going to carried out. By observation, the

---

[2] Juliansyah Noor, *Metodologi Penelitian (Skripsi, Tesis, Disertasi dan Karya Ilmiah),* Cet ke-1, (Jakarta : Kencana, 2011), p. 128.

researcher do observed to know the Student's Motivation in Learning Reading and Their Achievement and the writer can see directly to get the file.

d. Interview

Interview is form of verbal communication and dialogue to get the information of research needed. Or it can be concluded that interview is one of the techniques of collecting data that is done by the writer to know the further information about object researched and to collect data directly. Interview was asking directly about indication researched.

Submitted to:

1. The English Teacher at SMK Bismillah Padarincang Serang.

2. The students as informants at SMK Bismillah Padarincang Serang.

5. The Technique of Data Analysis

In analyze the data, the writer analyze by using statistic calculation of the students test, with following steps:

1. Counting up the total score of the student's motivation test.

2. Determining the class interval by using formula K = 1 + 3,3 (log n).

3. Determining the Range of data by using formula R = the lowest score- the highest score.

4. Looking for the length of class interval by using formula P = r/k.

5. Making the table of distribution of frequently looking for the mean, median and modus of data.

6. Looking for the standard t of deviation by using formula:

$$SD = \frac{\sum f(X - x)}{n - 1}$$

7. Arrange distribution of observation an expectation by using the table.

8. Looking for the score of the Chi- square by using formula

$$X^2 \frac{(Oi - Ei)}{Ei}$$

9. Determining the degree of freedom of the data by using formula df = K – 3

10. Looking for the score

11. of Chi-Square table with the tariff of significance choose.

12. Determining the normality of frequently distribution of both variable, with criteria as follows:

$Ho = X^2o < X^2$ in which $Xo = X^2 \text{count}^2$

$Hi = X^2o > X^2$ in which $Xo = X^2 \text{table2}$

It means that the data has normal distribution if Xo less than distribution (reject). Testing the linearity of both variables by using the simple linear regression by using formula $Y = a + b\ x$. While coefficient "a" can be found by using following formula:

a. $\dfrac{(\sum y)(\sum x) - (\sum x)(\sum Y)}{n\sum X - (\sum X)}$

While coefficient "b" can be found by using following formula:

b. $\dfrac{N\sum xy - (\sum x) - (\sum y)}{\sqrt{\{N\sum x\}\{N\sum y - (\sum y)\}}}$

Testing the student's Motivation in Learning Reading and their Achievement by using person product moment formula:

$r\ xy = \dfrac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{\{N\sum X^2 - (\sum X)^2\}\{N\sum Y^2 - (\sum Y)^2\}}}$ [3]

---

[3] Anas Sudijono, *pengantar statistik pendidikan*, cet ke-10,(jakarta: PT.Raja grapindo Persada,2000), p.193.

Comparing "r" obtained "r" critical values of the person product

moment correlation coefficient with the criterion as follow:

Ho = r obtained < r table

Hi = r obtained > r table

Determine interpretation of correlation as follows:

1. 0,00 – 0,20 = Very Low

2. 0,20 – 0,40 = Low

3. 0,40 – 0,70 = Fair

4. 0,70 – 0,90 = High

5. 0,90 – 1,00 = Very High[4]

[4] Anas Sudijono, *pengantar statistik pendidikan*, p.180