



CHAPTER III

RESEARCH METHOD

In this chapter explains about research design, population and sample, instrumentation, technique of collecting data, and technique of analyzing data.

3.1 Research Design

The design of this research is descriptive research. According to Gay (1987:189) descriptive research involves collecting data in order to test hypotheses or to answer question concerning the current status of the subject of the study. Descriptive research is used to describe characteristics of a population or phonemenon being studied. The researcher used this type of research because the researcher wanted to describe the third year students ability in mastering adjective complement by using noun clause and phrase at English Department of Bung Hatta.

3.2 Population and Sample

The population is the group of all individuals, organizations, or artifacts that could be involved in the study (Blankeship 2010:82). The population of this research was the third year students' at English Department of Bung Hatta University. The researcher chose them as population because they have learned about adjective complement by using noun clause and phrase. Warner (2012) says that sample is subset of member of a population. The number of population was 24 students. The researcher used total sampling technique because the population is less than 100 subjects.

3.3 Instrumentation

In this research, the researcher used writing sentence test and multiple choice part as instruments to collect data. In this test, the students were asked to write 20 sentences. The sentences are divided into: 10 adjective complement by using noun clause and 10 adjective complement by using noun phrase. Then, the researcher gave 40 minutes to do the test.

Table 3.1 : Table of Test Specification

No	Specification	Number of Item
1	Adjective complement by using noun clause	10
2	Adjective complement by using phrase	10
Total		20

A good test should be valid and reliable. According to Mcdonald (2001:24) validity refers to appropriateness of the interpretation of the test scores

the extent of the evidence that exists to justify the inferences the researcher make based on the result of the test. In this research, the researcher used content validity. McDonald (2002:25) says that content validity represents the degree to which the items on a test reflect a course's content domain. It means that the test is constructed on the syllabus of advanced grammar subject.

Reliability is used as a measure of quality and the term means repeatability or consistency (Scott and Morrison, 2007). To show the reliability of the test, the researcher used inter-rater technique by using two scorers (scorer 1 and scorer 2). The first scorer was the reseacher and the second scorer was Rati Kardila Sari. The researcher chose her because she got A in writing and grammar subject, and she is a qualified student.

To find out the reliability index of two scorer, the researcher used Pearson Product Moment as follow:

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

Where :

r_x = The coefficient of correlation between x and y variable

x = The total number of scores 1 given by first scorer

y = The total number of scores 2 given by second scorer

n = The total number of students

$\sum x$ = The total of X

$\sum y$ = The total of Y

$\sum xy$ = Total scores of cross product of XY

After that, the researcher used Arikunto's idea (2013:75) to classify the degree of coefficient correlation of the test as follow:

.81 – 1.00 = Very high correlation

.61 - .80 = Moderete correlation

.21 - .40 = Low correlation

.00 - .20 = Very low (no correlation)

According to Gay (2009), a test perfect reliabilityif the correlation coefficient index is very high. It was found that correlation index of the test was very high correlation 0.89 (see appendix 5). It means the test can be included as reliable test.

3.4 Technique of Collecting Data

The researcher collected the data through some procedures as follow:

1. The researcher administered the writing sentence test.
2. The researcher gave the instruction to the students.
3. The researcher asked the students to do the test in 40 minutes.
4. The researcher collected the students answer sheets.

5. The researcher copied the students answer sheets. The researcher checks out the original answer sheets and second scorer checks the copy of answer sheets.
6. The researcher and second scorer gave score based on the following criteria:

Table 3.2: Table of Scoring Criteria

No	Aspect of writing	Criteria scoring of each item	Score
1.	Idea	<p>- The meaning of the sentence is logical.</p> <p>Example:</p> <p>It was important <i>that he not get into an argument with her</i>.</p> <p>(The noun clause <i>that he not get into an argument with her</i> adds information about important)</p> <p>It's essential <i>for us to be happy in life</i>.</p> <p>(The noun phrase <i>for us to be happy in life</i> adds information</p>	1

		about essential)	
		- The meaning of sentence is not logical. Example: It's important for him to work in rainy day. (there is no meaning in the sentence)	0
2.	Grammar	- The use of linking verb and noun clause or phrase, is correct	1
		- The use of linking verb or noun clause and phrase, is correct	0.5
		- The use of linking verb and noun clause or phrase, is not correct	0
3.	Vocabulary	- Students use appropriate vocabulary	1
		- Students use inappropriate vocabulary	0
4.	Mechanics	- The use of capitalization, punctuation and spelling are correct.	1

		- The use of sub mechanics are two correct.	0.7
		- The use of sub mechanics are one correct.	0.3
		- The use of capitalization, punctuation and spelling are wrong.	0
Total			4

3.5 Technique of Analyzing Data

To analyzing the data, the researcher used the following procedure:

1. The researcher counted the average scores given by two scorers by using the formula:

$$\text{Students average score} = \frac{\text{score 1}^{\text{st}} \text{ scorer} + \text{score from the 2}^{\text{nd}} \text{ scorer}}{2}$$

2. The researcher converted the students score by using the formula as follows:

$$\text{Students' Converted Score} = \frac{\text{students score}}{\text{maximal score}} \times 100$$

3. The researcher classified the students ability using criteria of Bung Hatta University as follows:

Table 3.3 : Table of Scoring Criteria of Bung Hatta University

Score	Grade	Ability
-------	-------	---------

85-100	A	Very Good
81-84	A-	
76-80	B+	Good
70-75	B	
65-69	B-	
60-64	C+	Moderate
55-59	C	
44-54	D	Low
≤44	E	

4. The researcher counted the percentage of students who have each ability by using the following formula:

$$P = \frac{R}{T} \times 100\%$$

Where : P: percentage of students

R: the sum of the students who had very good,
good, moderate and bad ability

T: the total of students

5. Finally the researcher discussed the result of the data analysis.