CHAPTER III

RESEARCH METHODOLOGY

A. Form of Research

In order to achieve the purposes of this research, the researcher used an appropriate method. The method that was used in this research was correlational study. According to Singh (2006: 304) explained in which there is a need of finding out the relationship between two variables can be tackled properly by the method of correlation. For the next, according to Ross (2005: 9) said, "Correlational research involves the search for relationships between variables through the use of various measures of statistical association." Those statements explained that correlational study is the way to find the relationship between two variables. Based on the title, that researcher wanted to find the correlation between self-esteem and students' English achievement so that researcher believe the correlational study is the appropriate methotd for this research.

B. Population and Sample

1. Population

Population is part of research. "The collection of all individuals or items under consideration in a statistical study" (Weiss, 2012: 4), it is concluded that population is a set or collection of the subject in the research. In this research, the population is the students of SMA N 03 Ketapang at grade tenth in the academic year 2015-2016.

2. Sample

Sample is where the data of research can be taken. “Part of the population from which information is obtained” (Weiss, 2012: 4), it said that sample is the representatives from the population which is giving expected information. To help the researchers in collecting the data, the researcher decided to use disproportionate stratified random sampling. “Disproportionate sampling means that the size of the sample in each unit is not proportionate to the size of the unit but depends upon considerations involving personal judgement and convenience” (Singh,2006: 88). The researcher concluded that this sampling will take the same number as a sample from each unit in a population. It is appropriate for this research because in the population of this research there are eigh classes and this research would be much better if there are representatives from each class.

Based on the population, there are eigh classes in the grade tenth where the number of student is up to 303 students. By stratified random sampling the researcher took 5 (five) students from each class so there are 40 (fourty) students as the sample in this research. According to Melville (2001: 67) said, “Large-sample method can be reliably applied if there are at least 30 data values.” Means, the data can be reliably at least there are 30 data values to represent a large population. On the other hand, the researcher believe that 40 (fourty) students as the sample in this research can represent those 303 students as the population.

Table below shows how the researcher took the sample by using disproportionate stratified random sampling;

Table 3.1 Research sample

Popolation	**Total**	**Number as**
Name of Class	**Students**	**the Sample**
X – A	37	5
X – B	39	5
X – C	38	5
X – D	38	5
X – E	38	5
X – F	37	5
X – G	38	5
X – H	38	5
TOTAL	303	***40***

In order to ensure that the sample is homogen, the researcher did the homogeneity test which the data was taken from the result of English daily examination in the first semester. With the help of SPSS, the result of the homogeneity test as follow;

Table 3.2 Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
,762	7	288	,619

The result of the test showed that **p=0.619, a=0.05**. Therefore, 0.619 > 0.05. It meant the sample is homogen.

C. Technique and Tool of Data Collection

This study used indirect communication as a technique in collecting the data. Tools in collecting the data in this research were school's documents and questionnaire. For students' English achievement, the researcher used report card. For students' level of self-esteem, the researcher adopted a questionnaire from Rosenberg Self-Esteem Scale (RSES). According to Owens T., (2001: 36) stated, "Rosenberg's measure was designed to capture global self-esteem that was not tied to any specific area." It is said that self-esteem can be measured generally by using Rosenberg's measure (RSES).

Rosenbreg Self-Esteem Scale consisted 10 questions and each question contained 4 choices. Total self-esteem scores were ranged from 0-30. The higher score was indicated as the higher self-esteem, which scores below 15 was indicated as low self-esteem. Guindon (2010: 14) discussed about some instruments in measuring the level of self-esteem, he stated that the most widely used instrument is the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Regarding to the study, there were two researchers which also used this questionnaire, they were Abdolahi and Khansir in Iran 2014.

For the criterion variable or students' English achievement data, the researcher took the data from the documents of school where the students are studying. The data that measured as students' English achivement was the result of English examination for the first semester in the academic year of 2015-2016.

D. Procedure of Taking the Data

The researcher started to collect the data both self-esteem and Students' English achievement on Monday, 11 April 2016. The sample was taken by using disporpotionate stratified random sampling. The researcher took 5 (five) students from each class thus there were 40 (forty) students as the sample and gathered in one class. The researcher asked the teacher of English subject for grade tenth to help the researcher in controlling the students during the students were answering the questionnaire.

Rosenberg Self-Esteem Scale is written in English, in helping students to understand the questionnaire, the researcher has translated the questionnaire into Indonesian and it was already validated by an expert. It meant the translation of the questionnaire was translated correctly.

Firstly, before answering the questionnaire, the students listened to the researcher about the instruction of the questionnaire. After reading the questionnaire, the researcher asked the students to focus on the statements of the questionnaire and answer the statements honestly. The Rosenberg Self-Esteem Scale on the table of students were in English, the researcher read the translation then the students answered the questionnaire.

On the same day, after the students finished with the questionnaire, the researcher directly asked the teacher the students' English result of final exam at the first semester due to complete the data for students' English achievement.

E. Technique of Data Analysis

Analysis of data means a process of simplifying and arranging data to become simpler in order to find out the conclusion of an information. As explained by Singh (2006: 223) stated, "studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down existing complex factors into simpler parts and putting the parts together in new arrangements for the purpose of interpretation"

In processing the data, in the general process of analysis of research data, statistical method has contributed a great deal (Singh, 2006: 223). Singh (2006: 224) also explained about statistical analysis that is "the body of mathematical techniques or processes for gathering, describing organising and interpreting numerical data". The researcher concluded that statistical analysis of data is an activity or process of analyzing data or information by using statistic which is aimed at gathering, describing organizing and interpreting numerical data.

Therefore, in order to finish this research, the researcher has answered the questions those were written on the research questions, where the first question was about finding out the level of students' self-esteem. In answering the question number one, the researcher counted on the result from the questionnaire (Rosernberg Self-Esteem Scale). The higher the score, the higher the level of self-esteem. From the result, 0 – 15 was indecated as low level of self-esteem, and 16 – 30 was catagorized as high level of self-esteem.

The second question was about finding out the level of students' English achievement. In answering this question, the researcher asked the English teacher in SMAN 03 Ketapang about the standard of examination result. Therefore, from all representatives, the researcher has found out the students which high level or above standard average of achievement and the students which low level or under standard average of achievement.

The third question was about finding out whether or not a correlation between studnts' self-esteem and students' English achievement. The researcher decided to use Pearson Product Moment to answer the question because the data both self-esteem and students' English achievement were normal after the researcher tested the data by using Kolmogorov-Smirnov test. The test was calculated by using SPSS. The criteria that was used to accept and refuse the normality of the data as follow:

If p – value < α, the Hi accepted

If p – value ≥ α, the Ho accepted

Note :

Hi = the data of population normal distributed

Ho = the data of population not normal distributed

α = 0,05

The last question was about knowing the significant of the correlation if there is any. Therefore, to answer the question, the researcher counted on the result of question number three. According to Singh (2007 : 235), "The rejection or acceptance of a null hypothesis is based upon some level of

significance as a criterion. In psychological and educational circle the 5 per cent level of significance (.05) is often accepted as a standard for rejection". In order to decide what significant the correlation is, Urdan (2005: 76) explained if correlation coefficients between -.20 and +.20 indicate a weak relation between two variables, when correlation coefficients between .20 and .50 (either positive or negative) represent a moderate relationship, and those larger than .50 (either positive or negative) represent a strong relationship. As the conclution of the significant level, according to Urdan (2005: 76) the table below show the level of the significant.

Table 3.3 the level of significant

-.20 - +.20	Weak
0.20 – 0.50	Moderate
> 0.50	Strong