

CHAPTER III

METHODOLOGY

3.1 Research Design

Research is the systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles, or theories, resulting in predictions and possibly ultimate control of events (Best, 1981 in Maflukha's study, 2006). It is important for the researcher to choose the right research design. The researcher needs a suitable research design to get the true result of a research.

There are several kinds of research. They are fundamental, applied research, action research, assessment, evaluation, and descriptive research. In this research the researcher uses the descriptive research. There are several kinds of descriptive research, such as; case study, survey, developmental study, follow up study, discourse analysis, content analysis, assessment, curriculum and material development (developing study), and correlation study.

The study adopts correlation study. By considering the method of this research, this study is called a quantitative research. Although motivation variable belongs to qualitative, the assessment of motivation is through computing by the SPSS. That is also same with pronunciation variable. The result form of both variables is number. So, the study called a quantitative research and this research include to correlation study. In this research, the researcher does not give any

treatment to the subject of the research, but the researcher only collects the data based on the existing knowledge of the subject.

3.2 Subject of The Study

The population of this study is students of fourth grade at SDN Banjarsari and they consist of 42 students in A class and 42 students in B class. The researcher takes all of students in A class. The researcher chooses students in A class because they have more problems about pronunciation than the other class. It knows from the teacher clarifying. The teacher said that when he teach in A class some of student know well about how to pronounce the English words, some are quite hard to understand, some are facing many difficulties, and some are do not understand at all about how to pronounce English words. The researcher takes all of students in A class because the number of population is limited and the students represent the population. So, the total number of students used as subject is forty two students.

3.3 Data Collection

Data collection is collecting specific information about a student's academic or behavioral performance. Collecting data help the researcher to determine a program's effectiveness. In collecting data, the researcher used some instruments and doing some procedure.

3.3.1 Instrument

In a research, an instrument is one of the important ways to collect the data. According to Cokro Sujoso (1999) in Maflukha's study (2006:25) there are some research instruments, they are test, questionnaire, observation, interview, documentation and attitude scale. An instrument must be standard and valid. This study uses a questionnaire and score of pronunciation test. The questionnaire is used to get the answer of the students' motivation of learning English and the pronunciation test is used to get score of pronunciation ability.

3.3.1.1 Questionnaire

Cokro Sujoso (1999) in Maflukha's study (2006:25) explains that there are some kinds of questionnaire. They are open closed questions, close questions, direct and indirect questions and the form of questions (multiple choice, fill in the blank, check list and scale forms). The answer of open ended question depended on the respondent, but the kind of close ended question as multiple choices.

The researcher used the questionnaire to get the answer of the students' motivation of learning English, and in questionnaire itself there are some questions which are elaborated from indicators of both intrinsic and extrinsic motivation. Each item of question consists of four options and students are asked to choose one of the four choices based on their opinion or it can be called closed ended question (multiple choice).

The questionnaire was designed according to the Maflukha's Motivation Questionnaire, but some items had been changed to be appropriate with the particular situation under the research. The questionnaire consists of 20 questions. Each was designed to have a test of students' motivation. They were grouped by instrumental motivation, integrative motivation, interest and sense of pronunciation ability.

There are twenty items in the questionnaire and each item consists of four choices, A, B, C, and D. In counting the score of this questionnaire the researcher uses Likert Scale which is used in multiple choices test and in the options have each score, they are; A = 4 (very high), B = 3 (high), C = 2 (low), and D = 1 (Very low). The highest score of questionnaire is 80 and the lowest score is 20.

3.3.1.2 Test

According to Arikunto (2006) in Amalia's study (2011:25), test is collection of some questions to measure a skill, talent, and intelligence knowledge of one person or society. There were some kinds of test based on the subject that would be evaluated; they were personality test, aptitude test, intelligence test, attitude test, projective technique, measures of interest, and achievement test.

In this research, the researcher uses achievement test to get score of pronunciation ability. The test form is a short text that will be read by the students. The test for pronunciation is different with the test

generally. The researcher needs to know the pronunciation skill directly.

To know the students' pronunciation skill, the researcher asks the students to read the text and record them. The score will be taken from the record.

3.3.2 Procedure

In this research, the researcher does some procedures. Before getting the data, the researcher will do some preparation as follows:

1. Collecting the list of students' name
2. Preparing the scoring profile for pronunciation and motivation's questionnaire. For pronunciation test there are two tests. The first test is pre test to know the validity of the test, and the second is post test to decide the final pronunciation score of the students.
3. Deciding the data of the test with the teacher
4. Asking the teacher class for time to take out the result of the test

After the preparation procedure above the researcher will give the pre test about pronunciation test to the students. The test is students will be given a short text and the researcher will record their voice when they are reading. The score of pre test will be taken from the record. In this case, the subject is students in B class, not in A Class because before testing the post test the researcher should give pre test to the other subject to know validity of the test. After getting the score, the researcher searching for the normality and validity of the pre test score by using SPSS 15.00. For normality test, the researcher uses normality test

Kolmogorov-Smirnov and *Shapiro-Wilk*. *P-value* (sig.) for this test is minimal 0.05, if $P\text{-value} \geq \alpha$ (0.05) Variable is normal and if $P\text{-value} < \alpha$ means that the data does not come from population that have normal distribution (Uyanto, 2006:36).

The researcher can continue to the next step if the pronunciation pre test is valid. If the pre test is valid, the researcher will give the post test to the students in A Class. Same with pre test, to gain the data validity, the researcher records each student and gives the record to the teacher. After that the teacher will assess the record. The score of pronunciation test will be given to the researcher and the researcher will assess the validity by using SPSS 15.00.

After taking score of pronunciation, the researcher will give questionnaire related to the students' motivation. After getting the data, the researcher will calculate the score of pronunciation and motivation by using SPSS 15.00. The researcher also decides the validity and reliability of all the items in questionnaire test by using *Cronbach's Alpha*. The researcher using *Cronbach's Alpha* because the form of instrument in this study is questionnaire where the score is extension between 1 - 4 and the validity test is using total item where the score is not 1 and 0. The measure scale that reliable is minimum 0.70 (Uyanto, 2006:240). So, value ≥ 0.70 is accepted and value < 0.70 is discarded.

3.4 Data Analysis

The researcher needs variable of pronunciation and motivation to analyze the data in this research. Variable of pronunciation ability is gotten from

pronunciation test and variable of motivation is gotten from score of motivation's questionnaire.

The score of motivation is come from the calculate score of each item in the questionnaire. Not only have the score of motivation, the researcher also needed to know the scale of motivation. Scale of motivation is used to know the highest score and the lowest score. To know the scale of motivation, the researcher uses a formula.

$Mh = \frac{Xsh + Xsl}{2} \quad SDh = \frac{Xsh - Xsl}{6}$	<p>Mh = Mean Score</p> <p>Xsh = The Highest score</p> <p>Xsl = The lowest score</p>
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If the mean score of motivation (m) \geq Mh it means a positive

(Mh + 1,5 SDh) up	= Very High
(Mh + 0,5 SDh) to (Mh + 1,5 SDh)	= High
(Mh - 0,5 SDh) to (Mh + 0,5 SDh)	= Medium
(Mh - 1,5 SDh) to (Mh - 0,5 SDh)	= Low
Less than (Mh - 1,5 SDh)	= Very Low

There are three types of data that may gather in language research. They are nominal, ordinal, and continuous (interval or ratio). In this research, the form of data is ordinal and continuous data. Ordinal data is come from motivation questionnaire and continuous (ratio) is come from pronunciation test.

In this research, the independent variable is Ordinal and the dependent variable is continuous (ratio). So, to know the relationship the researcher uses

Spearman's rho. Based on Muijs (2004:155), if we want to look at the relationship between an ordinal and a continuous variable, we need to use a rank order correlation coefficient like *Spearman's rho*. This is because while variables measured at the higher level (in this case continuous) possess all the characteristics of variables measured at the lower level (in this case ordinal), the inverse is not the case.

		Independent		
		Nominal	Ordinal	Continuous
Dependent	Nominal	Cross tabulation + Chi square + Phi	Cross tabulation + Chi square + Phi	Two nominal groups: t-test
	Ordinal	Cross tabulation + Chi square + Phi	Cross tabulation + Chi square + Phi or Spearman's rho	Spearman's rho
	Continuous	T-test (2 groups) + Cohen's D	Spearman's rho	Pearson's r

Picture 2. Summary of bivariate relationships by Daniel Muijs

Spearman's rho does is calculate a correlation coefficient on rankings rather than on the actual data. For this research there are two variables, they are score of pronunciation test and score of motivation's questionnaire. The correlation coefficients vary between -1 and $+1$. -1 indicates a perfect negative relationship, $+1$ a perfect positive relationship and 0 no relationship.

A correlation is then calculated on these values, using the following formula (Muijs, 2004:152) :

$$\rho = 1 - [(6 * \text{SUM}(d^2) / n(n^2 - 1))]$$

$\rho (r_s)$ = spearman correlation coefficient

n = sample size

d = the difference in ranks.

Based on Muijs (2004:126), the interpretation r value is:

< 0.1 = Weak

< 0.3 = Modest

< 0.5 = Moderate

< 0.8 = Strong

≥ 0.8 = Very Strong