## CHAPTER III

## METHOD OF THE RESEARCH

## A. Design of the Research

The design of this research is a correlational research. According to Creswell (2012:338), correlation is a statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently. From the definition above, it is clear that the purpose of the correlation study is to find out whether there is a correlation between two or more sets of data. It means that that we have to examine the correlation of dependent variable and independent variable.

## B. The Location and the Time of the Research

The research was conducted on May 2017. This research was conducted of the Eleventh grade Senior High School 1 Kateman Indra Giri Hilir. It is located on Pendidikan Street, Sungai Guntung Indra Giri Hilir.

## C. The Subject and Object of the Research

The subject of this research was Eleventh Grade of Senior High School 1 Kateman, Indra Giri Hilir in 2017-2018. While the object of this research was the correlation between students' learning motivation and their listening comprehension of the eleventh grade students at senior high school 1 Kateman Indra Giri Hilir.

## D. The Population and Sample of the Research

## 1. Population of the Research

Sugiyono (2012:117) state that population is the generalization area which consists of object or subject that has sure quality and characteristic that is determined by the researcher to be learned and to be extracted the conclusion. There were four classes consisting of 128 students as the total of population. It can be seen in the following table:

Table III. 1
The total population of the Eleventh Grade students' at Senior
High School 1 Kateman Indra Giri Hilir

| No | Classes | Population |
| :---: | :---: | :---: |
| 1 | X 1 | 32 |
| 2 | X 2 | 32 |
| 3 | X 3 | 32 |
| 4 | X 4 | 32 |
|  |  | Total |

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## 2. Sample of the Research

Creswell (2012:142) stated that sample is a subgroup of the target population that the research plans to study for generalizing about the target population. So, in the research considering that the population was large. or more than 100 persons. The researcher took 40 students for the sample.

Table III. 2
Sample of the Eleventh grade students' of State Senior
High School 1 Kateman Indragirihilir

| No | Classes | Population | $\mathbf{3 0 \%}$ of the <br> population |
| :---: | :---: | :---: | :---: |
| 1 | X 1 | 32 | 10 |
| 2 | X 2 | 32 | 10 |
| 3 | X 3 | 32 | 10 |
| 4 | X 4 | 32 | 10 |
| Total | 128 | 40 |  |

Gay (2012:131) argued that simple random sampling is the process of selecting a sample in such a way that all individuals in the defined

Table III. 3
The statement of Likert Scale

| No | Statement | Positive Statement |
| :---: | :---: | :---: |
| 1 | Strongly Agree | 5 |
| 2 | Agree | 4 |
| 3 | Doubt | 3 |
| 4 | Disagree | 2 |
| 5 | Strongly Disagree | 1 |

(Riduwan, 2010:86)
Table III. 4
Blue Print of Learning Motivation Questionnaire

| No | Indicators of Learning Motivation | Number of item |
| :--- | :--- | :--- |
| 1 | There is a desire in learning | $1,2,3,16,17$ |
| 2 | There are motivation in learning and the <br> necessity of learning | $4,5,6,18$ |
| 3 | There is a prospect of their future life | $7,8,9,19$ |
| 4 | There is an interesting activity in <br> learning | $10,11,12$, |
| 5 | There is a conducive learning circle, so <br> that students are able to learn better | $13,14,15,20$ |

## 2. Test

Brown (2003:3) stated that test is a method of measuring a person's ability, knowledge, or performance in a given domain. To measure students' listening comprehension, the researcher used multiple choices. The test consisted of 20 items in multiple choices ( $a, b, c$, and $d$ ). The researcher made an incomplete story in narrative text and conversation. The students needed to make it complete. They had to answer the questions in multiple choices. For the correct answer, the students got 2 points. And for the incorrect answer, they got 0 .

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\text { Final score }=\frac{\text { total score }}{\text { Maximum score }} \times 100
$$

Table III. 5
Blue Print of Listening Comprehension

| Kinds of the questions |  |
| :--- | :--- |
| responding the certain information in <br> narrative text | $6,7,8,9,10$ |
| responding the event in narrative text | $16,17,18,19,20$ |
| responding some expressions of the questions <br> congratulating someone | $1,2,3,4,5$ |
| responding some expressions of anger | $11,12,13,14,15$ |

According to Arikunto (2006:245), the classification of the students' listening comprehension score can be seen in the following table:

Table III. 6
Classification of Students’ Score

| The score level | Category |
| :---: | :---: |
| $80-100$ | Very good |
| $66-79$ | Good |
| $56-65$ | Enough |
| $40-55$ | Less |
| $30-39$ | Fail |

## F. Validity and Reliability of Instrument

Vandergrift (2012:256) stated that validity refers to the extent to which a test assess what is proposed to assess. Validity is concerned with what a test measures and for whom it is appropriate. Thus, the validity of instrument is the device used to get the valid data. Those means that the instrument can be used to measure what should be measured.

## 1. Questionnaire of the Research

a. Validity of the Questionnaire

Gay (2012:160-164) mentioned that there are three kinds of validity. They are content validity, criterion-related validity, and construct validity. Meanwhile, in the research, the researcher used construct validity to know the validity of the questionnaire. Siregar
(2013:77) described that construct validity means the validity that is related to the ability of instrument to measure the concept of being measured. Non-test instrument is used to measure the attitude in construct validity.

To analyze the validity of variable X learning motivation, the researcher used SPSS 16.0 program version. Based on the try out result of the instrument validity to the 20 items, it's showed that all the items were valid. It means that there were 20 items that could be used in this research. The following table is the result of the instrument validity.

Table III. 7
The Analysis of Learning Motivation Test Validity

| Item Number | $\begin{gathered} \text { r- } \\ \text { item } \end{gathered}$ | $\begin{gathered} \mathrm{r}- \\ \text { table } \end{gathered}$ | Result | Item Number | $\begin{aligned} & \text { r- } \\ & \text { item } \end{aligned}$ | $\begin{gathered} \text { r- } \\ \text { table } \end{gathered}$ | result |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.54 | 0.34 | Valid | 11 | 0.63 | 0.34 | valid |
| 2 | 0.74 | 0.34 | Valid | 12 | 0.58 | 0.34 | valid |
| 3 | 0.56 | 0.34 | Valid | 13 | 0.47 | 0.34 | valid |
| 4 | 0.71 | 0.34 | valid | 14 | 0.57 | 0.34 | valid |
| 5 | 0.62 | 0.34 | valid | 15 | 0.71 | 0.34 | valid |
| 6 | 0.36 | 0.34 | valid | 16 | 0.62 | 0.34 | valid |
| 7 | 0.48 | 0.34 | valid | 17 | 0.53 | 0.34 | valid |
| 8 | 0.48 | 0.34 | valid | 18 | 0.62 | 0.34 | valid |
| 9 | 0.42 | 0.34 | valid | 19 | 0.44 | 0.34 | valid |
| 10 | 0.72 | 0.34 | valid | 20 | 0.66 | 0.34 | valid |

From the table above, the test items were valid. Because of the items were valid, the researcher used the questionnaire to be examined to the sample of the research.

## b. Reliability of the Questionnaire

Creswell (2012:159) stated that reliability means that scores from an instrument are stable and consistent. In this research, the
researcher used internal consistency in which the writer tried out the questionnaire once and analyzed each item by using cronbach alpha technique. Sugiyono (2012:130) cronbach alpha technique can be used for interval data.

To measure reliability in this research, it needs a measuring tool, which uses technique of Apha Croncbach. To measure, the researcher used SPSS (Statistical Product for Service) 16.0 program.

Table III. 8
Reliability Statistic of Students' Learning Motivation

| Cronbach's Alpha |  | N of Items |
| ---: | ---: | ---: |
|  | .895 |  |

## 2. Test

## a. Test Validity

Gay (2012:160-164) mentioned that there are three kinds of validity. They are content validity, criterion-related validity, and construct validity. In this research, the researcher used content validity. Brown (2003:22) stated that content validity is if a test actually samples the subject matter about which conclusions are to be drawn, and if it requires the test taker to perform the behavior that is being measured.

To analyze the validity of variable Y is listening comprehension, the researcher used SPSS 16.0 program version. Based on the try out result of the instrument validity to the 20 items, it's showed that all the item were valid. It means that there were 20 items that could be used in this research. The following table is the result of the instrument validity.

Table III. 9
The Analysis of Listening Comprehension Test Validity

| Item <br> Number | $\begin{gathered} \mathrm{r}- \\ \text { item } \end{gathered}$ | $\begin{gathered} \text { r- } \\ \text { table } \end{gathered}$ | result | Item Number | $\begin{gathered} \text { r- } \\ \text { item } \end{gathered}$ | table | result |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 0.61 | 0.32 | valid | 11 | 0.71 | 0.32 | valid |
| 2 | 0.72 | 0.32 | valid | 12 | 0.61 | 0.32 | valid |
| 3 | 0.82 | 0.32 | valid | 13 | 0.64 | 0.32 | valid |
| 4 | 0.47 | 0.32 | valid | 14 | 0.55 | 0.32 | valid |
| 5 | 0.72 | 0.32 | valid | 15 | 0.56 | 0.32 | valid |
| 6 | 0.54 | 0.32 | valid | 16 | 0.71 | 0.32 | valid |
| 7 | 0.64 | 0.32 | valid | 17 | 0.65 | 0.32 | valid |
| 8 | 0.55 | 0.32 | valid | 18 | 0.78 | 0.32 | valid |
| 9 | 0.68 | 0.32 | valid | 19 | 0.70 | 0.32 | valid |
| 10 | 0.77 | 0.32 | valid | 20 | 0.65 | 0.32 | valid |

From the table above, the test items were valid. Because of the items were valid, the researcher used the test to be examined to the sample of the research.

## b. Test Reliability

Reliability is to measure the instrument that is used to collect the data. To know whether the test is reliable or not, the researcher calculated the data obtained by using Statistical Product and Service Solution 16.0 program. The test reliability can be seen as follows:

Table III. 10
Reliability Statistic of Students' Listening Comprehension

| Cronbach's Alpha | N of Items |  |
| ---: | ---: | ---: |
|  | .930 |  |

## G. Technique of Data Analysis

The researcher used the data which were analyzed by using statistical method. This score was analyzed statistically. There is asignificant correlation or there is no significant correlation between two or more variables that can be analyzed by using product moment correlation SPSS version 23, because likert scale is an interval data (Riduwan, 2010:139). The formula is:
$\mathrm{Df}=\mathrm{N}-\mathrm{nr}$

Where: $\mathrm{N}=$ Number of cases

$$
\mathrm{Nr}=\text { Number of variable }
$$

Comparing ro (r observed) with the rt (r table)
If ro $\geq \mathrm{rt}$, Ha is accepted, Ho is rejected.
If ro < rt, Ha is accepted, Ho is rejected.
In the following table is the category of correlation coefficient (Hartono, 2008:87)

Table III. 11
Table of Interpretation Correlation Coefficient Product Moment

| R Product Moment | Interpretation |
| :---: | :---: |
| $0.00-0.200$ | Very Low |
| $0.200-0.400$ | Low |
| $0.400-0.700$ | Medium |
| $0.700-0.900$ | Strong |
| $0.900-1.000$ | Very Strong |

