

CHAPTER III

RESEARCH METHOD

A. Research Design

The study used the correlational research. According to Lodico, correlational research is a quantitative method designed to show the relationships between two or more variables Lodico (2006, p.14). Correlational research is similar to descriptive survey in that it is non experimental, consisting of only one group of individuals and two or more variables that are not manipulated or controlled by the researcher.

Arikunto (2010, p.4) said that “correlation research is a research that is conducted by a researcher to know the correlation degree between two variables or more than two variables”. According to Murdan (2012, p.133) “Correlation is between two or more variables”.

In this research there two variables, they are: independent variable (X) and dependent variable (Y). Independent variable is a variable that is presumed to influence another variable. Dependent variable is a category that is influenced by another category or that is the consequent. In this research independent variable is English translation (X) and the dependent variable is reading comprehension ability (Y).

Basically, the method of this research is quantitative research because the analysis of this research uses statistics to know the significant correlation between English translation and reading comprehension ability of the sixth semester

students of English Department at Antasari State Institute for Islamic Studies Banjarmasin academic year 2015/2016.

B. Research Setting and Time

1. Research Setting

The location of this research is at the English Department of Tarbiyah and Teachers Training Faculty at Antasari State Institute for Islamic Studies that is located on Jl. A. Yani km 4,5 Banjarmasin. This location was chosen by the writer because translation and reading skill subjects was taught for the sixth semester students of the English Department of Tarbiyah and Teachers Training Faculty at Antasari State Institute for Islamic Studies academic year 2015/2016.

2. Research Time

In this research, the writer collected data and get of some information that related with this research about 2 months. 09 May 2016 until 09 July 2016. To collect data for findings, the writer administered two tests they are: English translation and reading comprehension ability test.

C. Population and Sample of The Research

1. Population

The population of this research is the sixth semester of student class A, B, C, D and E of English Department of Tarbiyah and Teachers Training at Antasari State Institute for Islamic Studies Banjarmasin. The total numbers of them are 160 students as seen the following table:

Table 3.1 Population of the Sixth Semester Students of English Department at Antasari State Institute for Islamic Studies Banjarmasin

No.	Class	Number of Students		Total
		Male	Female	
1.	A	7	23	30
2.	B	10	24	34
3.	C	11	22	33
4.	D	11	23	34
5.	E	7	22	29
Total		46	114	160

Source: Document of English Department

2. Sample

Sugiyono (2013, p.118) states that “the sample taken from the population must be representative because sample is a part of the generality and the characteristic belonging to the population”. Arikunto (2010, p.112) said that “if the population is less than 100, it is better for taking all the population. If the population is large we can take 10-15% or 20-25% or more”. Based on the population above, the writer uses proportional random sampling method that will be taken from 25% of population. There are five class of sixth semester students, consist 160 students, therefore the writer takes 40 students in this research with 8 students for each class.

Table 3.2 Sample of sixth semester students' of English Department

Class	Number of students	25% of population	Total
A	30	8	40
B	34	8	
C	33	8	
D	34	8	
E	29	8	

Source : Sample of students of the sixth semester

D. Research Instrument

In this research, the writer gave two tests. The first is test to know the English translation. The writer prepared 1 English Text, scoring test that consists of 4 items each English text to measure English translation of students and students to translate English text from English into Indonesian, the second test is to know the reading comprehension ability scoring test that consists of 25 items in multiple choice. Then, the data are analyzed by using Pearson Correlation Product Moment Formula to know the correlation between the English translation and reading comprehension ability.

Table 3.3 The English Translation from English into Indonesian Scoring Test

Aspect of Scoring	Score
Accuracy	25
Choice of vocabulary	25
Cohesion, coherence, organization	25
Accuracy in technical aspect of punctuation	25
Total	100

(Munday,2001,p.30)

Table 3.4 The Reading Comprehension Ability Scoring Test

No.	Test	Number	No. Item	Score of Each Item	Total Score
1.	Reading Comprehension Ability	25	1-25	4	100

(Brown, 2010, p.295)

From the research instrument of the scoring test above, it will be examined the significant correlation between students' ability in English translation and reading comprehension ability of the sixth semester students of English Department at Antasari State Institute for Islamic Studies Banjarmasin academic year 2015/2016.

E. Data and Source of Data

1. Data

There are two kinds of data in this study, namely primary and secondary data.

a. Primary Data

- 1) The data about students' ability in English translation.
- 2) The data about students' ability in reading comprehension.
- 3) The data about the correlation between students' ability in English translation and reading comprehension ability.

b. Secondary Data

To complete the primary data, the writer also collects the secondary data, which relates to the research location as mentioned in the following:

- 1) General description about research location
- 2) A brief history of English Department, Tarbiyah and Teachers Training Faculty at Antasari State Institute for Islamic Studies Banjarmasin.
- 3) A description about lecturer, administration staff, facilities and the students condition at English Department, Tarbiyah and Teachers Training Faculty at Antasari State Institute for Islamic Studies Banjarmasin.

2. Sources of Data

The data is taken from the sources as follows:

- a. Respondents: Twenty five percent, consist 160 students therefore the writer takes 40 students in this research with 8 students for each class of the sixth

semester students of English Department at Antasari State Institute for Islamic Studies Banjarmasin academic year 2015/2016.

- b. Informants: Students, chief of English Department and lecturer of English Departments.
- c. Documents: All writer report which related to the primary and secondary data.

F. Data Collection Procedure

Procedure of the research to collect the data as follows:

1. Test (Written Test)

There are two kinds of the tests, the first test is English translation and the second test is reading comprehension ability. The writer uses translate English text from English into Indonesian and multiple choice 25 item for reading comprehension ability each true answer scoring is 4 (four) and total score 100 (one hundred).

For English translation into Indonesian the students translate the text given by the writer then the writer scores the students' English translation. In scoring the students' English translation, the writer uses translation assessments; they are:

- a. 25 point for the accuracy. Accuracy is related to how accurate the students' translation from English into Indonesian.
- b. 25 point choice of vocabulary. Choice of vocabulary is related to the correct word choose by students in translating English text into Indonesian.

- c. 25 point for cohesion, coherence, organization. Cohesion is related to the compatibility between the meaning the English into the Indonesian. Cohesion is closer in the give and take of dialogue and speech than in any other form of text. The coherence of a text, related to cohesion.
- d. 25 point for accuracy in technical aspects of punctuation. Punctuation is an essential aspect of discourse analysis, since it gives a semantic indication of the relationship between sentences and clauses. Accuracy in technical aspects of punctuation is related to put of punctuation.

From the students' translation, the writer can measure the students' ability of English translation into Indonesian.

2. Documentary

This technique is used to get the data by collecting all documents or written reports available at the university that can be complete this study.

G. Data Analysis Procedure

There are four steps of analyzing the data. The first step is to find out the degree of students' ability in English translation. The second step is to find out the students' reading comprehension ability. The third step is to see the correlation degree of them. The last step is to test hypothesis.

1. Measuring the degree of students' ability in English translation

The first step is measuring the degree of students' ability in English translation. In this research the writer prepared 1 English text, scoring test that consists of 4 items each English text from English into Indonesian. The writer determines the students' ability in English translation by applying this formula:

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

M = Mean

$\sum X$ = Total score of students' translating test

N = Total number of the respondents

After calculating the mean of the students test result by applying formula above, the writer determines the degree of the students' ability in English translation by consulting to these following categories:

Table 3.5 Categories of students' ability in English translation

Score	Category
80-100	Excellent
70-<80	Good
60-<70	Fair
50-<60	Low
0-<50	Very low

(source: David P. Haris, 1969, p.9)

2. Measuring the degree of students' reading comprehension ability

The second step is measuring the degree of students' reading comprehension ability. In this research, the writer prepared 25 items multiple choices for reading comprehension ability. The writer determines the students' reading comprehension ability by applying this formula:

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

M = Mean

$\sum Y$ = Total score of students' reading comprehension ability test

N = Total number of the respondents

After calculating the mean of the students test result by applying formula above, the writer determines the degree of the students' reading comprehension ability by consulting to these following categories:

Table 3.6 Categories of students' ability in reading comprehension

Score	Category
80-100	Excellent
70-<80	Good
60-<70	Fair
50-<60	Low
0-<50	Very low

(source: David P. Haris, 1969, p.9)

3. Making working table as following:

Table 3.7 Working table

Subject	X	Y	xy	x^2	y^2
1					
Until					
40					
N= 40	X=	Y=	$xy=$	$x^2=$	$y^2=$

(Riduwan, 2005, p.137)

Where:

X = The score of students' English Translation

Y= The score of students' reading comprehension ability

xy = sum of multiplication of X and Y

x^2 = sum of X quadrate

y^2 = sum of Y quadrate

4. Measuring the correlation between the students' ability in English translation and reading comprehension ability

The third step is measuring the degree of the correlation between the English translation and reading comprehension ability. The writer uses a Pearson

product moment formula because both of data are interval data, Murdan (2012, p.124) says, “If the correlation has two kinds of variables that are interval data”, the writer should use the coefficient person product moment formula.

Product moment formula is usually used to correlate two variables based on its correlation coefficient value, it is useful to describe and find out the significance of the correlation between those two variables, variable X and variable Y. It is usually symbolized by r or r_{xy} (because it is also known as there regression coefficient).

Person product moment formula:

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

Explanation :

r_{xy} = the correlation between variables X and Y

$\sum xy$ = the sum of the multiplication between variable X score and variable Y score.

$\sum x$ = the sum of X scores

$\sum y$ = the sum of Y scores

$\sum x^2$ = the sum of standard deviation from variable x

$\sum y^2$ = the sum of standard deviation from variable y

N = the total of respondents

5. To test hypothesis

- a. Consulting the degree of the correlation result (r_{xy}) and the degree of coefficient correlation product moment table to determine whether there is a correlation between students' ability in English translation and reading comprehension ability or not. In this research, the number of respondent is 40. By looking at the table of coefficient degree of Person Product Moment, the table degree of correlation for 40 in 5% fault significant is 0.312 and its degree of correlation in 1% fault is 0.403.
- b. Interpreting the result and making conclusion. There are two possibilities conclusion (Riduwan, 2005, p.145):
 - 1) If $r_{xy} > 0.312$ (significant at 5% (0.05) level) or $r_{xy} > 0.403$ (significant at 1% (0.01) level), the hypothesis null (H_0) is denied and hypothesis alternative (H_a) is accepted. It means there is a significant correlation between the students' ability in English translation and reading comprehension ability.
 - 2) If $r_{xy} < 0.312$ (significant at 5% (0.05) level) or $r_{xy} < 0.403$ (significant at 1% (0.01) level), the hypothesis null (H_0) is accepted and hypothesis alternative (H_a) is denied. It means there is no significant correlation between the students' ability in English translation and reading comprehension ability.
- c. Interpreting the result by referring to rough standard so that the degree of correlation can be classified.

Table 3.8 Standard Categories of “*r*” Product Moments Value

The value of “ <i>r</i> ” Pearson Product Moment (r_{xy})	Interpretation
0,80-1,000	There is very strong correlation between variable X and variable Y
0,60-0,799	There is a strong correlation between variable X and variable Y
0,40-0,599	There is fair or moderate correlation between variable X and variable Y
0,20-0,399	There is a weak correlation between variable X and variable Y
0,00-0,199	There is no correlation between variable X and variable Y

(Riduwan, 2005, p.138)

Correlation value (*r*) is (-1 ≤ *r* ≤ +1). 1 or -1 (for negative correlation). If the *r* value 0 is no correlation. If nearer to 1 until +1, the correlation is higher (for positive correlation). In verse, if the *r* value is fairer, the correlation is weak.

The writer also uses SPSS IBM program for this research to re-calculate if there is something wrong in manual calculation.