

## **CHAPTER 3**

### **METHODOLOGY**

This chapter discusses the methodology used in this study. The discussion of this chapter include research methods, participants of the study, time and place of the study, instrument of the study, validity and reliability, data collection procedures, and data analyzing procedures.

#### **3.1 Research Methods**

The research method of this study is survey. A survey is one kind of descriptive analysis has a purpose to obtain a snapshot of condition at a single point in time (Singarimbun, 2008; Creswell 2008:388). The writer intends to obtain a snapshot some of English teachers in Jakarta about syntactic knowledge as found in the fields. Descriptive analysis was used in which the data gathered was analyzed and described.

In this study, the writer wants to discover senior high school English teacher's syntactic knowledge in aspect of grammaticality knowledge, phrase structure knowledge, and structural ambiguity knowledge. The writer used tests as the main data to measure someone's ability to use the language and interviews to support the main data from the test worksheet.

### **3.2 Participants of the Study**

The participants of this study are 20 teachers' senior high school in Jakarta. They are four teachers from SMAN 47, three teachers from SMAN 37, three teachers from SMAN 112, two teachers from SMAN 65, two teachers from SMAN 23, two teachers from SMAN 72, two teachers from SMAN 21, two teachers from SMAN 77. Those 20 teachers were considered as the representative of each region. In selecting the participant, the writer uses convenience sampling based on their willingness and available (Creswell, 2010).

### **3.3 Time and Place of the Study**

The time for conducting this study is a month of June 2014. The places of the study are eight senior high schools in Jakarta: South Jakarta; SMAN 37 and SMAN 47, North Jakarta; SMAN 72, East Jakarta; SMAN 21, Central Jakarta; SMAN 77, West Jakarta; SMAN 112, SMAN 65 and SMAN 23.

### **3.4 Instrument of the Study**

This study uses two kinds of instruments; there are syntactic knowledge test worksheet and interview.

#### **3.4.1 Test Worksheet**

The writer uses syntactic knowledge test worksheet to gather the information about the syntactic knowledge of senior high school teachers of English in Jakarta. The test covers the items that measure the

knowledge of grammaticality, phrase structure rules, and structural ambiguity.

Test item number 1 is grammaticality judgment. The grammaticality judgment test is designed to test teachers' knowledge to judge the correctness of sentences in terms of grammar. The format of the test is giving checklist for correct sentences and giving cross for incorrect sentences. There are twenty numbers of grammaticality judgments taken from *Measuring implicit and explicit knowledge of a second language: A psychometric study* by Ellis (2005).

Test item number 2, 3, and 4 are phrase structure. The phrase structure test is designed to test teachers' knowledge of phrase structure rules that can occur in English and also lexical category of the words. The formats of the test are giving yes/no answer, matching, and identifying each word. There are fifteen numbers of phrase structure rules are adapted from *An introduction to language* by Fromkin et al. (2003).

Test item number 5 is structural ambiguity. The structural ambiguity is designed to test teachers' knowledge to identify noun phrase which is structurally ambiguous. The format of the test is matching. There are ten numbers of structural ambiguities are adapted from *An introduction to language* by Fromkin et al. (2003).

### **3.4.2 Interview**

Interview is conducted to strengthen the result of the main data gained by the test worksheet. The purpose of the interview is to get in depth information about the participants' syntactic knowledge. This is important to implement because it can make the data information from the test to be clear.

The questions of the interview are related to their background, experience, and test itself. The interview uses open ended questions in order to get in depth information about the participants' syntactic knowledge. This instrument is designed in Bahasa Indonesia to make the participants easier to understand and answer the questions. And it is also done to avoid misunderstanding between the writer and the participants.

### **3.5 Validity and Reliability**

Borg and Gall (1983) stated that validity is a degree to which a test measures what it is supposed to measure and reliability means the degree to which a test consistently measures whatever it measures. In this study, the writer uses content validity to test the validity of all the items in the test. According to McNamara (2000) content validity is a validity that has been estimated by measuring the test using verification and evaluation based on *expert judgments*. In this case, the researcher tests the validity of the test worksheet by consulting the test items to the advisor.

Reliability coefficients are obtained through several standard tests to verify and evaluate whether the research instrument is reliable or not. The instrument can be said reliable if the scores were similar over time and situation with equal respondent. Validity and reliability testing are the process of testing the test, whether the contents of the statement are valid and reliable (Santoso, 2009:129). To find out whether the test is contently valid and reliable, the writer is done a piloting study.

A pilot study is commonly used as feasibility studies (Mousavi, 1999). Piloting the study to some college students that have the same characteristics of the target participants are. The test was tried out to ten participants in this pilot study who was not the target participant. They were given a set of test to find the reliability and validity of the test. The test result was good. The test had clear instruction so that the students did not have difficulties in understanding the instruction. The students could answer 70%-80% of all test items.

### **3.6 Data Collection Procedures**

The writer does these steps in collecting the data:

1. Asking permission to the head of school.
2. Meeting the teachers of English and explaining the purpose of the test and asking them to contribute as the participants.
3. Giving the test worksheet to the teacher and explaining the instruction of each part and the rules to do the test.
4. Interviewing the teachers after the test was done.

5. Recording the interview.

### **3.7 Data Analysis Procedures**

Twenty teacher worksheets are analyzing and interpreting in the following methods:

- a. Test
  1. Checking the answer for each item from the test.
  2. Scoring each item then scoring the whole test. Score 1 (one) is given to the right answer and score 0 (zero) is given to the wrong answer.
  3. Ranging the score to determine the grouping of the teachers into four ranks. The score is converted into scale 0-100 by using guidance of assessment (Department of National Education, 2007: 11). Syntactic knowledge teachers of English is considered as excellent when they got score 100-90, good as their score 89-70, fair as their score 69-40, and poor as their score 39-0.
  4. Interpreting the data to provide the answer of research questions.
  5. Presenting the teachers' score into table of percentage and pie chart and describing the findings.
  6. Making the conclusion.
- b. Interview
  1. Transcribing the interview results.
  2. Describing the result.