CHAPTER III

METHODOLOGY OF THE RESEARCH

A. The Research Design

The research is a correlational research. This research is "one way of describing in quantitative terms the degree to which the variables are related" (Anderson and Arsenault, 2005, p.118). In line with Anderson, it is stated that this research is a quantitative method of research in which investigators measure the degree of association or relation between two or more variables using the statistical procedure of correlational analysis (Creswell, 2008, p.356). There were two variables used in this research which consist of one independent variable and one dependent variable. The students' motivation in learning English was as the independent variables symbolized by "x" and the their language learning strategies was as the dependent variable symbolized by "y". Furthermore, the design of this research is:

Variable X	Variable Y
Students' Motivation in Learning English	→ Language Learning Strategies

B. Time and Location of the Research

This research was conducted at Senior High School Pembangunan Bagan Sinembah, located on Rokan Hilir Regency. This research was carried out on May 15th to 16th 2017.

C. Subject and Object of the Research

The subject of this research was the tenth grade students of Senior High School Pembangunan Bagan Sinembah Rokan Hilir Regency. The object of this research was the students' motivation in learning English and their language learning strategies of English.

D. Population and Sample of the Research

Population is the group interest to the researcher, the group which she or he would like the results of the study to be generalizable (Gay & Peter, 2000, p. 122). Generalization is a way to take a conclusion to group of individual that have amount broader based on the data that we take from some group of individual that have amount narrower. A part of individual as representative in research is called as sample. Sampling is the process of selecting a number of individuals for study that they represent the larger group from which they were selected.

It has been revealed that "the bigger the number of sample, the smaller the sampling error" (Sugiyono, 2011, p. 97). Therefore, the researcher used simple random sampling technique and took fifty percent of students in each class by using lottery. The description can be seen in the table below:

Table III.1
Sample of the Research

No	Class	Population	Sample
1	X.A	36	18
2	X.B	40	20
3	X.C	38	19
4	X.D	38	19
5	X.E	38	19
	Total	190	95

The sample were supposed 95 students who were taken from the total population 190 students of five classes, however, some students were absent when the research was conducted and researcher only had 70 students as the sample to be generalized to the population

E. Technique of Collecting Data

In this research, the technique used to collect the data is questionnaire. Questionnaire is commonly used as an instrument of survey research. Wilson and Mclean propose questionnaire as widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to administer without the presence of researcher, and often being comparatively straightforward to analyze (as cited in Cohen, 2007, p. 317). The questionnaires used in this research consist of:

1. Questionnaire of Language Learning Orientation Scale (LLOS) by Noels, Pelletier, Clement, and Vallerant.

   Students' motivation in learning English was measured based on LLOS-IEA questionnaire by Kimberly A Noels from University of Saskatchewan, Luc G Pelletier from University of Ottawa, Richard Clement from university of Ottawa, and Robert J Vallerant from University of Quebac at Montreal. The items were 20 questions about intrinsic and extrinsic motivation in learning English.

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

Table III.2
Blue Print of Motivation in Learning English

Aspects	Indicators	Questionnaire Items
Intrinsic Motivation		
Knowledge	The students do an activity for the feelings associated with the exploring new ideas and developing knowledge	1, 4, 5,6
Accomplishment	The students' action related attempting to master a task or achieve a goal	2, 3, 7
Stimulation	The students' action based simply on the sensations stimulated by performing the task	8, 9, 10
Extrinsic Motivation		
External regulation	The students do activities determined by sources external to the person	11, 13, 19
Intojected regulation	The students doo activities due to some types of pressure that individual has incorporated into self	12, 14, 15
Identified regulation	The students invest energy in an activity because they have chosen to do so for personally relevant reasons	16, 17, 18, 20

2. Questionnaires of Strategy Inventory of Language Learning (SILL) by Rebecca L. Oxford.

The instrument used in this study was Strategy Inventory for Language Learning (SILL). SILL questionnaire ESL/EFL Version 7.0 measures the type (memory, cognitive, compensation, metacognitive, affective, and social) and frequency of strategy use. This instrument has been used extensively to collect data on large numbers of mostly foreign language learners. The *SILL* is a standardized measure with versions for

students of a variety of languages, and as such can be used to collect and

analyze information about large numbers of language learners.

Table III.3
Blue Print of Language Learning Strategies

Aspects	Indicators	Questionnaire Items
Cognitive strategy	Students involve in direct analysis in learning language	4
	Students transform the language into some patterns	3
	Students synthesize to comprehend the target language	1, 2
Metacognitive strategy	Students manage planning in language learning to reach goal and objectives of the target language	7
	Students monitor what they get in learning English	6
	Students evaluate what they have studied about the language	5
Memory-related strategy	Students create mental linkage to memorize the target language	8
	Students use image to memorize the target language	9
	Students review the target language to memorize it	10
Compensatory strategy	Students guess unfamiliar words in comprehending target language	11
	Students describe words and use synonym in order to get the meaning across in speaking or writing	13
	Students use gesture to produce meaning in speaking	12
Affective strategy	Students control their emotion in learning English	16
	Students show good attitudes in learning English	15
	Students motivate and encourage themselves through positive self-talk	14
Social strategy	Students ask questions in English	19

	Students cooperate with other to improve their language skills	17, 18
	Students become aware to other when they use English to interact	20

F. The Validity and Reliability of the Instruments

Good assessment needs to be valid, reliable and practical. To obtain data from the respondents, the researcher made the try-out of the test to determine the validity and reliability of the instruments used.

1. The Validity

Validity is being clear about what is being measured and why. Validity focuses on ensuring that what the instrument "claims" to measure is truly what it is measuring (Lodico et al, 2006, p.87). To know the validity of both questionnaires of personality traits and self-confidence, researcher will use construct validity. To analyze the validity of the questionnaires, the researcher calculated by using SPSS 22.0 program version.

The validity of each item in the instrument of motivation can be seen in the following table:

Table III.4
The Validity of Motivation in Learning English Questionnaire

Items	r count	r critical	Status
1	0.553	0.468	Valid
2	0.587	0.468	Valid
3	0.511	0.468	Valid
4	0.493	0.468	Valid
5	0.525	0.468	Valid
6	0.571	0.468	Valid
7	0.519	0.468	Valid

8	0.507	0.468	Valid
9	0.496	0.468	Valid
10	0.513	0.468	Valid
11	0.565	0.468	Valid
12	0.497	0.468	Valid
13	0.56	0.468	Valid
14	0.51	0.468	Valid
15	0.543	0.468	Valid
16	0.58	0.468	Valid
17	0.514	0.468	Valid
18	0.47	0.468	Valid
19	0.526	0.468	Valid
20	0.573	0.468	Valid

To analyze the validity of the instrument for motivation, the researcher conducted a try-out to 20 students. The items are valid if the r count is higher than r table at 5% significance level with df = N-2. Therefore, based on the table III.3 above, the r count for each item is higher than r table, the r table df = 18 (df = 20-2) was 0.468. It was obvious that all of the items were valid because the r count(s) were higher than r table 0.468 which means the questionnaire can be used to collect the data for students' motivation in learning English and continue the research.

Meanwhile, the validity of each item in the instrument of language learning strategies can be seen in the following table:

Table III.5
The Validity of Language Learning Strategies Questionnaire

Items	r count	r critical	Status
1	0.592	0.468	Valid
2	0.73	0.468	Valid
3	0.758	0.468	Valid
4	0.721	0.468	Valid
5	0.66	0.468	Valid

6	0.64	0.468	Valid
7	0.612	0.468	Valid
8	0.468	0.468	Valid
9	0.655	0.468	Valid
10	0.719	0.468	Valid
11	0.613	0.468	Valid
12	0.663	0.468	Valid
13	0.559	0.468	Valid
14	0.489	0.468	Valid
15	0.557	0.468	Valid
16	0.528	0.468	Valid
17	0.562	0.468	Valid
18	0.502	0.468	Valid
19	0.633	0.468	Valid
20	0.468	0.468	Valid

To analyze the validity of the instrument for language learning strategies, the researcher also conducted a try-out to 20 students. The items are valid if the r count is higher than r table at 5% significance level with df = N-2. Therefore, based on the table III.4 above, the r count for each item is higher than and few are equal to r table, the r table df = 18 (df = 20-2) was 0.468. It was obvious that all of the items were valid because the r count(s) were higher than r table 0.468 which means the questionnaire can be used to collect the data for students' language learning strategies and continue the research.

2. **The Reliability**

Reliability refers to the consistency of the instrument which is tested to the similar group and context. Cohen et al (2007:146) explain that reliability in quantitative research is essentially a synonym for dependability, consistency, and stability over time, instrument and groups

of respondents. Reliability in quantitative analysis takes two main forms, both of which measures of internal consistency: the split-half technique and the alpha coefficient. Both calculate a coefficient of reliability that can lie between 0 and 1. Cohen et al (2007:506) provide the following guidelines for the coefficient:

Table III.6
The Level of Reliability

No	Reliability	Level of Reliability
1	>0.90	Very Highly Reliable
2	0.80-0.90	Highly Reliable
3	0.70-0.79	Reliable
4	0.60-0.69	Minimally Reliable
5	<0.60	Unacceptably Low Reliable

Furthermore, to obtain the reliability of both questionnaires, the researcher calculated by using SPSS 22.0 program version in order to find out whether the questionnaires were reliable and could be used for this research or not.

Table III.7
Reliability Analysis of Motivation in Learning English

Cronbach's Alpha	N of Items
,863	20

Based on the table III.6 above, the value of Cronbach Alpha was 0.863 which based on the level of reliability belonged to highly reliable. It can be interpreted that the questionnaire of motivation in learning English

was reliable and could be used for collecting the data and continue the research.

Table III.8
Reliability Analysis of Language Learning Strategies

Cronbach's Alpha	N of Items
,908	20

Based on the table III.7 above, the value of Cronbach Alpha was 0.908 which based on the level of reliability belonged to very highly reliable. It can be interpreted that the questionnaire of language learning strategies was reliable and could be used for collecting the data and continue the research.

G. Technique of Analyzing Data

In this research, the data were analyzed by using statistical method. The researcher used the score of variable x and score of variable y. The data or score were collected by using questionnaires for variable x and variable y which adapted the Likert scale. The score were obtained by summing each of score in the answer option which was score 1 for strongly disagree and never, 2 for disagree and rarely, 3 for neutral and sometimes, 4 for agree and usually, and 5 for strongly agree and always. The maximum score for both questionnaires were 100. The category for both scores of motivation in learning English and language learning strategies can be seen in the table below:

Table III.9
The Category of Students' Motivation in Learning English and Their Language Learning Strategies

Score	Category
≤ 20	Very Low
$21 - 40$	Low
$41 - 60$	Sufficient
$61 - 80$	High
$81 - 100$	Very High

Based on the table III.8 above, the category was applied for both students' motivation in learning English and language learning strategies of which it consisted of five groups. The students were categorized very low when they obtained score less than and equal to 20, the students were categorized low when they obtained score in the range of 21 to 40, the students were categorized sufficient in when they obtained score in the range of 41 to 60, the students were categorized high when they obtained score in the range of 61 to 80, and the students were categorized very high when they obtained score in the range of 81 to 100.

Furthermore, the two sets data were analyzed by using *Pearson Product Moment Correlation Coefficient* (r) through spss 22.0 version program. The interpretation of the strength of association between variables was based on Cohen's idea as represented in the following table (Pallant, 2001, p.120):

Table III.10
The Strength of Correlation

No	Value (r)	Description
1	0.10 to 0.29	Small
2	0.30 to 0.49	Medium
3	0.50 to 1.0	Large

The table III.9 above gives the guideline in interpreting the level of relationship between variable x and variable y. The value of r coefficient

0.10 to 0.29 represented small correlation between x and y, the value of r coefficient 0.30 to 0.49 represented medium correlation between x and y, and the value of r coefficient 0.50 to 1.0 represented the large correlation between x and y. Therefore, by analyzing the strength of association on Product Moment (r) output, the researcher assessed the importance of her findings.