

CHAPTER III

METHODOLOGY

This chapter presents the procedures used in conducting the research. It covers research design, population and sample, data collection and data analysis.

1. Research Design

As stated in the purpose of the study, the study will be conducted in order to know error in using prefixes made by the five semester students of English Education Department at Islamic University of Surabaya. Especially in negative prefixes and specified into six kind of negative prefixes, including *prefix in-*, *prefix un-*, *prefix non-*, *prefix a-*, *prefix dis-*, and *prefix mis-*.

In this research the writer will be used descriptive quantitative study, because in this research the writer will count the most frequent error. According to Ary stated that descriptive research is research that asks questions about the nature, incidence, or distribution of variables; it involves describing but not manipulating variables.¹ According to Gay quantitative studies designed to describe the current condition are called survey or descriptive research.² From the definition, it could be clarified that the researcher will try to collect data from the students' misinformation error in employing prefixes. Especially in the

¹ Donald Ary, et. al, *Introduction to Research in Education*,(Wadsworth: Cengage Learning,2010)

² L. R. Gay, *Education Research: Competencies for Analysis and Applications* (USA: Pearson Education, Inc. 2003)p.102

In conducting research population and sample are very important. According to Ary, the small group that is observed is called sample, and the larger group about which the generalization is made called a population.³ According to Gay, the population is the group of interest to the researcher, the group to which the results of the study will ideally generalize.⁴ In this study, the target of the study was the six semester student of English Teacher Education Department academic year 2012/2013 at UIN Sunan Ampel Surabaya. The total population is 120 students who are divided into four classes; A, B, C, D. They were chosen as the population because they have already learned Morphology.

³ Ibid

⁴ *ibid*

⁵ *ibid*

3. Research Instrument

Each technique/method that is used to collect the data needs an instrument. Instrument is the measurement tool in the test which potentially made the researcher easier in collecting data and analysis.⁶

In short, instrument is a tool which is used by a researcher in using method during conducting the research in order to get the data better. Thus, determining instrument depends on the method used in the research.

The instrument which will be used to collect the data of first research question is the question sheets which contain the question that will be answered by the students. The amount of questions was 45 items contain uncomplete sentences (see appendix 1). The instrument utilized for second research question is result of the test.

And the question of the test must be tried out in advance. In this study the test is administered to six semester students of English Teacher Education Department UIN Sunan Ampel Surabaya. They were not already included in sample and class A was chosen. The purpose of conducting the try out test will to establish the test validity and reliability

In applying the instruments, the researchers need to analyze the validity and the reliability of the instruments before it given to the subject of the study

⁶ Sugiono, <i>Metode Penelitian</i>	148
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According to Ary, et al, validity is *“the extent to which an instrument measured what it claimed to measure. The focus of recent views of validity is not on the instrument itself but on the interpretation and meaning of the scores derived from the instrument”*.⁷ So, the validity is related to the instrument of the research. For this research, the researcher chooses content validity. The standard of content validity is the degree to which the sample of items, tasks, or questions on a test are representative of some defined universe or domain of content⁸. Content validity is related to the content of the test. It means that content validity is related to the content of items in the test that is available in the curriculum. Therefore the actualization of the test objectives indicates that the test will be conducted in accordance with those objectives. The relevance between the content of the test was implies the validity will be used in this study.

b. Reliability

Reliability is the degree of consistency with which it measures whatever it is measuring.⁹ It means that the test was said reliable if the result of the test had consistent score.

⁷ Donald Ary, et. al, *Introduction to Research in Education*,(Wadsworth: Cengage Learning,2010) p. 225

⁸ Ibid.

⁹ Ibid p. 249

above, the test was reliable to be used in this research. Thus, it could be used for the instrument of this research (see appendix IV and V).

c. Item Analysis

Item are said to be satisfactory if they meet two requirements, difficulty level and discriminating power of items. Item difficulty level determinates how easy or difficulty that particular item for the students. To evaluate this, the following formula is employed:

$$P = \frac{Np}{N}$$

Where:

P : Difficulty index

N_p : The number of correct answer on single items

N : Total number of the student who taking the test

According to Witherington in Sudijono, has described the item difficulty level on the table below:

Difficulty Level	Interpretation
$P > 0,25$	Too difficult
$0,25 < P < 0,75$	Average
$P < 0,25$	Too easy

Meanwhile the discrimination index of an item described how good a particular item was in distinguish the good students for the poor ones. The discriminations index will be calculated by using the formula bellow:

$$\theta = \frac{P_u P_L}{2\sqrt{(p)(q)}}$$

P_u : Proportion the correct answer of higher group
 P_L : Proportion the correct answer of the lower group
 P : Proportion of correct responses on single item
 Q : Proportion of incorrect responses on the same item
 θ : Discrimination index

[illegible]

2. After identifying the misinformation errors, the researcher will classify the errors into some specific category.

4. Finally, the writer will do the process of computing the frequency of misinformation errors by using the percentage, in which common formula of percentage will be used such as introduced by Sudijono:¹²

$$P = \frac{F}{N} \times 100\%$$

P : Percentage

F : Frequency of errors in each type

N : Total number of misinformation errors

¹² Anas, Sudjiono, *Pengantar Evaluasi Pendidikan*, (Jakarta: PT. Raja Grafindo Persada, 2005) p. 104