CHAPTER III

RESEARCH METHOD

This chapter provides the information concerning the methodology that is used in this research, they are: research design, population and sample of the research, technique in collecting the data, instrument that is used and the technique in analyzing the data.

1.1 Research Design

This study employs a survey research design, according to Scheuren (2004: 9) the word survey is used most often to describe a method of gathering information from a sample of individuals. Quantitative research allows the researcher to familiarize him/herself with the problem or concept to be studied, and perhaps generate hypotheses to be tested. In this paradigm: (1) the emphasis is on facts and causes of behavior (Bogdan & Biklen 1998), (2) the information is in the form of numbers that can be quantified and summarized, (3) the mathematical process is the norm for analyzing the numeric data and (4) the final result is expressed in statistical terminologies (Charles, 1995).

Quantitative data can be transposed into numbers, in a formal, objective, systematic process to obtain information and describe variables and their relationships (Brink & Wood 1998:5; Burns & Grove 1993:26) using cluster sampling. Ahmed
(2009:2) cluster sampling is a group of population elements, constitutes the sampling unit, instead of a single element of the population. And also “cost efficiency” (economy and feasibility), but we compromise with variance estimation efficiency.

3.2 Population and Sample

Polit and Hungler (1999:43, 232) define a population as the totality of all subjects that conform to a set of specifications, comprising the entire group of persons that is of interest to the researcher and to whom the research results can be generalized. The population in this survey is the eleventh grader in SMAN 5 Jambi. LoBiondo-Wood and Haber (1998:250) describe a sample as a portion or a subset of the research population selected to participate in a study, representing the research population and the sample is the eleventh grader students science program, that have 7 class of science programs, and have 180 students in science program.

3.2.1 Population

Polit and Hungler (1999:37) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. Similarly, Salkind (1994:80) proposed that population is a group of potential participants to whom the researcher wants to generalize the result of the study. As mentioned by Mcmillan (1996 : 85) A population is a group of elements or cases, whether individuals, objects, or events, that conform to specific criteria and to which we intend to generalize the results of the research can be generalized. While the population of this research covered
by students of the eleventh graders in SMAN 5 Kota Jambi. The reason was because they have some experiences about the difficulties in learning English speaking skill.

3.2.2 Sample

According to Hanlon and Larget (2011) Sample is a subset of the individuals in a population; there is typically data available for individuals in samples. While according to Mcmillan (1996: 86) The sample is the group of elements, or a single element, from which Sample: Group of subjects from data are obtained. And the sampling technique in this study is cluster sampling. cluster sample is obtained by selecting clusters from the population on the basis of simple random sampling. The sample comprises a census of each random cluster selected ( Fridah, 2002:8 ).

Reason for taking the cluster sampling because according to Fridah on page 9 are “Random purposeful sampling This adds credibility when the purposeful sample is larger than one can handle it when dealing with people, it can be defined as a set of respondents (people) selected from a larger population for the purpose of a survey. Because the population are larger and the student more than 100 students, this research will use cluster sampling, and sample in this research are science program (MIA 4) of eleventh grader SMA N 5 Jambi.

3.3 Research Instrument and Data Collection

the researcher used questionnaire as the instrument to find out the “Students’ difficulties in learning English speaking skill, the researcher will distribute the survey
questionnaire to the selected sample, instruments refer to devices used to collect data such as questionnaires, tests, structured interview schedules and checklists (Seaman 1991:42). As stated above, the researcher employed a questionnaire to collect the data to find out the students’ difficulties in learning English speaking skill. Questionnaires are widely used in educational researches as a technique to identify attitudes and perceptions (Al-Saadi. 2013: 81). Polit and Hungler (1997:466) define a questionnaire as “a method of gathering information from respondents about attitudes, knowledge, beliefs and feelings”.

Based in their statements, the researcher become confident to choose questionnaire as the research intruments since what what to analyzed is related to students’ perception about difficulties in learning speaking skill of English. The questionnaire that the researcher conduct is adopted from (Khampreted.N : 2012), the survey questionnaire has 20 items are close statements that ask the participant to choose one of responses which are appropriate for them ( strongly agree, agree, uncertain, disagree, and strongly disagree ) the specification of questionnaire consist of the difficulties and problem in learning english speaking skill are “lack of pronunciation , lack of vocabulary, lack of self confident”

3.4 Validity and Reliability

3.4.1 Validity
The traditional criteria for validity find their roots in a positivist tradition, and to an extent, positivism has been defined by a systematic theory of validity. Within the positivist terminology, validity resided amongst, and was the result and culmination of other empirical conceptions: universal laws, evidence, objectivity, truth, actuality, deduction, reason, fact and mathematical data to name just a few (Winter, 2000). Joppe (2000) provides the following explanation of what validity is in quantitative research: Validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull’s eye" of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others. (p. 1) Wainer and Braun (1998) describe the validity in quantitative research as “construct validity”. The construct is the initial concept, notion, question or hypothesis that determines which data is to be gathered and how it is to be gathered.

The validity in this research is related to the relevancy of the questionnaire to the purpose of the research. The items in the questionnaire are valid if it can measure what it is measured. In this case, the researcher has purpose to measure students’ difficulties in learning English speaking skill. Therefore, the researcher uses the questionnaire that had been used in the previous researcher that examined the same variable as that in this research. Besides, the questionnaire also tried out to a group of student reliability.
3.4.2 Reliability

Reliability in this research is important in order to maintain the consistency of the research. In internal consistency reliability, a single instrument is used to a group of people to estimate reliability on one occasion Trochim (2008). According to Kirk and Miller (1986) identify three types of reliability referred to in quantitative research, which relate to: (1) the degree to which a measurement, given repeatedly, remains the same (2) the stability of a measurement over time; and (3) the similarity of measurements within a given time period (pp. 41-42). In this case the researcher will take the eleventh grader of science programs SMAN 5 Jambi that will be participants to respond the questionnaire before it is used in actual study and their responses will be analyzed by using SPSS version 18 to find the reliability of the data.

The reliability of each statement determined by using Alfa Cronbach, Alfa Cronbach is one of techniques in internal consistency reliability estimation to measure the consistency of the result. Hair in Asra (2014) suggests that Alfa Crobrach for each item in the construct is good if it is not less than 0.6. the average of Alfa Crobrach in the range is 0.724 – 0.824. in this research, the result of the realibility analysis for overall item is 0.817. this means that the consistency level of questionnaire is good, in the other words, the instrument is reliable.

Table 1. Result of reliability analysis for overall item
### Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.817</td>
<td>20</td>
</tr>
</tbody>
</table>

#### 3.5 Technique of analysis Data

After collecting the data, the writer analysed the data by using SPSS version 18. This technique purposes to answer the research questions quantitatively. The data is described as quantitative form using descriptive statistics. It determined the frequency, the mean, and the standard deviation of the gathered data. Following the instructions in Field (2009) descriptive statistics, including frequencies, means, standard deviations and percentages, were implemented in order to investigate the demographic data and the use of language learning strategies. In statistics, the frequency of an item represents how many times that item appears in data. Frequencies can be represented by a histogram or a table. After finding the frequencies, descriptive percentage is used to know the percentage of responses.

The mean, in the other hand, is mathematical average of all the terms. To calculate it, add up the values of all term and then divide by the number of terms. To identify the criterion of mean score, the scale used in questionnaire to specify the student’s level of agreement or disagreement were based on the following criteria of Reniss Likert (1932):
<table>
<thead>
<tr>
<th>Scale</th>
<th>Agreement</th>
<th>Mean range</th>
<th>Level of problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Strongly agree</td>
<td>4.50 – 5.00</td>
<td>Very high</td>
</tr>
<tr>
<td>4</td>
<td>Agree</td>
<td>3.50 – 4.49</td>
<td>High</td>
</tr>
<tr>
<td>3</td>
<td>Uncertain</td>
<td>2.50 – 3.49</td>
<td>Moderate</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>1.50 – 2.49</td>
<td>Low</td>
</tr>
<tr>
<td>1</td>
<td>Strongly</td>
<td>1.00 – 1.49</td>
<td>Very low</td>
</tr>
</tbody>
</table>

Besides the mean, there is also standard deviation. Standard deviation indicates how much, in average, each of the values in the distribution deviates from the mean of the distribution.