

CHAPTER III

RESEARCH METHOD

In this chapter, the researcher discusses the description of the procedures in this research. The discussion covers research design; time and place; population; sample and sampling; variable; data and data source; method of collecting data and instrument; and technique of the data analysis.

A. Research Design

Research design is a plan for collecting and utilizing data so that desired information can be obtained with sufficient precision or so that a hypothesis can be tested properly. To do the research, people can use any kinds of design. There are many kinds of research: Historical research, Development research, Description research, Case study, Correlation research, Experimental research, and Action research (Suryabrata, 2008:72). A method of research is one of the most important requirements and it is essential in conducting a research. By using a method of research the researcher is able to work systematically and to avoid speculative problem solving.

According to Burgin (2005:84) research design is all process that is needed in conducting the research. It means that the process includes planning and doing the research.

Furthermore, Creswell (2008:3) states that research is a process of steps used to collect and analyze information to increase the understanding of a topic or issue. It is used to arrange the setting of the research in order to get valid data.

Because one of the use of correlation research is to assess the relationships among two or more variables in a single group as cited in Ary (2010:349). In this case the researcher wanted to find whether there is any significant correlation between reading habit in English and reading comprehension of the students English education program at IAIN Tulungagung, the researcher used correlation research in order to get the data with the use of quantitative approach. Therefore, it related with the statistic data.

B. Place and Time of Research

In this case, the researchers were conduct of research at IAIN Tulungagung, especially for second semester because students of this semester have lesson about inferential reading and suitable to done research. The researcher done at IAIN because in IAIN have curriculum about English education. This research has been done since 11 June 2014.

a. Population, Sample, and Sampling

1. Population

Population is the group of interest to the researcher, the group to which she or he would like the result of the study to be generalizable (Gay, 1992:125). An important characteristic of inferential statistics is the process of doing from the part to the whole. The small group that is

observed is called a sample and the larger group about which generalization is made is called a population. A population is defined as all members of any well-defined class of people, events or object.

Shortly, population is all of 30 students of b class because they have opportunity in reading and they also have good characteristic in reading, especially in their reading comprehension and their interest in reading that is going observed. In this research, the total numbers of population 120 students who divided into four (4) classes, A class, B class, C class, and D class of second semester English department students of IAIN Tulungagung, academic year 2013/2014.

2. Sample

Sample is a part of population which wants to be analyzed. Therefore, sample shall be seen as a notion to population and is not population itself (Bailey, 1994:119). Selected sample is a very important to conducting a research study. Sample must be representative if one is to be able to generalize with confidence from the sample to the population. (Arikunto, 2002:131) moreover states that “sample is a part of population which represents it”. He also states that “if the subject less than 100, it better is taken all so its research constitutes population. Hereafter, if total subject outgrows, therefore get among been taken 10-25% Or 20-25% or more” (Arikunto, 2002:112).

Shortly, sample, means part of population that observed. The researcher took second semester students of English department as a

sample because B class who have had habit in reading English and gets same opportunity in reading comprehension course, it is near with reading habit in English area, and of course the English study. There researcher took only B class because want to focus in research. Besides that, their reading habit in English and reading comprehension value is good as long as middle semester.

3. Sampling

The concept of sampling involves taking a portion of the population, making observation on this smaller group, and then generalizing the finding to the large population from which the sample was drawn (Ary, 2002:163).

In other word, sampling is a technique that used to take a sample. The purpose of sampling is to gain information about the population. Sampling is necessary for the a research because usually the time, money and the effort involved do not permit the researcher to study all possible members of the population.

According to Sugiyono (2010:118) sampling technique is the technique to taken sample. Technique sampling is divided into two groups; there are probability sampling and non-probability sampling. Probability sampling involves simple random sampling, stratified random sampling and cluster sampling. No-probability sampling involves systematic sampling, quota sampling, and indicated sampling, purposive sampling, saturated sampling and snowball sampling.

In this research, the technique of sampling used was stratified purposive sampling. The researcher used this random because it can improve the accuracy of estimation and the sample can be selected from each stratum randomly. Stratified random sample is the process of selecting sample by dividing the population the population into two or more subpopulations or strata then the sample is selected from each stratum randomly (Wiersma, 1991:253). The researcher used stratified purposive sample because the researcher believed that B class suitable to do the research. Besides of it, B class has a good reading habit in English and reading comprehension. Other opinion, the researcher used stratified purposive sample because of improving the accuracy of estimation and it can represent all of stratum. In stratified purposive sample, the researcher determined the sample randomly. It was done in order to get some advantages such as efficient and objective, because each element of population has the different chance to be chosen as a sample with suitable opportunity of it.

C. Variables of the Research

Variable is an object that is investigated in a research. according Arikunto(2010) and Ary (2010), variables is characteristic, value or attribute of an individual, or an activity that has certain varies in which researcher can measure or observed. Variable in this study was” students reading habit in English and students reading comprehension”. Both of them are independent

variables because both of them were connected indirectly or we can call them as a systematically association correlation.

D. Data and Data Source

1. Data

Data is important factor in a research. It is needed by researcher to solve problem in his/ her investigation. Data is some information about the research object that is gotten in research field (Bungin, 2008:119). It means that data is all information needed by researcher to find the answers of the research problems. There is only one kind of data needed that is interval or score data come from the reading habit in English related from questionnaire and reading comprehension score.

In short, to support the needed data, in this study researcher needed to get data deals with the frequency of reading habit in English of second semester English department students' in IAIN Tulungagung and about their reading comprehension achievement in second semester English department students at IAIN Tulungagung.

2. Data source

Data source is the subject of research from where the data can be obtained. Arikunto, (2010: 172) say that the data source can be classified into three sources which are person, place, and paper. Bungin (2008:122) stated that the primary data is data which are collected directly from the first data source in the field or research object.

In this research, the quantities data are taken from the result of the test. It means that data source of this research were the second semester of students English education program at IAIN Tulungaung.

E. Method and Instrument in Collecting Data

In this research, the researcher used some method of collecting data to get the needed data by using the following instruments. Methodology is a way used by researcher in order to collect research data in order to easier the researcher and better result in short the data is more accurate, more complicated, and more systematically so that it will be easier to be analyzed (Arikunto. 2010:203). In this study, methods in collecting data were questionnaire and documentation score, while the instrument were questionnaire sheet and the documentation score list of value students' reading comprehension from the teacher.

1. Questionnaire

Questionnaire is a list of questions that given to the subjects of a research that usually forms in, (Cohen, 2005:245) questionnaire is a widely and useful instrument for collecting information written. This questionnaire used to take the data from reading habit. Then the subject of research will be asked to the answer the questions in order to get the data. Arikunto,(2002:128) states that a questionnaire is a number of written questions which is used to obtain information from the respondents about their personality or something they had known. According to Cohen (2005) being able to be administered without the presence of the research and usually in the form of numerical data.

In this research, the questions in the questionnaire were written in Indonesian. It was done in order to make easier the respondents answer the question. The questionnaire consist of 20 (twenty) multiple-choice. In this part, the researcher asked the students to choose one option that they want. It meant that the answers must reflect their personality or their real life about their frequency of reading habit in English, when they reading, what are they reading. Each question consists of four (4) options of the answer: A, B, c, and D, which indicated the degree of respondents. The researcher used four options of the answer in order to the answer more effective reading reflecting the respondents' life. Arikunto (2010:248) stated that the lacking of five options of the answer is the respondents tend to choose the middle choice it. Moreover, the researcher results that is gotten to be less accurate because it is difficult to give criterion of estimation in neutral choice. To make is easy determining in interval of the score of the questionnaire sheet, all answers of the questionnaire would be changed becomes score by using Likert Scale. Likert scale is a scale that is used to measure attitude, option and perception of a person or a group of people toward a social situation (Sarjono and Julianita, 2011; 6).

Based on the Likert scale, the score of each student would be marked as follows:

- a. Score 4 for item A (always)
- b. Score 3 for item B (often)

c. Score 2 for item C (sometimes)

d. Score 1 for item D (never)

Every choice indicates that if the respondent chose option A, the students' habit in English was very good, and when the respondent chooses option B, the students' habit in English was good. If the respondent chose option C, the students' habit was fair. If the respondents chose option D, the students' habit was poor.

Finally, the total scores of the students answer in questionnaire would present their motivation in learning English. Based on the standard score above, the highest score of the questionnaire is one hundred (100) and the lowest score twenty (20).

The students were given a questionnaire on 11 June 2014, in which the researcher came to class to give the questionnaire.

2. Interview Guide

This instrument is such kind of instrument that has a function as additional data. Because of this instrument cannot change into number, while the writer will analyze the data in the in the form of number, so it is use as a supporter the primary data. Interview was done to collect data by having some oral questionnaire. In the interview the writer choose four respondent student of IIB English class. Accordiong Carver (1982) shows that there are optimal rates of proccesing prose, and they are roughly equevalent for reading and listening, at 300 words perminute (wpm). Reading Theory contends that individuals maximise their efficiency of raeding prose by keeping their rate

constant at the optimal rate. In arranging interview guide the writer also develops from review of related literature and questionnaire. The interview of students having question that were about reading habit.

3. Documentation of value test

Besides the questionnaire in getting the data of students' reading habit, the researcher also used documentation of value test, but the test took from the teacher of reading comprehension itself. A test is a set of stimuli presented to an individual in order to elicit despondences on basic of which a numerical score can be assigned (Ary, 2002: 216). While Heaton (1988:5) sates that test may be constructed primarily as devices to reinforce learning and to motivate the student's performance in language. Test is a series of question, exercise or other mans which is to measure the skills, intelligent of knowledge, ability or talent of an individual or a group of people (Arikunto, 2006:150).

Based on the statement above, the researcher concluded that a test is a method of data collection to measure their achievement in reading order to be analyzed. Here, the researcher took the score test of inferential reading as a data of students reading achievement. Achievement test is widely used in educational research. They measure mastery and proficiency in different areas of knowledge by presenting subject with a standard set of question involving completion of cognitive tasks (Ary,

2002:226). In other words, it is used to measure someone's ability in mastering certain knowledge after having learning course.

4. Reading Log

One way to hold students accountable for their progress in reading is to ask them to document the type and quantity of reading, they do through reading logs. (Atwell 1987; Garcia: 1994; Hill and Ruphe: 1994; Routman 1994). Students are given a chart for entering a story or book's author and title, the data completed, perhaps the number of pages read, and a brief expression or critique of the reading. By reviewing reading logs for reading interest levels as well as for the quantity of material read independently. Researcher can provide feedback to student on their reading progress.

F. Technique of The Data Analysis

Because the purpose of this research is to measure the correlation between reading habit in English and reading comprehension for the second semester, the researcher used statistical method. Therefore, used correlative research to analyze the data. Statistical techniques for determining relationship between pairs of score known as correlative procedures (Ary, 2002:143). A research which uses statistical technique definitely uses quantitative analysis.

In this research, all data are gained from the result of the questionnaire and documentation score are in the form of numbers. All data, therefore analyzed quantitatively. Since this research is to know the correlation between two

variables, the researcher applied Bivariate Correlation Analysis by using Pearson Product Moment technique. The researcher used it because the data obtained from two variables was exposed in terms of quantitative scores and the data was using interval scale. Ary, (2002:146) the Pearson Product Moment coefficient of correlation is used when the scale of measurement is either interval or ratio. Therefore, the Pearson r is the appropriate correlation coefficient to calculate.

Here, the researcher used the simple formula of Pearson's Product Moment technique. From this formula, it could be gotten the correlation coefficient value (r) of the two variables. Those variable are X was "students reading habit in English" and "the reading score". Then we give simple interpretation the index correlation number obtain by consulted it with significant tables value of "r" product moment. The significant coefficient correlation tested at the level of significance. Below the researcher mentioned the pattern of simple formula of Product Moment to count those variables, as below:

$$r_{xy} = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{\{N \sum x^2 - (\sum x)^2\} \{N \sum y^2 - (\sum y)^2\}}}$$

Explanation:

$\sum xy$ = the sum of the product of variable X and Y

N = number of cases of subject

$\sum x$ = the sum of the X scores

Σ_y = the sum of the Y scores

Σ_x^2 = the sum of the sequence X score

Σ_y^2 = the sum of the sequence Y scores

Tables 3.1 The interpretation table of significant level according to Sudjiono (2005)

r	Interpretation
0.00 – 0.20	Not reliable
0.21 – 0.40	Less reliable
0.41 – 0.60	Enough reliable
0.61 – 0.80	Reliable
0.81 – 1.00	Very reliable

Table value “r” product moment is index used to measure the correlation between two variables which is significant or not. These are table of significant value “r” product moment.

Table 3.2 Significant value of coefficient correlation product moment according to Sudjiono (2002)

No	Degree of significant	
	5%	1%
1	0.977	1.00
2	0.950	0.990

3	0.878	0.959
4	0.811	0.917
5	0.754	0.874
6	0.707	0.834
7	0.666	0.790
8	0.632	0.765
9	0.602	0.735
10	0.576	0.708
11	0.533	0.684
12	0.532	0.661
13	0.514	0.641
14	0.497	0.623
15	0.483	0.606
16	0.468	0.590
17	0.456	0.575
18	0.444	0.561
19	0.433	0.549
20	0.423	0.537
21	0.413	0.526
22	0.404	0.515.
23	0.396	0.505
24	0.388	0.496
25	0.381	0.487
26	0.374	0.478

27	0.367	0.470
28	0.361	0.463
29	0.355	0.456
30	0.349	0.499

Hypothesis testing:

Finally, if the correlation coefficient (r) obtained is zero or lower than to the “ r ” product moment table value H_0 is rejected. H_0 (there is no positive correlation between students reading habit in English and students comprehension) is rejected. It means that there is no positive correlation between students reading habit in English and students reading comprehension of second semester English department students at IAIN Tulungagung. But, if the correlation coefficient (r) obtained is greater than or equal to the “ r ” product moment table value, H_a is accepted. It means that is a positive correlation between student reading habit in English and reading comprehension of second semester English department student at IAIN Tulungagung.

The writer assumes that the data has perfect function in research. The writer used the Spearman rank correlation to analyze the correlation reading habit in English and reading comprehension. The procedures of analyzing the data as follow:

1. Check the answer of questionnaire and giving score to each item and each respondent.

Every students answer the questionnaire has point, answer A this point 5, answer B this point 4, answer C this point 3 and answer D this point 2. After that all point from one students gives scale to get the score.

2. Tabulating the questionnaire and the achievement from middle- terms score to describe the percentages of each variable. The classification of the questionnaire and achievement test can be different into some level:

- a. $90 - 100 = 6$

- b. $80 - 89 = 5$

- c. $70 - 79 = 4$

- d. $60 - 69 = 3$

- e. $50 - 59 = 2$

- f. $0 - 49 = 1$