CHAPTER III

RESEARCH METHODOLOGY

All research requires suitable and appropriate methodology in order to explain a phenomenon. Such methodology helps the researcher to get intended data from which the analysis is done and the conclusion is drawn. Like any other research, this study, which takes language anxiety in EFL classrooms as its primary concern, needs the appropriate way of how to find out the level of anxiety among senior high school students, the sources of anxiety, and the strategies the students employed in coping with it. Therefore, in this chapter, the steps of collecting relevant data will be described as well as the method used to analyze the data.

This chapter comprises four major sections. The first section presents the overview of methodology. The second section describes the participants involved in the study. The third is the instrumentation administered in gaining the data. The last is the data analysis.

3.1. Overview of the Methodology

This study employed mixed method research. According to Johnson and Onwuegbuzie (2004), mixed methods research is defined as the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study. It was used to answer research questions in multiple approaches. Mixed model research is research in which the researcher mixes both qualitative and quantitative

research approaches within a stage of the study or across two of the stages of the research process. In this research, the researcher conducted a survey and used questionnaires that are composed of multiple closed-ended or quantitative type items as well as several open-ended or qualitative type items. The researcher collected qualitative data but then quantified the data.

3.2. Participants

The participants of this study were the second grade students in SMU 15 Bandung. The reason for choosing this population is based on the assumption that the second graders are familiar with the school environment than the freshmen. On the other hand, the study could not involve the third graders as it may interfere with their preparations in facing the final examination.

There were two classes under investigation – one Science class and one Social class. The reason for examining the different level of anxiety from both classes was based on assumption that both classes under investigation had different levels of anxiety. However, from several Science and Social classes available at school, there was no reason to choose a particular class that would be investigated. The decision to choose which classes were going to be investigated was left to the school management. Thus, Social 1 and Science 3 were allowed to be investigated. Social 1 class consisted of 38 students, and they all participated in research. Meanwhile, science 3 class consisted of 42 students and only 35 students participated in the investigation. The rest did not attend when the questionnaires were distributed. In short, the participants of this research were 73 students all.

In addition, two English teachers also participated in the research. These teachers taught English both in Science and Social class. They were experienced teacher who had been teaching English for more than 10 years. Besides, they had also participated in teacher training.

3.3. Instruments

The instruments used in this study included classroom observation, questionnaires, and interviews. The first was classroom observation, where the researcher went to the classrooms under investigation. It was aimed at observing the event or process related to the study, and gaining tacit understanding, theory-in-use, and participants' point of view which might not probably be explored by interview or questionnaires (Alwasilah, 2003). In this case, the observation was done to observe the natural occurrences of anxiety symptoms experienced by students under investigation. Afterwards, the questionnaires were administered to the participants. There were two kinds of questionnaires which were used in this study. The first questionnaire was English learning experience questionnaire, consisting of eight questions. It was designed by the researcher and was basically aimed at surveying students' general view points toward English language and students' experience during English lesson.

The second part of the questionnaire was Horwitz, Horwitz, and Cope's (1986) Foreign Language Classroom Anxiety Scale (FLCAS), which was used to investigate senior high school students' foreign language anxiety in English learning. In this research, FLCAS was a translated version of the FLCAS designed by Horwitz et al. (1986). There were some reasons that encouraged the researcher

to use the FLCAS in the study: first, this scale had been designed on the basis of previous in-depth qualitative research, which rendered it as one of the most comprehensive and valid instruments that were available for measuring the situational anxiety directly associated to the specific context of the foreign language classroom; second, the scale had demonstrated satisfactory reliability coefficients with the first samples of population to which it had been administered (Horwitz 1991). In the FLCAS, there were 33 question items, and a 5-point scale ranging from "never" (5 points) to "always" (1 point). Each anxiety score is was gained by summing the ratings of the thirty-three items. The theoretical range of this scale was from 33 to 165. The higher the total points were, the more anxious the student was. Both questionnaires were conducted in the participants' native language, Indonesian.

In addition, interviews were also employed to gain a more in-depth insight into the study. Interviews were used to enable the researcher in gaining in-depth information (Alwasilah, 2003). The semi-structured interview techniques were used in the study. It was necessary to gain an in-depth data showed in the questionnaires. The interviewer modified the questions and procedures according to the interviewees' responses. The open-ended format interview was also employed to find information about certain contextualized happenings that were relevant to the investigation. This interview session was conducted on thirteen students, seven from Social class and six from Science class, and two English teachers. There were fourteen questions for the student interviews and six for the English teacher interviews.

3.3.1. Instrument Validity and Reliability

3.3.1.1. Trying Out the Instrument

Although FLCAS instrument had been tested and found to be valid and reliable in other research, it should be tried out before they were administered to the sample. This is intended to collect the valid and reliable data. Sugiyono (2002: 109) noted that by using the valid and reliable instruments in collecting data, it is expected that the result of the research is also valid and reliable. The validity and reliability of the instrument were analyzed by using SPSS 12.0

3.3.1.2. Validity of the Instrument

It is important to find out the instrument's validity. Validity is the degree to which a test measures what is supposed to be measured (Borg, 1979, 211). Without standard for validity, tests can be misused and may actually have harmful effects on person being tested. Invalid tests can lead to erroneous research conclusion. Hatch and Farhady (1982) stated three things about validity: (1) validity refers to the extent to which the procedure serve the uses for which they were intended, (2) validity refers to the results of the test not to test itself, (3) validity is a matter of degree. It is not an all-or-nothing trait. The Pearson Product Moment correlation is used to test the instrument's validity.

In this kind of analysis, Masrun (1979) stated that, until now, the correlation technique is the technique mostly used to find out the items validity. Moreover, in giving the interpretation toward correlation coefficient, Masrun added that the item which has positive correlation with the total score and has a

high correlation is the item that has high validity. The item will be considered valid if r result is more than r table. If the correlation between the item and r result is less than r table the item is considered invalid. From the try out of the instrument, it was found that all items' correlation coefficient was higher than r table which meant that all items were valid.

3.3.1.3. Reliability of the Instrument

Testing the instrument reliability is important to find out whether the instrument is reliable. It means that if the instrument is tested to the same group in different time, it will yield the same result. In line with this, Hatch and Farhady (1982) noted that reliability can be defined as the extent to which a test produces consistent results when administered under a similar condition.

One method to test the reliability of the instrument is Alpha-Cronbach method (Budi, 2006). If the reliability is tested by using Alpha-Cronbach method, r result is shown as Alpha. If alpha is more than r table, and has positive value, the instrument is reliable. From the reliability test, it was found that the instrument was reliable, in which the Alpha value showed 0.892. Since the instrument was considered both valid and reliable, it means that the instrument can be used to obtain the desired data in this research.

3.4. Data Analysis

In qualitative analysis several simultaneous activities engage the researcher in collecting information from the field, sorting the information into categories, formatting the information into a story, and writing the qualitative text

(Bogdan & Biklen, 1992, in Cresswell, 1994: 153). Merriam (1988) asserts that the process of analyzing the data actually begins with the first observation, first interview, or with reading first document. In fact, data collection and analysis is a simultaneous activity in qualitative research. Every piece of information gathered from the field influences the analysis and then is tailored in order to have comprehensive description. Guided by the research questions, the data analysis will flow from the level of anxiety perceived by senior high school students, the causes and the provoking anxiety situation, and the strategies the students take up in coping with anxiety.

3.4.1. Levels of Anxiety Perceived by Senior High School Students

The research instrument used for this study was a translated version of the FLCAS designed by Horwitz et al. (1986). Foreign Language Classroom Anxiety Scale (FLCAS), which consisted of 33 question items and a 5-point scale ranging from "never" (5 points) to "always" (1 point), was employed to figure out the level of anxiety in senior high school students. The range was from 1 to 5 or from 5 to 1 depending on whether the question was positively or negatively stated. In FLCAS, the positive statements included questions number 2, 5, 8, 11, 14, 18, 22, 24, 28, and 32. Meanwhile, the negative statements included questions number 1, 3, 4, 6, 7, 9, 10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 25, 26, 27, 29, 30, 31, and 33. The table below shows the Likert' scoring table regarding FLCAS statements

Table 1 Likert's Scoring Table

Statement	Scoring				
	Never	Seldom	Sometimes	Often	Always

Positive	5	4	3	2	1
Negative	1	2	3	4	5

As a measure to identify the level of anxiety among students, Oetting's scale was also employed to identify the range of FLCAS score that would be useful to identify which level the students were. The result showed that the level of anxiety was based on the categorization of FLCAS Scale below.

Table 2 FLCAS Anxiety Scale

Range	Level
124 – 165	Very anxious
107 – 123	Anxious
86 – 106	Mildly anxious
65 – 85	Relaxed
33 – 64	Very relaxed

The components of anxiety were also discussed in this study. As proposed by Horwitz, Horwitz and Cope (1986), there were three components of language anxiety – communication apprehension, test anxiety and fear of negative evaluation. These components can be found in the FLCAS questionnaire, whose 8 items were for communication apprehension (1, 9, 14, 18, 24, 27, 29, 32), 9 items for fear of negative evaluation (3, 7, 13, 15, 20, 23, 25, 31, 33) and 5 items for test anxiety (2, 8, 10, 19, 21). As for the remaining 11 items, they were put in a group which was named anxiety of English classes (Na, 2007). The score of these components was counted and showed the components of anxiety which frequently occur to the students.

3.4.2. The sources of Students' Language Anxiety and Anxiety-provoking Situation

Having administered the FLCAS, the researcher conducts an interview session with students and teacher to figure out the sources of students' language anxiety and anxiety-provoking situation among students. The selection of students taking part in the interview was based on their level of anxiety. For the interview session, finally thirteen students, seven from Social class and six from Science class, were chosen to take part in it. Four students belonged to relaxed level students and nine others belonged to anxious and mildly anxious level students. This selection was based on assumption that an exploration of further information about the sources and anxiety-provoking situation would be gained from a variety of students' levels of anxiety. The students 'interview session was conducted at different times because of availability of the students' time to take part in the interview. The library was chosen as an appropriate location to gather the interview data.

The interview was also conducted to English teachers at school. This aims at figuring out the teacher's basic assumptions about the issue under investigation and acknowledging learning activities or activities that provoked anxiety in classroom setting. To provide more information about the issue, two teachers were interviewed.

3.4.3. Strategies Applied by Students in Coping with Language Anxiety

The third research question in this study was aimed at investigating the types of anxiety-coping strategies applied by the senior high school students. In the questionnaires, the students were expected to write down their own strategies in coping with anxiety. They were supposed to jot down the appropriate strategies that could contribute to reduce the level of anxiety without any limitation about the strategy they prefer to apply. After the strategies were collected, the researcher classified them into five major strategies based on Kondo and Yang's (2004) study - Preparation, Relaxation, Positive Thinking, Peer Seeking, and Resignation.