

CHAPTER III

RESEARCH METHOD

This chapter presents the research method. It focuses the method used in conducting this study. The decision covers research design, population, sampling and sample, variable data, data source, data collecting method and instruments and technique of data analysis.

A. Research Design

This research used quantitative approach and the design employed is correlational research. According to Donald Ary (2002), correlational research methods are used to determine relationships and patterns of relationship among variables in a single group of subjects. He also argues that correlational research is useful in a wide variety of study.

It's been clearly explained in the previous chapter that there are actually a lot of correlation between mothers' educational level and students' English achievement. Thus, due to those similarities, there must be close relationship between mothers' educational level and students' English achievement. In accordance, the researcher really wants to know whether the correlation between those two variables are really existed or not. Accordingly, the most appropriate research design used in order to answer whether or not parents' involvement and students' English achievement of MTs Darul Huda Wonodadi Blitar in the fourth semester 2018/2019 is correlational design.

B. Population, Sample, and Sampling

1) Population

Population is all subjects being studied. Parahoo (1997:218) defines population as “the total number of units from which data can be collected”, such as individuals, artifacts, events or organizations. Burns and Grove (2003:213) describe population as all the elements that meet the criteria for inclusion in a study. The population of this research is all the second year students of MTs Darul Huda Wonodadi in the fourth semester 2018/2019. There were three classes of the second year students that consisted of 120 students.

2) Sampling

Due to the large sizes of populations, the researcher could not test each individual in the population because it was too expensive and time-consuming. This was the reason why the researcher relied on sampling techniques. Related to Fraenkelet *al* (2012: 91) sampling was the selection of the sample of individuals who will participate (be observed or questioned). To put it simply, sampling was the way of proses in taking sample intended to carry out research. Ary (2002: 16) stated “the purpose of sampling is to obtain information concerning the population”.

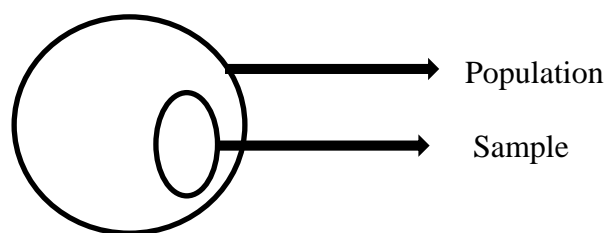
With the intention of taking sample, the researcher was conducting research to the students who have been categorized as top ten ranking and they live with their mother. Here, purposive sampling technique was the proper one aimed to select subjects in this research. Purposive

sampling implied the way that researchers sample must be tied to their objectives, it was about with whom, where, and how one does one's research (Palys, T, 2008: 697). Therefore, it allowed researcher determined the subjects by defining specific characteristics suit to research purposes, so that it was expected to answer research questions.

3) Sample

Sample is part of population that is being studied. According to Lodicoet *al* (2006: 143), “a sample is a smaller group selected from a larger population (in this case, a realistic population) that is representative of the larger population”. For having sample, researcher was allowed to conduct the study to individuals from the population so that the results of their study could be used to derive conclusions that will apply to the entire population.

Figure 3.1 : The Illustration of Population and Sample



In this study, the sample was taken from the students from three classes that have been categorized as top ten ranking and live with their mother.

C. Variable

1. Independent Variable: is the one affecting another variable. In this research parents' involvement is an independent variable because it can affect the student's achievement.
2. Dependent Variable: is variable affected or becoming the result because of the existence of the independent variables. Dependent variable in this research is students' English achievement of the eighth grade of MTs Darul Huda Wonodadi Blitar in academic year of 2018/2019.

D. Technique of Collecting Data and Instrument

In this study, the data will be taken through questionnaire and documentation. The technique that will be used to obtain the data of parents' education level background is questionnaire. Meanwhile, the documentation is school report, school report will be used to collect data of students achievement. In the technique of collecting data, the researcher will collect parents education level background data and students achievement data. The researcher presented those as follows:

1) Questionnaire

Arikunto (2006:236) states a questionnaire is a number of written questions which are used to gain information from respondents about the respondents themselves or their knowledge, believe, etc. There are two types of questionnaire:

- a. Opened questionnaire: the respondent can answer the questions using their own sentences.

- b. Closed questionnaire: the respondent can directly choose the appropriate answer.

In this research, the researcher will use the closed questionnaire to know the parents' education level background in MTs Darul Huda Wonodadi. The questions in the questionnaire was written in Indonesian language. It conducted in order to make easier the respondents to answer the questions. The questionnaire was about 13 question in form of multiple choice. The researcher asked mothers to choose one option that they wanted. The researcher provided 4 options for each question. A,B,C and D. To make easy to determine the interval score of the questionnaire set, all answer of the questionnaire would be changed become score. The score of parents involvement and educational background would be marked as follows:

- 1) For education level background
 - S3/S2 is given value 4
 - S1/Diploma is given value 3
 - SMA (Sedrajat) is given value 2
 - SMP (Sedrajat)/SD (Sedrajat) is given value 1
- 2) For characteristics of educated person
 - Answer A is given value 4
 - Answer B is given value 3
 - Answer C is given value 2
 - Answer D is given value 1

2) Documentation

Arikunto (2006:135) states that documentation method is intended to find data on manuscript, book, magazine, newspaper, epigraph and agenda. In this study, the researcher uses school report to get the data about student's English learning achievement.

E. Validity and Reliability

Sugiyono and wibowo (in Sujianto 2006:94) states “ the validity of instrument is instrument that is used to obtain the data that is credible and it can measure what are going to measure. The reliability of instrument means the instrument that obtain the similar data and finding eventhough the instrument are used many times. To know whether the instruments were valid or not, the researcher conducted validity and reliability test as follows:

1. Validity

Hammersley in Ary (2002:452) states “ an account is valid or true if it represents accurately those features of the phenomena that it is intended to describe, explain, theorize”. Before being distributed to the sample. The instruments were checked by the expert that was the teachers from Mts Darul Huda Wonodadi Blitar as a validator to get the validation.

Also the instruments were trying out to the other class The criteria of validation included the accuracy of using word, the suitability of

question with the research, the questions proposed enable the researcher to answer the research problem, and the clarity of aim in question.

2. Reliability

Azwar (in Sujianto 2009:97) state “reliability means consistency”. The result of measurement can be trusted if in several times of conducting measurement in same sample are relatively same, since the aspect that is measured are not change. The reliability of instrument was the result of measurement that can be trusted. It was necessary to get the data based on the purpose of measurement. Reliability, on the other hand, refers to the consistency of a measurement. It deals with Azwar (in Sujianto 2009:97) who noted that “*reliability* means consistency”. However, these two criteria are absolutely important used to judge the quality of all pre-established quantitative measures. In addition, Triton (in Sujianto, 2009: 97) stated that there were some interpretations of Cronbach values (see table 2).

Table 3.1 : Cronbach Alpha interpretation based on Triton

Cronbach values	Interpretations
0,00 – 0,20	Less reliable
0,21 – 0,40	Rather reliable
0,42 – 0,60	Quite reliable
0,61 – 0,80	Reliable
0,81 – 1,00	Very reliable

The instrument that had value between 0,00-0,20 were less reliable, the instrument that had value between 0,21-0,40 were rather reliable, the

instrument that had value between 0,41-0,60 were quite reliable, the instrument that had value between 0,61-0,80 were reliable, and the instrument that had value between 0,81-0,100 were very reliable.

In this study used 2 kinds of questionnaire taken by several resources. Before being distributed to the sample, the instruments were trying out to the other class to get the reliability. From the answer of students' response in questionnaire the researcher then analyzed using reliability test based on Cronbach's Alpha.

The result of reliability test is:

Tabel 3.2 : Reliability Statistics for Mothers' Educational Background

Reliability Statistics	
Cronbach's Alpha	N of Items
.646	13

From the data reliability statistics seen (see table 3.2 for Mothers' education background) showed the Cronbach Alpha's value reached 0.646. Based on the Cronbach scale in table 3.1 it lies on the cronbach value between 0, 61 – 0,80. So, it can be said that the instrument was reliable.

F. Normality test

Sujianto (2006:77) states that normality testing is test to measure whether the data have normal distribution so it can be used in parametric statistic.

Based on the definition above, the purpose of the conducting normality test was to know whether a certain variable normal or not. The data that was normal means the distribution data were normal was one of the condition to conduct parametric test. For the data that abnormal should analyze by using non-parametric test. Santoso(2006), normality test data is usual thing that is conducted before statistics method are applied.

According to know wheteher the distribution was normal or not, can be known from:

- 1) Nugroho (in Sujianto 2006: 78) states “ the normality of the data can be seen from skewness and P-P Plots.
- 2) Santoso (in Sujianto 2006: 78) states “ the normality of the data can be detected from skewness ratio, kurtosis ratio, histogram, Kolmogorov-Smirnov, and Shapiro-Wilk.
- 3) Akbar (in Sujianto 2006:78) states “Kolmogorov-Smirnov is statistical testing that conducted to know the distribution of a certain data that has ordinal. Whereas Chi-square for the data that has nominal scale. Santoso (2006:78) states “if the Sign.-value or probability value $>0,005$ the distribution is normal (symmetrical).

Normality test was done towards the two scores (mothers' educational background and students' English achievement) obtained from the students. The data was presented as the next table (see table 3.3)

**Table 3.3 : Parents' Involvement and Students' English
Achievement Score**

No.	Name	Score	
		Parents' Involvement	Students' English Achievement
1	DN	38	95
2	EL	37	88
3	LNH	43	95
4	LNA	44	100
5	UN	45	100
6	PA	39	90
7	AS	39	90
8	IT	40	95
9	MF	45	95
10	ND	44	80
11	FA	41	80
12	PW	39	89
13	AN	42	95
14	EN	44	80
15	SK	43	80
16	SN	46	90
17	YSN	44	85
18	SFI	44	80
19	MM	43	85
20	PT	42	85

The hypotheses involved were:

a. H_0 : The data is in normal distribution

b. H_a : The data is not in normal distribution

The analysis of which hypothesis was accepted refer to the significance value ($\alpha = 5\%$). Null hypothesis (H_0) would be rejected when the *Asymp. Sig* value was lower than 0,05 (*Asymp. Sig* < 0,05). The result of the normality testing done by using SPSS below (see table 3.13).

The result of Normality testing by using SPSS 16.0 (see Table 3.4)

Table 3.4 : Normality Testing

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		20
Normal Parameters ^a	Mean	.0000000
	Std. Deviation	6.78838052
Most Extreme Differences	Absolute	.146
	Positive	.146
	Negative	-.142
Kolmogorov-Smirnov Z		.655
Asymp. Sig. (2-tailed)		.785
a. Test distribution is Normal.		

The value of *Asymp. Sig. (2-tailed)* was 0,785 which were higher than 0,05 ($0,785 > 0,05$). As a result, the Null hypothesis (H_0) was accepted while the Alternative Hypothesis (H_a) was rejected. Accordingly, all data from the scores was in a normal distribution.

G. Data Analysis

Because the purpose of the research was to measure the correlation between Parents' Involvement and The English Achievement of second year students, the researcher used statistics method. In this research all the data were gained from the result of questionnaire and the test in the form of number. All the data analyzed quantitatively. After all the data was gathered, firstly, the researcher *tabulated* them into the tables which expected for readers to understand easier. Secondly, knowing the correlation between the two involved variables, researcher employed computer calculation of *Pearson Product Moment* correlation using SPSS 16.0 program to analyze the data. This showed the result that the interpretation coefficient correlation (r) value of how strong/high or weak the correlation between the variables. Consider the following interpretations given the following size of coefficients related to Creswell (2012: 347);

- .20 –.35: When correlations range from .20 to .35, there is only a slight relationship; this relationship may be slightly statistically significant for 100 or more participants.
- .35 –.65: When correlations are above .35, they are useful for limited prediction. They are the typical values used to identify variable membership in the statistical procedure of factor analysis (the intercorrelation of variables with a scale), and many correlation coefficients for bivariate relationships fall into this area.

- .66 –.85: When correlations fall into this range, good prediction can result from one variable to the other. Coefficients in this range would be considered very good.
- .86 and above: Correlations in this range are typically achieved for studies of construct validity or test–retest reliability. In fact, researchers want their reliability and validity test correlations to be this high.

Thirdly, the researcher would take a conclusion based on the result showed by SPSS 16.0 program if the hypothesis was rejected or accepted.

