CHAPTER 111

RESEARCH METHODOLOGY

This chapter provides the design used in this study, population and sample, data collection technique and the instrument used, and the technique of analyzing data.

A. Research Design

Since the research design determines of making statistical decision, defining it in advance is the most essential part of conducting a research. As the topic indicates the correlation between students' self-assessment and writing skill achievement at first grade of SMP Pawiyatan Surabaya, so this study is aimed at finding out the possible relationship between the two variables. In other word, this study is correlational study. This research uses quantitative method with the analysis of product moment.This type of the research is one kind of method to look for correlation and born out hypothesis of two variables if both of them are interval and source of data are same.[35]

According to Karl, it is usually used to correlate two variables or more based on its correlation coefficient value.[36] It is beneficial to find out the

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[35]Sugiyono.*Statistika untuk Penelitian*.pg 133
[36]Anas sudijono.*Pengantar Statistik Pendidikan*.pg 177-178

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significance of the correlation between those variables, that is variable X and variable Y.

Correlation coefficient (usually represented by r) is index indicating both the direction of the correlation (either positive or negative) and the degree of the relationship between variables. Correlational coefficients can rangefrom -1.00 to +1.00 with positive numbers used to identify a positive relationship and negative numbers being used to identify a negative relationship.The following table can be used todetermine the strength of a relationship:

Table 3.1

Simple Interpretation of Correlation

Rxy	Interpretation
0.00 − 0.20	There is correlation between X variable and Y variable, but it is very week or very low. So the correlation is rejected. In other words, there is no correlation between X variable and Y variable.
0.20 − 0.40	There is week or low correlation between X variable and Y variable but it is sure.
0.40 − 0.70	There is an enough correlation between X variable and Y variable.
0.70 − 0.90	There is a strong or high correlation between X variable and Y variable.

0.90 – 1.00	There is a very strong or very high correlation between X variable and Y variable.

From the explanation above, we can identify that the first variable is students' self-assessment level which is taken by distributing questionnaire; it is considered as independent variable (variable X). The second variable is English learning achievement score which is taken by collecting secondary data of final test score in first semester; it is considered as dependent variable (variable Y).

In this study, the researcher cannot directly manipulate the independent variable because there is no control group as in experimental research and also no treatment given since the independent variable occur naturally.

B. Research Location

This research was conducted at SMP Pawiyatan Surabaya. Because of the recommendation from the teacher, the population of this study was VII grade. The VII grade consists of 8 classes and each class consists of around 40 students. So, the total of population was 320 students. The researcher used cluster sampling technique in which the population consists of groups which is equivalent[37] and the result of the lottery were VII-3 and VII-5. The research conducted at SMP Pawiyatan Surabaya. Because of the recommendation from

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[37] Sumani. *Metode Penelitian Kuantitatif*.pg 12

the teacher, the sample of this study will be VII grade. The researcher uses cluster sampling in which the population consists of groups which is equivalent[38] and the result of the lottery are VII-3 and VII-5.

C. Data and The Source of Data

In this research, the researcher will gain the data from students' English test score which have collected by the teacher as the preliminary research. The researcher does this way to know the students' achievement in learning English. Then, the researcher will collect the data from questionnaire of Self Assessment to know their Self Assessment level in learning English. The last is all data will collect which are from secondary data of English test score as students' achievement in learning English and Self Assessment questionnaire. It will show how the correlation of self Assessment and achievement in learning English.

D. Research Procedures

1) Documentation

The preliminary research will do on 11th of May 2015 to get the information about the situation and condition of SMP Pawiyatan Surabaya. The researcher also asks the information about the students' and teachers' perception of self-assessment and students'

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[38] Sumani. *Metode Penelitian Kuantitatif*.pg 12

English achievement. Then, researcher collects secondary data of the students score in learning English which has collected by the teacher.

2) Self-Assessment Questionnaire

Since the researcher wants to investigate the correlation between student's self-assessment and their achievement in learning English, after doing preliminary research the researcher will conduct a survey by distributing questionnaire to know how the students' self-assessment level in learning English. This technique is used to answer the second research question..

3) Analysis the Data

After getting all the data, the researcher will analyze the data to know the correlation of self assessment and achievement in learning English.

E. Data Collection Technique

For collecting the data, the researcher uses some techniques:

1) Documentation

This research will collect students' score in learning English which has collected by the teacher. The score are about final test as students' achievement in learning English.

2) Self- Assessment Questionnaire

After collecting data, then researcher will do a survey. In this case, the researcher will use self assessment questionnaire.

Questionnaire is used to find the valid data and the questions should be related to the self assessment in learning English.

F. Data Collection Instrument

1) Data of Students' Score

The data are taken from teacher's file of students' achievement. This is final English score in first semester. There are 44 students in VII-7, and from their score will take as variable Y in the correlation.

No	Nama	Final Test Score
1	X	X
2	X	X

Table 3.2 The interpretation of final test score

2) Questionnaire

Questionnaire is used to investigate first research question that is students' self-assessment level in learning English. The researcher will use questionnaire adapted from Learning Outcomes and Self-Assessment of Baccalaures Students on journal of International Conference IMLA 19 Optija 2011.

G. Data Analysis Technique

In this study, the researcher obtains the data through observation and interview. The data will beclassified from those techniques are described as follows:

1.) Classifying the data

   a) Self-Assessment Questionnaire

   As stated before the researcher will use questionnaire which is adapted from Learning Outcomes and Self-Assessment of Baccalaures Students on journal of International Conference IMLA 19 Optija 2011(see on appendix 1). This questionnaire shows the level of students' self assessment : 1. strongly disagree2. Disagree3. neither agree nor disagree4. Agree5. strongly agree.

   Based on the sum of their answer which will be explained as follows:

   1 point (strongly disagree) = never or almost true of me

   2 points (disagree) = usually not true of me

   3 points (neither agree or disagree) = somewhat true of me

   4 points (agree) = usually true of me

   5 points (strongly agree) = always or almost true of me

   The higher score indicates the higher self-assessment level.

2) Interpreting the Data

In interpreting the data, some statistical procedures will be carried out in this study: (a) Descriptive statistics including Cronbach alphas, means and standard deviations (b) Product moment correlation (c) Paired sample T-Tests will be done to explore the effects of high and low self-assessment on achievement in learning English.

a) Descriptive Statistic

Descriptive statistics including Cronbach alphas, means andstandard deviations will be computed to summarize the students' responses to the self-assessment questionnaire and achievement in learning English.

b) Product moment correlation (r test)

Data have been collected will be interpreted using SPSS product moment correlation. This research uses quantitative with the analysis of product moment. This type of the research is one kind of method to look for correlation and born out hypothesis of two variables if both of them are interval and source of data are same, in this case students' self-assessment as variable X and achievement in learning English as variable Y.

The formula of correlation product moment is described as follow:

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

Where:

r_{xy} :the correlation coefficient

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

$\sum x^2$:the sum of standard deviation of variable X

$\sum y^2$:the sum of standard deviation of variable Y

c) Paired sample T-Test

Paired sample T-Test will be done to explore the effects of high and low self-assessment on English achievement.

3) Conclusing the Data

After interpreting the data using SPSS, the researcher can draw the conclusion of the correlation between students' self-assessment and achievement in learning English based on interpretation of correlation coefficient and relationship degree.