CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

This research applied a quantitative approach. Based on the purpose of this study that the study is to explain the correlation between collage entrance language test score and students' achievement in the first semester in case Intensive Course (IC), this study clarifies as nonexperimental research. Nonexperimental research is a research where the researcher identifies variables and may look for relationship among them but does not manipulate the variables.[1] This study makes no manipulation or control of independent variable from the researcher, thus, it is catagorized as correlational research.

B. Research subject

The number of research subject in this research is twenty six students. The research subject is students of English Teacher Education Department (PBI) accepted through college entrance test or SPMB qualification test academic year 2014-2015. The scores needed by the researcher to answer the hipothesis are two kinds of score: the first is college entrance language test scores of English Teacher Education Department (PBI) Students who are received through SPMB qualification

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[1] Donald Ary , *Introdcution To Research In Education,* (USA:Wadsworth, Cengage Learning, 2010), 26

test and the second is their scores of Intensive Course (IC) score in the first semester academic year 2014-2015.

C. Data collection technique

To gather the information about the object of the study, the researcher uses documentation. The documentation is in the form of students' score of college entrance language test and students' score of Intensive Course (IC) in the first semester academic year 2014-2015. The students' score of college entrance language test and the students' score of Intensive Course (IC) will be reached from central office of UINSA Surabaya (Rektorat Office) that handles the documentation of all scores of college entrance.

D. Research instrument

This research uses quantitative data analysis. The data collection technique in the research is documentation. Therefore, the research instrument in this research is documentation study guidence which is used to list the data needed for the research. The list of data consists of primary data and secondary data. The primary data consists of data of college entrance language test scores academic year 2014-2015 and data of Intensive Course (IC) scores of students of English Education department (PBI) who were accepted through SPMB qualification test. For additional information, the secondary data are also listed in documentary study guidence such as range of the scoring in college entrance language test, the number of the question in college entrance language test and point of each

question. Those secondary data are needed to strengthen the result of the research.

E. **Data Analysis Technique**

This is the final and the most important step of the research as it will lead the researcher to the conclusion about the data collected. For this reason the researcher must choose the appropriate data analysis to come up with the valid hypothesis. Considering the research project is to measure the correlation between college entrance language test score and Intensive Course (IC) score the researcher will use quantitative data analysis with Pearson Product Moment correlation. According to Ary, one of the correlation parts is prediction correlation which evaluates how the two variables will predictively impact to another variable[2]. In the other word, the bigger correlations of two variables have the bigger possibility of the prediction will be success.

In this research the data is from the college entrance language test score and Intensive Course (IC) score of the first semester of English Teacher Education Department (PBI). Furthermore, the data will be analyzed by using Pearson Product Moment correlation to see the correlation between those two variables, with the level of significance 0,05. Here is the manual formula of Pearson Product Moment correlation.

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[2] Ibid, 351

$$r = \frac{\Sigma XY - \frac{(\Sigma X)(\Sigma Y)}{N}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{N}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{N}\right)}}$$

where

r = Pearson r

ΣX = sum of scores in X distribution

ΣY = sum of scores in Y distribution

ΣX^2 = sum of the squared scores in X distribution

ΣY^2 = sum of the squared scores in Y distribution

ΣXY = sum of products of paired X and Y scores

N = number of paired X and Y scores (subjects)

After knowing the result of the r_{xy} (Coefficient correlation), then the researcher see the r_{xy} result in the table. With the consideration that H^0 (null hypothesis) is rejected if the result of r_{xy} is bigger than r_{xy} table (r_{xy} (N-1) > r_{xy} table), and H^0 (null hypothesis) is accepted if the r_{xy} test is smaller than r_{xy} table (r_{xy} test (N-1) < r_{xy} table).

The explanation above is manual analysis of pearson product moment. In this study, the researcher does not use the manual analysis. The researcher uses SPSS 16.0 version program in analyzing the data. SPSS is an application program that has high statistical analysis and data management system in a graphical environment by using descriptive menu and simple dialog boxes, so it is easy to understand how to operate. Some activities can be done easily by using the pointing and clicking a mouse[3]. Based on Ary, SPSS is the most widely used statistical package for data

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[3] https://suicidealone.wordpress.com/2008/05/14/hello-world/, taken in 30 April 2015

analysis in educational research[4]. Thus, SPSS is chosen by the researcher because it is more valid and efficience.

After the result of analizing those two scores, college entrance language test scores and Intensive Course (IC) scores, by using SPSS 16.0 version program, the researcher then catagorizes the result whether the correlation between those two scores is low or high. Above is the guidence:

3.1 **The Guidence of Determining Correlation**

R	Correlation Criteria
0,00 - 0,199	Very low
0,20 - 0,399	Low
0,40 - 0,599	Averange
0,60 – 0,799	Strong
0,80 – 1,000	Very strong

To simplify in determining the correlation between college entrance English test scores and Intensive Course (IC) scores, the researcher devides the guidence of determining correlation above in two kinds, low and high. It is catagorized as low correlation when the result is under 0,40 and it is catagorized as high correlation when the result is more then 0,40. However, in catagorizing the result, even the researcher catagorizes the result in two kinds, the researcher constantly will explain the result

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[4] Donald Ary , *Introdcution To Research In Education,* (USA:Wadsworth, Cengage Learning, 2010) 140

including into one of correlation criteria in the table 1.1. The null hypothesis is rejected or the alternative hypothesis is accepted when the result of the SPPS version 16.0 analysis shows that the correlation between those two scores is high, and The null hypothesis is accepted or the alternative hypothesis is rejected when the result of the SPPS analysis shows that the correlation between those two scores is low.