

CHAPTER III

RESEARCH METHOD

This chapter discusses sources of data, time and setting of research, subject of research, variables and indicators of research, research design, scoring technique, method of data analysis, and research procedures.

A. Research Design

This research will focus on students' motivation in learning speaking. Considering the purpose of the research and the nature of the problems, this research is a quantitative one. A scientific research has to use methodology. The method used is an absorptive of the study and can be counted as scientific. The using comparative study is to identify the students' motivation in learning speaking in MAN Bawu Jepara at the natural science program and social science program XI grade in the academic year 2011/2012.

According to Suharsimi Arikunto, to perform comparison of condition exists in two places, what is the both of condition same, or there is difference, and if there is difference, which condition in place is better.¹ Therefore, this research used descriptive quantitative approach where the data of the study are presented on verbal word and in numbered.

Comparative Research seems there is benefit value only if compared to show dynamic variable. In this research is used dynamic variable that is motivation. If it is compared between work result of motivated and demotivated people and its result shows group one who is motivated its result of work is better

Research of descriptive means to investigate situation, condition or other matter which has been mentioned, which its result is presented in the form of research report.²

¹ Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, (Jakarta: PT. Rineka Cipta, 2010), p. 6.

² Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik*, p. 3.

B. Research Setting

This research was conducted on the second semester in the academic year of 2011/2012 for about 2 weeks began from April 30 up to May 14, 2012. It was conducted in MAN Bawu Jepara, which was located on Bawu Batealit Street KM.07 Jepara.

C. Population and Sample

This study was conducted in MAN Bawu Jepara located on Bawu Batealit Street KM.07 Jepara. The subjects of this study were the natural science program and social science program of XI Grade Students at MAN Bawu Jepara in academic year 2011/2012. This study was conducted in second semester. To limitation of time, the writer did not take all students as the subjects of the study, but using a sample.

1. Population

This study will be conducted with XI grade students MAN Bawu Jepara in academic year of 2011/2012 as the population. According to Arikunto, population is whole subject in the research.³ The students are four classes. There are 2 classes in XI grade student's natural science program and there are four classes in XI grade student's social science program. Total of students are 186 students.

Arikunto also stated that sample is representative of the population observed.⁴ Because of that, which is used 2 classes not all population of students in whole school, so this is the small proportion from the population which is observed. By observing just the sample, the researcher hopes to be able to collect the particular conclusion that will be related to the population.

³Suharsimi Arikunto, *Prosedur Penelitian Suatu Pendekatan Praktik 6th revised*, (Jakarta: Rineka Cipta, 2006), p. 130.

⁴Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik, 6th revised* p. 131.

2. Sample

Sample is part of amount and characteristic had by population⁵. If population is big, so it is not possible to study all that is in population. For example because of limitation of fund, time and energy, hence could be used sample taken away from that population. What studied from that sample, its conclusion will be able to be applied for population. For that, sample taken away from population have to be really representative.

Random sampling is method of taking sample by which the object of population is mixed. Hence all objects seem to have same opportunity for being taken as sample. Actually classes of population are same, and then the subjective disposition is released because it is factor which particularizes one or some objects for being become the sample.

Because subject of this research were big number, (more than 100), so, sample is taken just one in each class, a class of natural science program and a class of social science program. Total samples are 58 students. For population, There were 64 students in 2 classes of natural science program, and 120 students in 4 classes of social science program. The students are six classes. Total of students are 184 students.

D. Variables and Indicator

Variable is phenomenon which varies in the form, quality, amount, quality of standard, and etc. From this definition, hence variable is a phenomenon (fickle) hence it is possible that there is no an event in this nature which cannot be called as variable, it is depended how is the quality of its variable, that is how phenomenon variation. There is phenomenon which is its variation of spectrum is simple, but also there is other phenomenon with variation of spectrum which is very complex.⁶

⁵ Sugiyono, *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R&D)*, (Bandung: Alfabeta, 2008), p.118.

⁶ M. Burhan Bungin, *Metodologi Penelitian Kuantitatif: Komunikasi, Ekonomi, dan Kebijakan Publik Serta Ilmu-Ilmu Sosial Lainnya*, (Jakarta: Kencana, 2010), p.59.

This research has title Students' Motivation in Learning Speaking. The variable of this research is same as the title. It is Students' Motivation in Learning Speaking. It is natural science program of XI Grade Students' motivation in learning speaking as variable X and social science program of XI Grade Students' motivation in learning speaking as variable Y

This research has title Students' Motivation in Learning Speaking. It has two variables. Those variables were:

1. The Independent Variable

Independent variable is variable that influences or being a cause of change or risen from dependent variable.⁷ This variable is also called as a stimulus, predictor, and antecedent variable.

For example is in this research, the students' speaking ability depends on motivational level, equally good motivation will result students' speaking mounts, while students' speaking ability decreases if the students' motivation is bad. The independent variable of this research was 'students' motivation' or as variable X.

2. The Dependent Variable

The dependent variable is variable "influenced" by independent variable.⁸ The dependent variable of this research was 'learning speaking' or as variable Y.

Indicators

Indicators that are used in this research are indicators of motivation that can be classified as follow:

⁷ Sugiono, *Metode penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R & D)*, p.61.

⁸ M. Burhan Bungin, *Metodologi Penelitian Kuantitatif:K omunikasi, Ekonomi, dan Kebijakan Publik Serta Ilmu-Ilmu Sosial Lainnya*, p.62.

No	Indicators	Aspect
1.	Attitude Direction	It is the students' impression toward the aim of English learning.
2.	Level Achievement Qualification	It is output that is got from English learning. Achievement and motivation are two factors that influence each other.
3.	Level of Aspiration	It is the target or planning that will be reached by doing English learning.
4.	Devotion and Loyalty	This is students' capability to spend their money, time, energy, or mind for reaching the goal by learning English.
5.	Firmness and Tenacity	It is students' ability for solving the difficulty in reaching the goal by learning English.
6.	Persistency	Persistency in pursue the goal of English learning
7.	Frequency of Activity	How often English learning done in determining time is.
8	Duration of Activity	How long time students' ability in using the time to do English learning is.

Indicators of motivation above are influential each other. It means one indicator gives contribution in other indicator.⁹ Students feel pleasure in English

⁹ Abin Syamsudin Makmun, *Psikologi Kependidikan*, (Bandung: Remaja Rosdakarya, 2000), p.39.

speaking, they spend more time and they are diligent In doing work, then they get achievement as the result, also in contrary.

E. Data Collection Technique

- a. Questionnaire. It is collection or list of questions arranged systematically, and then sent to be filled by respondent.¹⁰ After filled, questionnaire is sent or returned to officer or researcher. In other words, Questionnaire is interview that is written to collect the motivation of the students. Actually given the question to the participants.
- b. Interview. It is some questions which are given to students in spoken form as data collection technique. The Interview was done with English teacher and some students of class XI grade student's natural science program and class XI grade student's social science program. The interview was about students' motivation in speaking English.
- c. Documentation

In collecting data, is used documentation study. Documentation study may refer to technique of collecting data by gathering and analyzing documents. While documents is any material used to explain some attributes of an object, picture, systems or procedure.

The authentic data is collected in searching data in concrete form. Documentation that were used in this research are profile of school, student's name list, photo of students' activity, questionnaire list as part of source that is original or no changing. So, documentation can proof that the research was done and correct the mistakes that may be appear.

¹⁰ M. Burhan Bungin, *Metodologi Penelitian Kuantitatif:K omunikasi, Ekonomi, dan Kebijakan Publik Serta Ilmu-Ilmu Sosial Lainnya*,p.123.

F. Data Analysis Technique

After data is gathered from result of data collecting, it is needed to process soon, namely data processing. In other books often said as data processing. There are people mention *data of preparation*, there is also *data of analysis*.

After collecting data, then analyze them by some steps:¹¹

1. Preparation

It is checked all of complete data to make sure that no data being left by the following activities:

- a. Checking list of students identify completeness.
- b. Checking instruments in this case is questionnaire sheets.
- c. Checking all of answered questions of the questionnaire.

2. Tabulation of the Data

They are:

- a. Giving score on multiple choice questionnaires
 - Score 5 for the respondents who choose item 'a'
 - Score 4 for the respondents who choose item 'b'
 - Score 3 for the respondents who choose item 'c'
 - Score 2 for the respondents who choose item 'd'
 - Score 1 for the respondents who choose item 'e'

3. Assembling

After major data had been collected, comparative analysis would be done. This analysis took following steps:

1. To test difference of each variable mean¹²

¹¹ Suharsimi Arikunto, *Prosedur Penelitian, Suatu Pendekatan Praktik*, p235.

¹² Tulus Winarsunu, *Statistik dalam Penelitian Psikologi dan Pendidikan*, (Malang: UMM Press, 2007)

- a) To determine mean of each variable

$$M = \frac{\sum X}{n}$$

- b) Determining variance and standard deviation

$$V_x = \frac{n\sum X_i^2 - (\sum X_i)^2}{n(n-1)} \quad ^{13}$$

Standard deviation is square root of variance, so

$$S = \sqrt{V_x}$$

- c) To determine standard deviation of each variable

$$SD2 = \frac{\sum x^2}{N} - Mx^2$$

- d) To determine error of mean¹⁴

$$SD2M_x = \frac{SD2}{N - 1}$$

$$SD2M_y = \frac{SD2}{N - 1}$$

- e) To determine standard error difference of mean

$$SDbM = \sqrt{SD2M_x + SD2M_y}$$

¹³ Moh. Nazir, *Metode Penelitian*, (Bogor: Ghalia Indonesia, 2009), p.386.

¹⁴ M. Burhan Bungin, *Metode Penelitian Kuantitatif: Komunikasi, Ekonomi, dan Kebijakan Publik serta Ilmu-Ilmu Sosial lainnya*, p.189.

f) To determine t_{test}

$$t = \frac{Mx - My}{SDbm}$$

g) To measure degree of freedom by $df = n_1 + n_2 - 2$

h) To check the criteria t_{table} with significant degree 5 %

i) To get conclusion

The criteria H_0 is $t < t_{1-\alpha}$

If alternative hypothesis or H_a is acceptable, so the conclusion is There is significant motivation difference that natural science program is better in learning speaking English than social science program of XI grade at MAN Bawu Jepara.

If H_0 or null hypothesis is acceptable means the alternative hypothesis is unacceptable. So, the conclusion is nothing significant motivation difference that natural science program is better than social science program in learning speaking English of XI grade at MAN Bawu Jepara.