CHAPTER III
RESEARCH METHOD

In this chapter the researcher present about research design, population and sample, research instrument, technique of collectingdata, tehnique of analyzing data and procedure of the research.

A. Research Design

This research is correlation research desi is research uses correlation method. It is one of method that correlate between one variable to other variables for the purpose of describing existing condition and result of the correlation between variable. It means to know have or not correlate between two or variable. This research is connecting between motivation in learning English and English learning achievement. This research is using two variables. They are:

Variable x : Motivation in learning English

Variable y : English learning achievement

B. Population and Sample

1. Population

According to (James, 2000:85) Population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which we intend to generalize the results of the research. Population of this research is the seventh grade students of SMP N 01 Bengkulu

city. It consist of 8 classes, from (VII A – VII H). The total number of population is 280 students. The total number of the seventh grade student of SMP N 01 Bengkulu in academic year 2023/2024 are showed in the table 2.

Table 3.1

Population of the research

No	Classes	Male	Female	Total
1	VII A	16	19	35
2	VII B	15	20	35
3	VII C	16	19	35
4	VII D	14	21	35
5	VII E	20	15	35
6	VII F	25	10	35
7	VII G	19	16	35
8	VII H	20	15	35
9				
10				
TOTAL				280

2. Sample

According to (james,200:86) The sample is the group of elements, or a single element, from which Sample: Group of subjects from data are obtained. Although the phrase “the sample included. To select the sample the researcher used

purposive samplingtehnique, (suharsimi, 2014:175) states that purposive sampling is the technique of taking samples is not based on random, regional or strata, but based on the existence of considerations that focus on specific goals. It is a tehnique determine sample with particular consideration. There were some criteria to select the sample. There were the member of the selected groups have similar characteristics, such as the number of student, age, mean score, and English teacher.

In this research, researcher use simple random sampling to choice the sample because the population of seventh grade more than one hundred and the students ability are homogeny. It related to (sugiyono, 2008:43) states simple random sampling is the thecnique to get the sample randomly. the researcher was chose two classes as sample there are VII B and VII C. The researcher chose both of classes because they have similar characteristic based on criteria purposive sampling tehnique above.

Both of the classes are shown in table 3.3 below

Table 3.3

Sample of research

No	Class	Male	Female	Total
1	VII B	15	20	35
2	VII C	16	19	35
	Total			

C. Research Instrument

1. Questionnaire

The researcher used questionnaire to know about students motivation in learning English The questionnaire consisted of 20 items, divided into 10 questions for observing intrinsic motivation statements and 10 questions for observing extrinsic motivation statements. The instrument has some alternative options based on Likert Scale : always, sometimes, and never. The questions of questionnaire are taken from William and Burden's ramework about the indicator of motivated learner.

Table of questionnaire

No	Questions	Always	Sometimes	Never

The researcher formulated it into some statements in the questionnaire from the description. To know the students' English learning achievement, the researcher used their midterm scores as the documentation. The data was collected from the English teacher. After getting data from the students in the questionnaire, the researcher need to analyze the data and correlate between questionnaire result and students' English learning scores.

Table of students responding

NO	Alternative Answer	Frequency	Percentage
1	Always		
2	Sometimes		
3	Never		
Total			

1. **Validity and Reliability of the instrument**

   a. **Validity**

   (Gronland, 1969:126) state that validity refers to the appropriateness of the interpretations of test result. In addition, according (Brown,1996:101)test validity is the degree to which a test measure what it claims to be measuring.

   There are several concepts of validity used in the test according to (Gronlund,1969:126) agreed are:

   (1) validity refers to the interpretation of test results

   (2) validity is inferred from available evidence

   (3) validity is specific to a particular use selection, placement, evaluation of learning

   (4) validity is expressed by degree.

   According to (P Haris,1969:19) There are three ways to look at the validity of a test: content validity, construct validity, and criterion-related validity. Harris

said that the analysis accords with the views of recognize authorities in the stills area and the then reflects such an analysis, it may be said to have content validity.

$$R_{xy} \frac{n\sum x_i y_i - (\sum X)(\sum Y)}{\sqrt{\{n\sum x_i^2 - (\sum x_i)^2\}\{n\sum y_i^2 - (\sum y_i)^2\}}}$$

Note:

N: number of subjects

XY: the result of the multiplying the x score and the y score

X: score from the first test

Y: score from the second test

b. Reliability

(Harris, 1969,24) state that reliability means the stability of test scores. Adequacy of sampling can affect the reliability test. Reliability indicates whether the instrument is reliable and can be used as a tool for collecting data. Reliability means the stability of the test score when the test is used. In conclusion, reliability is important. It is an application of design in a component so that the component can carry out its functions properly and in accordance with the design process that has been made.

$$(KR-20)=\frac{n}{n-1}\left(1-\frac{\sum s^2}{\delta}\right)$$

Note:

ri: internal reliability of all instruments

k: Number of items in the instrument.

Pi: Proposal for number of subjects who answer item 1

Ki: 1-Pi

2. Documentation

Another data needed to help the researcher conduct the research is documentation, in implementing questionnaire needing supporting such as photos, students, and condition of the school.

D. Tehnique of Colleting the Data

1. Normality Test

The normality test is use to measure whether the data in the class are normally distributed or not. In this study the researcher use statistical computation by using SPSS (Statistical Package for the Social Science) for normality of test. The test of normality employed are Kolmogorov-Smirnov and Saphiro-Wilk.

The hypothesis formulas are:

H_0 = the data have normal distribution

H_a = the data do not have normal distribution

While the criteria acceptance or rejection of hypothesis were:

H_0 is accepted if Sig (Pvalue)≥ α = 0.05

H_a is accepted if Sig (Pvalue)< α = 0.05

To collect the data the researcher used Questionnaire. This was used by providing a set of questions which were answered by the respondent.

$$p_i = \sum F_j + F_i$$

Note:

Pi: expected frequency of data -i

Fi: frequency of data -i

$\sum$: Number of frequency of previous data

E. Tehnique for Analyzing the Data

The tehnique of data analysis consist of data from obsevation, data from document and data from test will analyzing in some ways as presente below:

In this research, the writer used correlation product moment. Arikunto

(2006:271) say that correlation product moment is used to determine correlation

$$r_{xy} = \frac{N\sum XY - (\sum X)\sum Y)}{\sqrt{\left[N\sum X^2 - (\sum X)^2\right]\left[N.\sum Y^2 - (\sum Y)^2\right]}}$$

$r_{xy=}$coefficient correlation product moment

N = amount of research subject.

$\sum_X$ = amount of total score of item

$\sum_Y$ = amount of total of item.

$\sum_X 2$ = amount of total square of item.

$\sum_Y 2$ = amount of total square item.

$\sum xy$ = amount of result of multiplication of total score of item.

The statistical hypothesis with

significance level 5% was formulated as

follow:

Ho : r = 0 .....…(2)

Ha : r ≠ 0 .....…(3)

If r_{xy}> r table means there is correlation

between X variable and Y variable, Ha is

accepted and Ho is rejected.

If r_{-xy}< r table means there is no

correlation between X variable and Y variable, Ho is accepted and Ha is rejected.

UNIVERSITAS ISLAM NEGERI FATMAWATI SUKARNO
BENGKULU