CHAPTER III

RESEARCH METHODOLOGY

This chapter discusses about the research methodology. Research method is the step how to get the result of the study. It covers research type, research design, time and place, sample and population, research instrument, data collection procedure, and data analysis procedure.

A. Research Type

The writer used the quantitative method to analyze the data. Quantitative research deals with questions of relationship, current status that the writer can answer by gathering and statistically analyzing numeric data. It can be further classified as experimental and non-experimental.¹ The quantitative used to analyze data of Dayakese students' motivation in learning English of senior high school in Palangka Raya at SMA Negeri 4 Palangka Raya. Focus on Dayakese students whom learn English.

B. Research Design

The design of this study is descriptive quantitative design because the writer wants to describe of Dayakese students' motivation and to know the motivation Dayakese students usually use in learning English of senior high school in Palangka Raya at SMA Negeri 4 Palangka Raya. This study

performs descriptive quantitative research. It is using quantitative approach because quantitative is the data that from of number using statistic data. According to Jujun states in Rahardjo “dalam penilitian kuantitatif, dapat dikatakan bahwa metode yang digunakan selalu menurut alur berfikir ilmiah yang disebut logico-hipotetico-verification”. From the statement, it help the writer to find out the result of Dayakese student motivation and the motivation that Dayakese students usually use in learning English of senior high school in Palangka Raya at SMA NEGERI 4 Palangka Raya. Focus on Dayakese students whom learn English.

So descriptive quantitative research means to find out and describe the phenomena through the process observation, questionare, and documentation in detail and clearly as reality.

C. Time and Place

The study conduct in academic year 2016/2017. The place of this study at senior high school in Palangka Raya, it is at SMA Negeri 4 Palangka Raya on Sisingamangaraja III street Palangka Raya. In SMA Negeri 4 it have heterogen students, it means in this school not only Dayakese learner but also javanese, sunda, betawi learners to. Its reasoon why writer take this place, but writer did not compare their motivation to another ethic this is only Dayakese ethic.

\[2\] Mudja Rahardjo, *Pengantar Penelitian Bahasa*, Malang, P.61
D. Sample and Population

Sugiono states if the objects that have some qualities and characteristics that are chosen to be learned and to be conclude by the researcher. Population is the full set of data from which a subset (sample) is taken. In this study sample took at senior high school in Palangka Raya, it is at SMA Negeri 4 Palangka Raya on Sisingamangaraja III street Palangka Raya.

According to Sugiono sample is a part of total and characteristic that is possessed by population. Sampling is the process of selecting the individuals for a study in such a way that the individuals represent the large group from which they are selected. This study using purposive sampling that the elements selected for the sample are chosen by the judgment of the researcher. In this study sample took at senior high school in Palangka Raya, it is at SMA NEGERI 4 Palangka Raya.

The sample was took at X grade that consist of 12 class room were each class consist of 40 or 41 students. The students are in a class room is blend ethnic. From X grade the was found 486 students who life in different ethnic and they are classified into Dayakese, blend ethnic, the other ethnic (their ethnic is not Dayakese), that shows in percentage.

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4 Ibid, P.118
Based on the respondence ethnic there are different value. That blend Dayakese is bigger than not Dayakese and not Dayakese is bigger than pure Dayakese. Than from the figure will be shown in percentage value.
from the figure that can be seen if the pure Dayakese is 10.49% its about 51 respondence, blent ethnic is 73.45% its about 357 resodence and the other ethnic is 16.04% its about 178 respondnce.

E. Research Instrument

The instrument that used in this study is a questionaire. which adapt from the original 7-point likert scale format of Gardener’s Attitude/Motivation Test Battery (AMI) ranged from ‘strongly agree’ to ‘strongly disagree’.

A Likert scale has several defining characteristics, namely a declarative statement, and a number of response categories that have distinct cut-off points and assume linearity and equal intervals between them. These characteristics are now discussed in more detail. In a Likert-response item
with choices varying from “Strongly Disagree” to “Disagree” to “Neutral”, to “Agree” to “Strongly Agree”, it would appear to be in the mind of the research participant whether or not there is an equal distance between each of these choices. Note that the above response options are balanced in that the items to the left of “Neutral” have an equal number of counterparts to the right of “Neutral”. If the response choice is unbalanced to either side, the possibility of that item being an interval measurement seems greatly diminished.

Table 3.1 Score Answer

<table>
<thead>
<tr>
<th>Score</th>
<th>Score Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
</tr>
<tr>
<td>3</td>
<td>Neutral</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

1. Research Instrument validity

Validity is the most important consideration in developing and evaluating measuring instruments. Historically, validity was defined as the extent to which an instrument measured what it claimed to measure. The focus of recent views of validity is not on the instrument itself but on the
interpretation and meaning of the scores derived from the instrument.\(^5\)

Simply, it can be said he instrument be valid, if it measure accurately what is intended to measure. Therefore, related to the study the instrument measure the students motivation in learning focus on Dayakese.

To know the validity level of the instrument, the result of the test interprets to the criteria coefficient correlation, with the pearson product moment formula.\(^6\)

The validity of instrument know with formula:

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

Where:

\( r_{xy} \) : Numeral of index corelation ‘r’ product moment

\( N \) : Total sample

\( XY \) : Amount X score and Y score

\( X \) : Amount X score

\( Y \) : Amount Y score

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To know the validity level of the instrument, the result of the test interprets to the criteria coefficient correlation.\(^7\)

\begin{align*}
0,00-0,20 &= \text{very poor validity} \\
0,21-0,40 &= \text{poor validity} \\
0,41-0,60 &= \text{fair validity} \\
0,61-0,80 &= \text{high validity} \\
0,80-1,00 &= \text{very high validity}
\end{align*}

**The validity of instrument try out**

Based on the result of instrument try out were consist of 13 items. It found 10 item instruments is valid and 3 item instrument is invalid. The valid instrument can be use to get the data of Dayakese students motivation in learning English. To know students motivation usually use be able refers to internal or extrinsic and intrinsic motivation.

2. Research Instrument reliability

Reliability is a necessary characteristic of any good test for valid at all. A test must be reliable as a measuring instrument. For the measurement of instrument try out reliability could be known that te whole numbers of tests item were reliable or not. For the measurement of instrument try out reliability it is know that the whole numbers of test

items are reliable and can be used as the instrument of the study. The reliability of the whole test can be estimated using the formula:

The reliability of the instrument is known with Cronbach’s Alpha. In statistics classical test theory, Cronbach alpha is used as a lower bound estimate of the reliability of a psychometric test.

Formula:

\[ r = \frac{k}{(k-1)} \left( 1 - \frac{\sum \sigma_h^2}{\sigma_{\xi}^2} \right) \]

Where:

- \( k \): Number of Item
- \( r \): Reliability of instrument
- \( \sum \sigma_h^2 \): Total variances item
- \( \sigma_{\xi}^2 \): Total variances

To know the reliability of the instrument, the result of the test interprets to the criteria coefficient correlation \( \alpha \) follow:

- \( r \geq 0.9 \) = excellent
- \( 0.9 > r \geq 0.8 \) = good
- \( 0.8 > r \geq 0.7 \) = acceptable
- \( 0.7 > r \geq 0.6 \) = questionable
- \( 0.6 > r \geq 0.5 \) = poor
- \( 0.5 > r \) = unacceptable
The reliability of instrument try out

Total varian butir (item) / $\Sigma a_{ij}^2 = 7,0933$

Total varian / $a_{ij}^2 = 33,7067$

Koefisien cronbach alpha / $\gamma = \frac{k}{(k-1)} \left[ 1 - \frac{\Sigma a_{ij}^2}{a_{ij}^2} \right]$  

$= \left[ \frac{13}{13-1} \right] \left[ 1 - \frac{7,09333}{33,7067} \right]$  

$= 0.78956$  $\rightarrow$ Reliable

F. Data Collection Procedure

One of main duties in this study to collect the data for answer the problem of the study above. The data collected natural without manipulation of the setting. Data collection technique use in this study, namely: observation, questionare, and documentation.

1. Observation

Agrosino states in Latief quantitative research data is gathering by observing people in highly controlled setting in which the researcher control all the variables involved, with the aim of experimetically testing specific hypothesis. 8 Observation refers to one of technique in gathering data. Observation is used a tecnical term in research with its specific meaning. Observation usually refers to the use our visual sense to record and make sense of information.

2. Questionnaire

Questionnaire is a written instrument consisting of questions to be answered statement to be responded by respondents.²⁹ Best J W and Khan J V in Adnan states” questionnaire used to gather information about fact or about opinion/attitude. Some researches use some instrument to gather information on opinion or attitude scales, some other use questionnaire to gather both information about fact as well as about opinion attitude”.³⁰ Questionnaire may take a cloosed form or an open form to be selected by respondent. writer use close form questionnaire to ask respondents to give answer of responses freely. With close form questionnaire is that easy for writer to prepare and it gives freedom to respondents to give answer.

The data are obtained through out questionnaire for some of students. The questionnaire consists of some question related to motivation in learning English were in the questionnaire is consist the internal and external motivation. Every question has values ranging from 1-5, consist of strongly agree = 5, agree = 4, neutral = 3, disagree = 2, strongly disagree = 1. The student’s answer classifying based on the following classification.

²⁹ Ibid, P. 193
³⁰ Ibid
a. 0%-19,99% “Strongly disagree”
b. 20%-39,99% “Disagree”
c. 40%-59,99% “Neutral/enought”
d. 60%-79,99% “Agree”
e. 80%-100% “Strongly agree”

3. Documentation

Through documentation technique, the writer try to get the data related to the study. Documentation is technique of collecting the available documentation for te program being evaluated.\textsuperscript{11} Documentation its mean when the writer do research writer take documentation with the subject or another relevant sources.

In this study data collection procedure that witer apply. Writer come to the class, give the students questionnaire and let them to answer all of questionnaire in seriously. Before it writer explain what should they do. If they finish blank it writer collect questionnaire that students fill. Than writer analysis students response.

G. Data Analisys Procedure

Data analysis procedure is the last steps in the procedure, in this case processing the data. The data obtained from the questionnaire analysis using statistic calculation. Data concerning subjects’ general background as well as their comment were calculated and presented in percentage. A five point

\textsuperscript{11} Brian K. Lynch, \textit{Language Program Evaluation Theory And Practice}, USA: Cambrige University Press, 1996, P. 139
Likert scale used to measure the level and the type of the subjects’ learning motivation. Such scale used in the questionnaire to specify the level of the agreement or disagreement. The result show in percentage of students learning motivation in English.

Likert scale formula:

\[ T \times P_n \]

Where:

\[ T \]: Total response
\[ P_n \]: Choice score of Likert scale

To find the interpretation of Likert scale, need high score as Y of response choice answer and low score as X response choice answer. Its mean Y is 5 and X is 1. Than conclude it with percentage, the formula for getting index percentage is:

\[ \text{Index} \% = \text{total score} (Y) \times 100 \]

With the interval I=100/ total score (Likert)

The data obtained from the questionnaires analysis using Ms excel program and manual method. The data concerning subjects’ general background as well as their comments calculated and presented in percentage. A five point Likert scale was used to measure the level and type of respondents
learning motivation. Such scale used in questionnaire to specify the level of strongly agree and strongly disagree based on the following criteria.

**Table 3.2 interpretation of students learning motivation**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>80%-100%</td>
<td>Very high degree of motivation</td>
</tr>
<tr>
<td>60%-79,99%</td>
<td>High degree of motivation</td>
</tr>
<tr>
<td>40%-59,99%</td>
<td>Moderate degree of motivation</td>
</tr>
<tr>
<td>20%-39,99%</td>
<td>Low degree of motivation</td>
</tr>
<tr>
<td>0%-19,99%</td>
<td>Very low degree of motivation</td>
</tr>
</tbody>
</table>