CHAPTER III
RESEARCH METHOD

A. Research Design

This study uses quantitative approach. It is because the analysis of the study stressed on the numerical data that processed with statistically. This research focus on parents’ education level background and students’ achievement in English learning. The writer uses statistical analysis to calculate the numeral data that are gathered and to analyze them by using regression one predictor analysis. The result of the analysis is then interpreted to find out the influence of parent’s economy background to the student’s English learning achievement.

B. Source of Data/Participant And Setting

1. Population

Population or universe is the whole total of analytical unit which characteristics will still be preassumed.\(^1\)

In the research that will be conducted to parents’s of the students in VIII grade of MTs NU Nurul Huda Semarang academic year 2013/2014 that consists of several classes with a particular amount of parents.

<table>
<thead>
<tr>
<th>No</th>
<th>Classes</th>
<th>Total students</th>
<th>Total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XIII A</td>
<td>- students</td>
<td>- parents</td>
</tr>
<tr>
<td>2</td>
<td>XIII B</td>
<td>- students</td>
<td>- parents</td>
</tr>
<tr>
<td>3</td>
<td>XIII C</td>
<td>- students</td>
<td>- parents</td>
</tr>
<tr>
<td>4</td>
<td>XIII D</td>
<td>- students</td>
<td>- parents</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>- students</td>
<td>- parents</td>
</tr>
</tbody>
</table>

1. Sampling Technique

Sample is a partial part of total population, which is taken from population, in such a way to represent the whole total of population itself.\(^2\)

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\(^1\) Singarimbun dan Sofian Efendi, *Metode Penelitian dan Survei*, (Jakarta: PT Pustaka LP3ES 1995), p 152

The sample will be taken as much as 20% from the total population, because the total population itself is exceeding a hundred / 100, (Arikunto, 2006)\(^3\). To derive the particular representative sample, so the sample technique that will be used is the Proportional Random Sampling, in which the sample is taken from a populations that has already been categorized with a stable result or proportional. This technique is used because the populations has already been categorized into some claseses with the same exact amount, (Arikunto, 2006)\(^4\). The amount of the sample in this research is some particular amount of students, which is 20% from each classes.

Tabel 3.2 Research sample’s determination process.

<table>
<thead>
<tr>
<th>No</th>
<th>Class</th>
<th>Students population</th>
<th>Students’ sample</th>
<th>Parent’s sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>XII A</td>
<td>- Students</td>
<td>- Students</td>
<td>- Parents</td>
</tr>
<tr>
<td>2</td>
<td>XII B</td>
<td>- Students</td>
<td>- Students</td>
<td>- Parents</td>
</tr>
<tr>
<td>3</td>
<td>XII C</td>
<td>- Students</td>
<td>- Students</td>
<td>- Parents</td>
</tr>
<tr>
<td>4</td>
<td>XII D</td>
<td>- Students</td>
<td>- Students</td>
<td>- Parents</td>
</tr>
</tbody>
</table>

2. Variable of the Research

There are two variables in this research, those are:

1. Variabel X

The dependent variable in this research, which is the parent’s social economy condition, they are:

a. Educational Level
b. Income Level
c. Wealth or Facilities owning
d. Residence categories

2. Variabel Y

The tied variable in this research is the learning’s achievement, those are the average score of Geographic subject in the first semester of the
students in VIII grade of MTs NU Nurul Huda Semarang, in academic year of 2013/2014.

The relations between factors that influence the social economy level (dependent variable) to the learning’s achievement (tied variable) can be seen in this scheme below;

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents’ Economy Level</td>
<td>MTS NU NURUL HUDA SEMARANG</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
</tr>
<tr>
<td>Income Level</td>
<td></td>
</tr>
<tr>
<td>Wealth/Facilities</td>
<td></td>
</tr>
<tr>
<td>Ownig Categories</td>
<td></td>
</tr>
<tr>
<td>Residence Categories</td>
<td></td>
</tr>
</tbody>
</table>

Picture 3.1 Relations between Dependent Variables (X) and Tied Variables (Y)

3. Data Collection Technique

In this research, the collection data technique use documents, observation and also use questionnaire.

1. Observation

Observation is a data-collecting method that is performed by directly examining the research objects; it means that an observer or an examiner is on the spot where the observation takes place. In other explanation, observation is doing observation directly to the object research to see more close the activity that done by the object. Observation concerns the planned watching, recording, analysis and interpretation of behavior, action or event. The resercher will use this method to see the condition of the school and how much the students at the school, so the resercher will get the description of the

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5 Sumarsono, HM Sony, *Metode Riset Sumber Daya Manusia*, (Yogyakarta: Graha Ilmu 2004), p 70
sample that will be taken, after get the data of the sample, it will show that the sample will be able to represent the population of students at that school.

2. Questionnaire Method

An interview also means as an indirect interview; in another word, it means that the respondents will be given the questionnaire and they are free to answer it entirely on their own will.\(^8\)

The researcher used this method to find out the social economy condition of the parent and by using that method the researcher will get the information in which level the student’s parents economy background at that school, after the researcher get the data, it was used to find out is there any influence between parents economy level to student’s achievement.

3. Documentation Method

Documentation is to get data directly in research location.\(^9\) Documentation is including to secondary data. There are several sources of secondary data, including books and periodicals, government publications of economic indicators, census data, Statistical Abstracts, data bases, the media, annual reports of companies, and other archival records.\(^10\) Documentation Method is going to be used to find out the history of the school, the building condition, geographic location of the school and also to get the first semester report score of the students of MTs NU Nurul Huda Semarang academic year 2013/2014 grade VIII. And the data above was used to find out is there any influence between parents economy level to student’s achievement at MTs NU Nurul Huda Semarang Semarang.

4. Data Analysis Technique

1. Representative Description

Representative Description is used to give a description or explanation in this research.

Some steps that are going to be used to be done in using this analysis technique are:

\(^8\) Sumarsono, HM Sony, Metode Riset Sumber Daya Manusia, (Yogyakarta: Graha Ilmu 2004), p 73
\(^9\) Riduwan, Belajar Mudah Penelitian Untuk Guru, Karyawan Dan Peneliti Pemula, page 77
a. To make distribution table of X and Y Questionnaire
b. To determine the score of respondents results with the fixed score regulations that has been set before.
c. To calculate results score that are gained from each respondent.
d. The next step is to determine the score into the formula as follows:

\[ DP = \frac{n}{N} \times 100\% \]

Explanation:
DP = Descriptive Percentage
n = Score
N = Whole calculated scores that are expected

The data that are taken from the Questionnaire (as the primary data) will be then analyzed by these steps:
1. Compile data according to its category
2. Make the data tabulation
3. The data that has already been tabulated then analyzed by using a simple regression analysis to know how big a social economy influence of the parents can get into the learning achievement. To ease the data analysis, the score that comes from the respondents from their questionnaire results need to be found out first. Thus, it is needed to have these score system criteria as follows:
   1. Alternatively, the answer of A contains the amount of score 4
   2. Alternatively, the answer of B contains the amount of score 3
   3. Alternatively, the answer of C contains the amount of score 2
   4. Alternatively, the answer of D contains the amount of score 1

The frequency calculation of research questionnaire spreading results in correlation between social economy conditions of parents to the student’s learning achievement. To determine the criteria of scoring, there is a relation between parent’s social economy conditions to the learning achievement by using a calculation as follows:
1. Maximum Score Percentage = (4: 4) x 100% =100%
2. Minimum Score Percentage = (1:4) x 100% = 25%
3. Range

\[= 100\% - 25\% = 75\%\]

4. Length Class Interval

\[= 75\% : 4 = 18,75\%\]

With the Length Class Interval as much as 18,75\% and Minimum Score Percentage as much as 25\%, thus we have the class intervals as follows:

Tabel 3.3 Percentage Descriptive Calculation

<table>
<thead>
<tr>
<th>No</th>
<th>Percentage</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25% - 43.75%</td>
<td>Not good</td>
</tr>
<tr>
<td>2</td>
<td>43.76% - 62.50%</td>
<td>Less good</td>
</tr>
<tr>
<td>3</td>
<td>62.51% - 81.25%</td>
<td>Good</td>
</tr>
<tr>
<td>4</td>
<td>81.26% - 100%</td>
<td>Very good</td>
</tr>
</tbody>
</table>

This research will be conducted to give us a detail explanation of how is the condition of parent’s social economy, it is expected that the results will be able to give description or guidance for any necessary that might come in the future.

2. Simple regression analysis

A simple regression analysis is a regression analysis that includes both a dependent and independent variables in its measurement.\(^{11}\) In other book it was mentioned that simple linear regression analysis is a linear relation between parents’ economy background and students’ achievement. The purpose of this analysis is to find out the relation direction between the two variables, whether positive or negative, as well as to predict the independent variable's value, whether its increasing or decreasing.\(^{12}\) The applicable data usually in either interval scale or ratio.

This method is used to calculate to what extent the influence between social economy condition of the parents and the students’ learning achievement. The steps to analyze are such follows;

a. Look for the similarity of regression line

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\(^{11}\) Nazir Moh, *Metode Penelitian*, (Bogor Selatan: Ghalia Indonesia 2005) p 459, cetakan ke 6

Using the one variable linear regression analysis technique with formula as follows;

\[ Y = a + bX \]

Y : Tied Variable (Learning Achievement)
a : Constant
b : Variable X regression coefficient
X : Dependent Variable (Social Economy condition)

b. Testing the significant of regression line from the F regression price

This is used to find out to which extend the influence between predictor X1 and Y (learning achievement) assessed. From the calculation we’re going to have the F price which then to be consulted by F price table for db 1 and db as in N-1 in a significant portion 5%. If the F is calculated and has bigger result or the same with F table then Ho is rejected while Ha is accepted, and so otherwise, when the F is having smaller result from F table so the Ho is accepted while Ha is rejected.

c. Determination Coefficient

Determination Coefficient (R ) basically to measure how many percents the dependent variables can be explained by the independent variables.\(^{13}\) The value of the Determination Coefficient is in between 0 to 1. If the value of R2 closer to 1, then it can be said that the model is getting stronger in explaining the dependent/tied variable, so otherwise, if the R2 value closer to 0 so the independent variable will be weaker to explain the dependent/tied variables.

5. Instrument

1. Observasi
   The researcher used observation to know the condition of the whole school environment
2. Questionnaire
   Researcher used this method to acknowledge the parent’s social economy condition.

\(^{13}\) Nazir Moh, Metode Penelitian, (Bogor Selatan: Ghalia Indonesia 2005) p 460, cetakan ke 6
3. Documentation

The documentation method is used to recognize the final score of the first semester of students in MTs NU Nurul Huda Semarang academic year 2013 / 2014.