

CHAPTER III

RESEARCH METHOD

A. Research design

The research was conducted through quantitative method and the design was correlational study. Correlational study is a research methodology that often used in psychology as a preliminary way to gather information about a topic or in situations where performing an experiment is not possible. It means the objects are two variables which might have correlation and this correlation become the focus of examination. And the goal of the writer is to find out the correlation between them.

B. Research Setting

This research took place in English Department in Higher Institution of Education in Banjarmasin. Banjarmasin is a capital city of South Kalimantan, Indonesia.

C. Population and Sample

1. Population of the research

The population of this research was all students of the English department in Banjarmasin.

2. Sample of research

The researcher took the sample of population by using purposive sampling. The samples have to be studying English as their major in higher education and have an ability to construct or comprehend musical syntax. It means that each individual has a musical ability from the population, ensuring that the sample will be representative of the population. There are 20 persons who are eligible as the samples in this study.

D. Research Instrument

The instrument that the researcher used in this research was Test. In test, researcher have at their disposal a powerful method of data collection that emphasize on gathering data in numerical rather than verbal kind. (Cohen, Louis. Manion, Lawrence. Morrison, Keith (2007) *Research Method in Education: sixth edition* , New York: Roudledge.)

In constructing test, the researcher considers about identify purpose of the test, identify test type, identify test specification, select content of the test, consider the form of the test, consider the timing of the test, and plan for the scoring the test.

The researcher will conduct two kinds of test, one to measure the musical syntactic competence, and another for English syntactic

competence. For measuring the musical syntactic competence, the researcher will consider three factors in musical syntactic competence (According to Patel: 2008). These three factors are called Multiple level of organization that stands for Scale structure, Chord structure, and Key structure. And as well as the constructing the test for musical syntactic competence, the English syntax test will be constructed with considering the similar factors in musical syntax.

E. Data Collection Procedure

To collect the data in this research, the researcher used Musical syntactic competence test, that has to include three factors of multiple level of organization which are Scale, Chord, and Key Structure, and music hierarchical structure. And English syntactic competence test which contained the similar factors.

F. Hypotheses

Ha : There is a significant correlation between musical syntactic competence and language syntactic competence.

H0 : There is no significant correlation between musical syntactic competence and language syntactic competence.

G. Technique of Data Analysis

In analysing the data, Pearson product moment correlation showed the coefficient (r) which is a single value that represents the relationship between the two individual variables. Pearson product moment technique is used when the variables are both interval/numbers.

The researcher will use this formula to analyze the test:

$$r = \frac{n \sum xy - (\sum x) (\sum y)}{\sqrt{\{n \sum x^2 - (\sum x)^2\} \{n \sum y^2 - (\sum y)^2\}}}$$

X = score of the English structure test

Y = score of the Musical syntactic competence test

1. Interpretation of Coefficient Correlation Value

(Cohen and Manion, 1981:128) in Sukardi (2008:170) determine the price of r (correlation) as follows:

- 1) The value $r = 0.00 - 0.35$ showing the relationship between the two variables is weak, though significant.

- 2) The value $r = 0.35 - 0.65$ showing the relationship is medium, generally significant on more than 1%, the relationship is useful for predictive analysis.
- 3) The value $r = 0.65 - 0.85$ showing the relationship is pretty high that probably researchers to predict the exact.
- 4) The value $r \Rightarrow 0.85$ showing a high correlation between the variables, and researchers are encouraged to predict accurately.

Savuela and Nicolae (Savuela, Dorel & Constantinecu, Nicolae. (2010) Statistical Correlation Study, *Mathematics and Computer Science Series Journal* , University of Craiova, Volume 37(3), 35-51) determine the price of correlation as follows :

1. If $0 \leq r < 0.20$ there is no significant relation between variables.
2. If $0.20 \leq r \leq 0.50$ the relationship between variables is low.
3. If $0.50 \leq r \leq 0.75$ the relationship between variables is average.
4. If $0.75 \leq r \leq 0.95$ the relationship between variables is strong.
5. If $0.95 \leq r \leq 1$ there is a functional relation between two variables.