

## **CHAPTER III**

### **RESEARCH METHOD**

#### **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. Correlation method is most appropriate for this study, because it uses two variables to find out the relationship between students' habit in watching English movies on personal computer and students' achievement on vocabulary and show if they have any positive or negative relationship and examining hypothesis.

After that, Pearson Product Moment formula is used to correlate two variables and to find out the significance correlation between students' watching habit and their vocabulary mastery. The independent variable of this research is the students' watching habit (variable X) and the students' vocabulary mastery is the dependent variable (variable Y).

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

This research is field at English Department of Faculty of Tarbiyah and Teachers Training of IAIN Antasari on Jl. Jenderal Ahmad Yani, Km. 4,5 and this study will do from March until May 2016.

## C. Population and Sample

### 1. Population

Population is all cases, situations or individuals who share one or more characteristic. According to Sugiyono, Population is generalization that composed of the subject / object that has certain qualities and characteristics of the applied researcher to learn and then be concluded. Population of this research is the second semester students of English Department of IAIN Antasari Banjarmasin academic year 2015/2016. That have five classes which consists of 169 students from five classes (class A, B, C, D, and E). It can be seen in the following table:

**Table 3.1 The Population of The Research**

No	Class	Population
1	A	34
2	B	37
3	C	36
4	D	35
5	E	30
<b>Total</b>		<b>169</b>

### 2. Sample

Sample is a subset of individuals from a given population. According to Suharsimi Arikunto(2006:51), Sample is a part of population which has same characteristics. There are two ways in selecting a sample. First, if the population is less 100, all population can be sampled. Second, if the population is over 100, the researcher can take 10%-15% or 20%-25% from all population as a sample. In this research,

the researcher takes 25% from second semester students of English Department of IAIN Antasari Banjarmasin academic year of 2015/2016 as a sample. So, the researcher takes 42 students as the sample of this research which takes 25% of every class.

**Table 3.2 The Sample of The Research**

No	Class	Population	Sample
1	A	34	8
2	B	37	9
3	C	36	9
4	D	35	9
5	E	30	7
<b>Total</b>		<b>169</b>	<b>42</b>

#### **D. Technique of the Data Collection**

The researcher will carry out two instruments to collect the data containing questionnaire and vocabulary test. They are:

##### 1. Questionnaire

Questionnaire is a list of questions provided to others who are willing to respond (respondents) as requested by the researchers. There are two kinds of questionnaire, they are open and enclosed questionnaire. In this research, the researcher will distribute questionnaire to the students aimed to know about their watching habit. Total items of the questionnaire are 22 items includes of the features of the students' habit in watching English movies on PC. The features of habit are automaticity, history of repetition, and identity element. The questionnaire was adapted from previous study (Rahman, 2012). Using

five alternatives based on the Likert's scale types. Likert's scale is used to measure attitude, opinion, perception based on the certain object or phenomena (Siregar, 2013, p.50). The researcher uses questionnaire to get the data about students' habit in watching English movies on personal computer.

## 2. Vocabulary Test

In this study, the achievement test is used to measure student's vocabulary mastery. A test is a method of measuring a person's ability, knowledge, or performance in a given domain (Brown, 2010:3). A test is used to collect the data of students' vocabulary mastery (variable Y). There are 25 questions in the test. The questions are based on the syllabus in vocabulary course of English department in IAIN Antasari Banjarmasin.

## E. Technique of Data Analysis

After collecting data, the researcher takes some step to analyze data. The analysis step will as follow:

### 1. Questionnaire Data

The researcher categorized the score resulted of questionnaire data or also called independent variable (X) into the following criteria. If a student chooses *Always (selalu)*, the student will get score 5. This is a table to understand about Likert's scale types:

Likert's scale types	Score
<i>Always (selalu)</i>	5
<i>Often (sering)</i>	4

Sometimes ( <i>kadang-kadang</i> )	3
Seldom ( <i>jarang</i> )	2
Never ( <i>tidak pernah</i> )	1

After calculating all the result in the questionnaires, the researcher determines the students' habit strength in watching English movies on personal computer. According Sudijono (2006, pp.175-176), the formula in interpreting the score is:

- a. Finding the mean

$$M_x = \frac{\sum fX}{N}$$

- b. Finding the standard deviation

$$SD_x = \sqrt{\frac{\sum fx^2}{N}}$$

After that, the researcher then determines the Classifying the scores into three categories bad, fair, and good by applying this formula

- c. Classifying the scores into three categories

- Top up of watching habit score =  $M_x + 1 SD_x$
- Bottom of watching habit score =  $M_x - 1 SD_x$

Explanation:

$M_x$  = mean of students' watching habit

$SD_x$  = Standard deviation of students' watching habit

$\sum fX$  = Total score of students' watching habit

$N$  = Total Number of the respondents

2. The score of vocabulary test

The students' vocabulary test is also called dependent variable (Y). If the answer is correct, they will get score 4. So, the total score of 25 items test is  $25 \times 4 = 100$ . In classifying the score, the researcher uses the categories which is submitted by David p. Harris (1969: 134), as follows:

Score	Category
80 – 100	Excellent
70 – 79	Good
60 – 69	Fair
50 – 59	Low
0 – 49	Poor

After that, the researcher determines the students' English vocabulary test generally by applying this formula:

$$M = \frac{\sum X}{N}$$

3. The correlation between students' habit in watching English movies on PC and their vocabulary mastery

After the data of students' habit in watching English movie on personal computer and vocabulary mastery are collected. The researcher examines research hypothesis by calculating and correlate the data of X and Y variables. The examination uses Product Moment.

The equation for Pearson (r) is as follow:

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

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

$r_{xy}$  = correlation coefficient between variable X and Y.

$\sum x$  = the values for the X variable.

$\sum y$  = the values for the Y variable.

$\sum x.y$  = the values for the XY variable.

However, before using the formula, the researcher does normality test and linearity test because these tests are prerequisite in using Pearson product moment formula. Normality test is done to determine normal distribution and linearity test is used to know the relation between dependent and independent variable. In doing normality test and linearity, the researcher uses SPSS version 23.

The criteria in determining normal distribution of the data are as follows:

- A normal distribution of data, if the value of significance  $> 0,05$
- An abnormal distribution of data, if the value of significance  $< 0,05$

The criteria in determining the linearity of the variables are as follows:

- If the value of significance  $> 0,05$ . It means that the variables are linear
- If the value of significance  $< 0,05$ . It means that the variables are linear

Then, the researcher will interpret the value of  $r_{xy}$  by comparing it with  $r_t$  with significant value 0,05. The result of correlation between X and Y variables will be compared with the value ( $r_{table}$ ). The table value is 5 % or 1 %. If  $r_{xy} > r_{table}$  is significant or there is a correlation between

students' habit in watching English movies and their vocabulary mastery. If  $r_{xy} < r_{table}$  is not significant. It means that there is no correlation between students' habit in watching English movies on PC and their vocabulary mastery. A positive correlation indicates that the score move together either increasing or decreasing. A negative correlation indicates that the scores on one variable rise and scores on other decrease. Correlation does not imply caution means two events are in some ways correlated does not mean that on necessarily cause the other. The ranging of correlation coefficient is as follow (*Sudijono, 2006, p.193*):

<b><math>r_{xy}</math></b>	<b>Interpretation</b>
0,00 – 0,20	There is a very low correlation between variable X and Y
0,20 – 0,40	There is a low correlation between variable X and Y
0,40 – 0,70	There is a medium correlation between variable X and Y
0,70 – 0,90	There is a high correlation between variable X and Y
0,90 – 1,00	There is a very high correlation between variable X and Y