CHAPTER III

RESEARCH METHOD

This part of this study deals with research methodology which is designed as technique to collect and analyze the data. The discussion about methodology in this research is divided into five parts: Research Design, Research Variable, Population and Sample, Research Instrument, Data Collection Technique and Data Analysis Technique.

A. Research Design

The design of this study was quantitative research design because this method describes a research problem through a description of trends or a need for an explanation the relationship among variables. According to John W. Creswell, Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. The characteristic of quantitative research are using instrument such as questionnaire, interview, computer, etc. 42

This research design is ex post facto-correlation, since this research is aimed to discover the influence of students' listening TOEFL strategies and their

⁴⁰ John W Creswell, *Educational Research "Planning, Conducting, and Evaluating Quantitative and Qualitative Research Fourth Edition*" (Boston: *Pearson*, 2012), 13.

⁴¹ John W. Creswell. *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. USA. SAGE Publication. 2009. p. 22

⁴² Jack R. Fraenkel and Normal E. Wllen. *How to Design to Evaluate Research in Education Second Edition*. 1993

achievement in listening TOEFL test through the use of correlation statistics.⁴³

Basic concept of correlation research is very simple, involving nothing more than two sets of scores or variables and computing a correlation coefficient. Correlation has a direction and magnitude. With respect to direction, a correlation can be either positive or negative. *A positive correlation* exists when, as one variable increases (or decreases), the other variable also increases (or decreases). Whereas *negative correlation* is the opposite of a positive correlation; two variables are negatively correlated when, as the value of one variable increases, the value of the other variable decreases.⁴⁴

There is a computation of coefficient of correlation (linear). In this research, the researcher uses linear regression. The degree of linear correlation can be represented quantitatively by the coefficient of correlation which symbolically represented by 'r'. A perfect positive correlation is +1.00. A perfect negative correlation is -1.00. A complete lack of relationship is zero (0).

Inferential statistical analysis is used to test the hypotheses and analyzes the influence of independent variables, those are: focus on second line; choose answers with synonyms; avoid similar sounds; draw conclusion about who, what, where; listen for who and what in passives; listen for who and what with multiple nouns; listen for negative expressions; listen for negative with comparatives;

44 Scott w. Vanderstoep and Deirdre d. Johnston. *RESEARCH METHOD FOR EVERYDAY LIFE Blending Qualitative and Quantitative Approaches*. USA: PB Printing. 2009. p. 98.

⁴³ Yogesh Kumar Singh. *Fundamental of Research Methodology and Statistics*. Mahatma Gandhi Chitrakoot rural University; New Delhi. 2006. p. 304

listen for expressions of agreement; listen for expressions of uncertainty and suggestion; listen for emphatic expressions of surprise; listen for wishes; listen untrue conditions; listen for two and three part verbs; and listen for idioms, anticipate the topics, anticipate the questions, determine the topics, draw conclusions about who, what, when, where and listen for answers in order. While the dependent variable is their Listening TOEFL score.

B. Research Variable

There are two variables used in this research, which are Independent Variable and Dependent Variable.

a. Independent Variable

According to Umar, Independent Variable is variable that influence and explain other variables. 45 In this research, independent variable was Listening TOEFL strategies will become Variable X.

b. Dependent Variable

While dependent variable is variable that is influenced by independent variable. 46 In this research, dependent variable was Listening TOEFL score will become Variable Y.

⁴⁵ Husein Umar. *Metodologi Penelitian untuk Skripsi dan Tesis Bisnis* (Jakarta: Gramedia Pustaka, 2003). p. 63.

⁴⁶ Ibid......63

C. Population and Sample

In quantitative research, population and sample can be very necessary. To get deep explanation about the two terms, several definitions are next presented. Population is larger group which the generalization is made.⁴⁷ And Fraenkel and Wallen defined population as "the larger group to which one hopes to apply the results".⁴⁸ In other words, population is group that the researcher wishes to study. After knowing some definitions about population also drive us to know more about sample.

According to Trochim and Donelly state their definition about sampling as "Sampling is the process of selecting units (such as people and organizations) from a population of interest". ⁴⁹ While Donald Ary stated that Sample is the small group that is observed ⁵⁰. In other words, sample is a part of population that the research is focused on in order to gain the data relating with the research. The more the samples are taken, the better the research will.

1. Population

This study took place at UIN Sunan Ampel Surabaya which is located in Jl. A.Yani 117 Surabaya. In UIN Sunan Ampel Surabaya, there are two English Department which are English Teacher Education Department and

⁴⁷ Donald Ary, et.al,. *Introduction to Research in Education 8th*. USA: Wadsworth, Cengage Learning. 2010.

⁴⁸ Jack R Fraenkel and Norman E Wallen. *How to Design and Evaluate Research in Education 7th Ed.* (USA: Beth Meija, 2008), p. 90.

W.M. K. Trochim., and J.P. Donnelly, *The Research Methods Knowledge Base 3rd ed* (Mason: OH, 2008), p. 41.

Donald Ary, et.al, 2010, "Introduction to Research in Education", 8th, USA.

English Literature Department. Hence, the population of the study was the sixth semester students of English Teacher Education Department in academic year 2014-2015.

2. Sampling Technique

In this research, the researcher used purposive sampling because this research obligated several criteria in sampling technique. Purposive sampling selects a sample based on believes and prior information which provides the data we need.⁵¹ The sample of this research was sixth semester students of English Teacher Education Department who took TOEFL Preparation subject in this academic year of 2014-2015.

The first criterion of this research was limited on sixth semester students who were taking TOEFL Preparation subject. While the second criterion of this research was sixth semester students who took TOEFL test in all section (listening, structure and reading) at one time. But, this research was only focus on listening section. The consideration in choosing TOEFL test helped the researcher to identify TOEFL strategies used in taking listening TOEFL test.

3. Number of Sample

The subject of this study was the sixth semester students of English

Teacher Education Department. There are three classes of TOEFL Preparation

⁵¹ Jack R Fraenkel and Norman E Wallen. *How to Design and Evaluate Research in Education 7th Ed* (USA: Beth Meji). 2008. p.99.

subject, but the researcher chooses two classes because the first class did not take TOEFL test in all section (listening, structure and reading) at one time. The B class was consist 27 students which is taught by Mr. Arfiyan Ridwan M.Pd and the C class was consist 23 students which is taught by Miss Hikmatul Masykuriyah M.Pd. Then the amounts of the students were 50 students joining the TOEFL subject in this academic year as the sample of this research. Those elements will be the focus on the study in this research. Therefore, the researcher wants to know what are listening TOEFL strategies used by the students on TOEFL preparation test and students' listening TOEFL strategies are influenced their listening TOEFL score. 50 students were taken from all sixth semester students in B class and C. Actually, only B class and C class that applied TOEFL preparation test for all section at that time. While the A class applied TOEFL preparation test partially (listening test in first test, structure test in second test, reading test in third test).

D. Research Instruments

Since this research employs ex post facto-correlation design, the instrument used in this research are human instrument (the researcher), questionnaire, and test.

Human instrument means that the researcher herself, who collects, organizes, analyzes, and draws the conclusion or the results of the research. The researcher analyzes the data based on the questionnaire and students' listening

TOEFL score. Hence, the researcher did not reduce or increase the data.

The questionnaire is distributed to the students so that they can give their opinion through the questionnaire honestly. The questionnaire consists of some points related to students listening TOEFL strategies: focus on second line; choose answers with synonyms; avoid similar sounds; draw conclusion about who, what, where; listen for who and what in passives; listen for who and what with multiple nouns; listen for negative expressions; listen for negative with comparatives; listen for expressions of agreement; listen for expressions of uncertainty and suggestion; listen for emphatic expressions of surprise; listen for wishes; listen untrue conditions; listen for two and three part verbs; and listen for idioms, anticipate the topics, anticipate the questions, determine the topic, draw conclusion about who, what, when, where and listen for answer in order.

The last instrument is TOEFL test which is conducted by the lecturer of TOEFL Preparation subject. Kind of the TOEFL test is Paper-Based TOEFL.

E. Data Collection Technique

This research used questionnaire and listening TOEFL score as the instrument to obtain the necessary data. Questionnaire is a paper and pencil instruments that asks respondents to complete.⁵² Furthermore, this research defines Listening TOEFL Score as score obtained by sixth semester students of

⁵² W.M. K. Trochim., and J.P. Donnelly. *The Research Methods Knowledge Base 3rd edition* (Mason: OH. 2008. p.108.

English Teacher Education Department of UIN Sunan Ampel in TOEFL test.

1. Questionnaire

First question of this research addressed to find out the listening TOEFL strategies used by test takers. The questionnaire result of this research is gotten from respondents answer toward some questions in the questionnaire provided. There will be 20 questions provided. The research chooses student's answer from questionnaire as the main instrument to collect the data because questionnaire can be the representative for the research to collect the data fast. Additionally questionnaire can be written data that can help the research to remain students' answer or response.

The researcher gave the students as a respondent the written question to know about the students' listening TOEFL strategies on TOEFL test. Also the type of the questionnaire is ended questionnaire. The total of items in questionnaire is 20 items assessing listening TOEFL strategies. The researcher expected the questioner to answer the first research question about the students' listening TOEFL strategies.

2. Test

To answer the statement of problem number two, the researcher took students' listening score for measuring students' achievement. Then the researcher analyzes the result of the students' listening TOEFL strategies inventory and students' achievement (listening TOEFL score) in Listening section. From this analysis, it can be concluded whether the students' listening

TOEFL strategies have relationship and influence or not on student's achievement in listening TOEFL Test.

F. Data Analysis Technique

In analyzing the data, the data gathered from two instruments were analyzed to get brief understanding which is questionnaire and test. In this part, the researcher classified the data into quantitative data. It also helped the researcher to conclude, made some decisions and answered the research problem. This research used both of statistical procedures either descriptive statistic or inferential statistic. Descriptive statistic is the branch of statistics that deals with numerical manipulations to describe and summarize the data. On the other hand, inferential statistic is purposed to infer the characteristics of the population of reference from the sample.

After the researcher got the questionnaire done, the researcher counted the students' answer by using Guttman scale. It was assessed with the following scale, yes = 1 and no = 0.

Descriptive statistic was used to answer first question which wants to know students' listening TOEFL strategies used by sixth semester students. This research ranked five most and five least strategy by looking the total value of the strategies.

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⁵³ Ricardo Russo, *Statistical for the Behavioural Sciences an Introduction* (NY: Psychology Press, 2003), p. 9.

⁵⁴ Ibid.....p.10

Whereas, inferential statistic was purposed to answer the second research questions which the researcher used linear regression run to find out the significant relationship between students' Listening TOEFL strategies and their achievement in listening TOEFL test in order to predict the value of dependent variable (students' achievement in listening TOEFL test) from independent variable (students' listening TOEFL strategies) and SPSS (statistical product and service solution) 16 for analysis.