## CHAPTER III

## RESEARCH METHOD

## A. Design of the Research

 ${ }^{5}$ statistical test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently" (Creswell, 2012, p.338). In this$\square$ research, correlation means the relationship between learning motivation in listening English songs and their listening comprehension.

In addition, there are two types of correlation design, these are "Explanatory Design" and "Prediction Design". In this research, the design will be used is explanatory design. According to Creswell (2012, p.340) "an explanatory correlation design explains or clarifies the degree of association among two or more variables at one point in time." It means that, when the ${ }^{n}$ writer collects the data, the writer correlates two or more variables and then collects the data at one point in time.

## B. Time and Location of the Research

The research was conducted at the eleventh grade of Senior High School 1 Pekanbaru. The research was conducted on February 2018.

## C. Subject and Object of the research

The subject of this research was the eleventh grade of Senior High
${ }^{2}$ School 1 Pekanbaru. While the object of this research was students' motivation -in listening to English songs and students' listening comprehension.

## D. Population and Sample of the Research

The population of this research was the eleventh grade of Senior High School 1 Pekanbaru. There were twelve classes consisting of 378 students as the total of population. It can be seen in the following table:

## Table III. 1

## Population and Sample of the Research

| No | Classes | Population | Sample (10\%) |
| :---: | :---: | :---: | :---: |
| 1 | XI MIA 1 | 33 | 3 |
| 2 | XI MIA 2 | 34 | 4 |
| 3 | XI MIA 3 | 34 | 3 |
| 4 | XI MIA 4 | 30 | 3 |
| 5 | XI MIA 5 | 32 | 3 |
| 6 | XI MIA 6 | 29 | 3 |
| 7 | XI MIA 7 | 33 | 3 |
| 8 | XI MIA 8 | 27 | 3 |
| 9 | XI MIA 9 | 33 | 4 |
| 10 | XI MIA 10 | 35 | 3 |
| 11 | XI IIS 1 | 32 | 3 |
| 12 | XI IIS 2 | 26 | 378 |

In this research, the writer considered that the population is big because the population was more than 100 persons. Therefore, to determine the sample, the writer used the simple random sampling for this research. In simple random -sampling, according to Creswell (2012, p.143) any individual has the same probability to be the participants. So in this research, the writer took 38 ${ }^{\sim}$ students to become a sample. Furthermore, Arikunto (2006, p.134) state that if the research subject more than 100 , the writer takes $10-15 \%$ or $20-25 \%$ from万 the population as the sample. So, in this research, the writer took $10 \%$ of the population as the sample. So, the total sample that the writer took was38 students as the sample randomly.

## E. Technique of Collecting the Data

There were two kinds of techniques used for the data collection. They are:

1. Questionnaire

In order to get the data, the writer used questioners as the technique of collecting the data. It was used to find out how is the students' motivation in listening to English song. According to Cohen et al (2007, p.317) questionnaire; is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the writer, and often being comparatively straightforward to analyze. Through questionnaire, to collect the data can be processed quickly.

In questionnaire, the writer gave 20 items of questionnaire for collecting the data of students' motivation in listening to English songs. The
questionnaire that the writer used was Likert chart scale. Creswell stated that there are scoring data that the writer assigns a numeric score (value) to each category for each questions on the instrument be used to collect data. In the instrument there were five options for each question that would be answered by the respondents, they are: always (5), often (4), sometimes (3), seldom (2), never (1).

The questionnaire was adopted from Goctu (2016), and the writer make blue print for the questionnaire based on the indicators of motivation that consisted of 20 items.

As described in the next table below:
Table III. 2
Blue Print of Students' Motivation in Listening to English Songs


Test was used to measure the listening comprehension of the students. According to Cohen et al (2007, p.421) test is subject to the item
analysis. The test is used to measure the students' achievement, to know the students' progress, to motivate and direct students' learning, whether it is good or not. In this study, the writer gave a test to obtain the students' listening comprehension. There were 20 questions that the writer gave to the students to find out the students' listening comprehension at the eleventh grade of Senior High School 1 Pekanbaru.

Table III. 3
Blue Print of Students' Listening Comprehension

| Number | Indicators of Items | Number of Items | Items Number |
| :---: | :--- | :---: | :---: |
| 1 | Identify main idea. | 5 | $7,11,14,16,20$ |
| 2 | Finding the explicit and implicit <br> information. | 5 | $1,3,12,13,19$ |
| 3 | Predict word meaning. | 5 | $4,6,9,10,15$ |
| 4 | Identify reference of pronouns. | 5 | $2,5,8,17,18$ |

## 3. Validity of the Instruments

Before the test and questionnaire were given to the sample of this research, they were tried out to the eleventh grade students ofSenior High School 1 Pekanbaru. The purpose of the try out is to obtain validity and reliability of the test. Validity is the most critical criterion and indicates the degree to which an instrument measures what it is supposed to measure (Kothari, 2004, p. 17). In other words, validity is the extent to which differences found with a measuring instrument reflect true differences among those being tested.


Dilarang mengutip sebagian atau seluruh karya tulis ini tanpa mencantumkan dan menyebutkan sumber:反uepun-6uepun !бunpu!!!a ełd!כ צен

In this research, the writer used construct validity for measuring the instruments. Sanjaya (2014, p. 225) stated that construct validity is relating to whether the test will be tested able to measure characteristics of subject. This validity test was used for determining the characteristics of the subjects such as an intelligence test, a motivation test, an interest test, and skill test of persons.

To know whether the data is valid or not, the data obtained was calculated by using SPSS 24.0 windows program. The writer examined and noted the differences between $\mathrm{r}_{\text {item }}$ and $\mathrm{r}_{\text {table }}$. Siregar (2014) stated that the item is valid if the value of $\mathrm{r}_{\text {item }}$ is higher than $\mathrm{r}_{\text {table }}$ at significance level of $5 \%(\alpha=$ alpha $=0.05)$. The questionnaire and the test were tried out to 20 students, meaning that $\mathrm{N}=20$ with $\mathrm{df}=\mathrm{N}-2=18$. The writer took df 18 , so $\mathrm{r}_{\text {table }}$ acquired was 0.444 (See in appendic r table).

The result of questionnaire indicated that all items were valid. It can be seen as follow:

Table III. 4
The Validity of Students' Motivation in Listening to English Songs Questionnaire

| Items | $\mathrm{r}_{\text {item }}$ | $\mathbf{r}_{\text {table }}$ | Status | Information |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 0,583 | 0,444 | Valid | Used |
| 2 | 0,697 | 0,444 | Valid | Used |
| 3 | 0,485 | 0,444 | Valid | Used |
| 4 | 0,742 | 0,444 | Valid | Used |
| 5 | 0,493 | 0,444 | Valid | Used |
| 6 | 0,713 | 0,444 | Valid | Used |
| 7 | 0,811 | 0,444 | Valid | Used |
| 8 | 0,623 | 0,444 | Valid | Used |
| 9 | 0,806 | 0,444 | Valid | Used |
| 10 | 0,487 | 0,444 | Valid | Used |
| 11 | 0,69 | 0,444 | Valid | Used |
| 12 | 0,577 | 0,444 | Valid | Used |
| 13 | 0,739 | 0,444 | Valid | Used |
| 14 | 0,658 | 0,444 | Valid | Used |
| 15 | 0,731 | 0,444 | Valid | Used |
| 16 | 0,682 | 0,444 | Valid | Used |
| 17 | 0,502 | 0,444 | Valid | Used |
| 18 | 0,795 | 0,444 | Valid | Used |
| 19 | 0,498 | 0,444 | Valid | Used |
| 20 | 0,748 | 0,444 | Valid | Used |

2. Dilarang mengumumkan dan memperbanyak sebagian atau seluruh karya tulis ini dalam bentuk apapun tanpa izin UIN Suska Riau

 Hak Cipta Dilindungi Undang-Undang
3. Dilarang mengutip sebagian atau

The table above shows the validity of students' motivation in listening to english songs questionnaire try out. Based on the table, all items are valid because $\mathrm{r}_{\text {item }}>\mathrm{r}_{\text {table }}$. Because all items are valid, the writer used all the items to be tested to the sample.

The following table is the validity result of listening

Table III. 5
The Validity of Listening Comprehension Test

| Items | $\mathbf{r}_{\text {item }}$ | $\mathbf{r}_{\text {table }}$ | Status | Information |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 0,626 | 0,444 | Valid | Used |
| 2 | 0,506 | 0,444 | Valid | Used |
| 3 | 0,664 | 0,444 | Valid | Used |
| 4 | 0,625 | 0,444 | Valid | Used |
| 5 | 0,511 | 0,444 | Valid | Used |
| 6 | 0,536 | 0,444 | Valid | Used |
| 7 | 0,479 | 0,444 | Valid | Used |
| 8 | 0,664 | 0,444 | Valid | Used |
| 9 | 0,49 | 0,444 | Valid | Used |
| 10 | 0,559 | 0,444 | Valid | Used |
| 11 | 0,664 | 0,444 | Valid | Used |
| 12 | 0,486 | 0,444 | Valid | Used |
| 13 | 0,596 | 0,444 | Valid | Used |
| 14 | 0,516 | 0,444 | Valid | Used |
| 15 | 0,516 | 0,444 | Valid | Used |
| 16 | 0,6 | 0,444 | Valid | Used |
| 17 | 0,502 | 0,444 | Valid | Used |
| 18 | 0,536 | 0,444 | Valid | Used |
| 19 | 0,528 | 0,444 | Valid | Used |
| 20 | 0,51 | 0,444 | Valid | Used |

Based on the table above, it can be seen that the all items are valid because $\mathrm{r}_{\text {item }}>\mathrm{r}_{\text {table. }}$. So, the writer used all the items to be tested to the sample.

## 4. Reliability of the Instruments

According to Brown (2003, p. 20), reliability has to do with the accuracy of measurement. Furthermore, a reliable test is consistent and dependable (Brown, 2003 p. 21). It means that a reliable test will stay to give unchangeable results in a few test conducted to the same group of people.

Siregar (2013) stated that reliability test can be done by having external and internal ways. In this research, the writer used internal consistency in which the writer tried out the questionnaire once and analyzed each item by using cronbach alpha technique. According to Sugiyono (2012), cronbach alpha technique can be used for interval data.

The categories below are the level Realibility:
Table III. 6
The Level of Reliability

| No | Reliability | Level of Reliability |
| :---: | :---: | :---: |
| 1 | $0.0-0.20$ | Low |
| 2 | $0.21-0.40$ | Sufficient |
| 3 | $0.41-0.70$ | High |
| 4 | $0.71-1.0$ | Very high |

Taken from Tinambunan in Ersika
To find out the reliability of the questionnaire and test, the writer used Cronbach's alpha formula ad test through SPSS 17.00. The following table is the reliability test of students' motivation in listening to English songs questionnaire.

Table III. 7
Cronbach Alfa Table
Reliability Statistics

## Students' Motivation in Listening to English

Songs

| Cronbach's Alpha | N of Items |  |
| ---: | ---: | ---: |
| .926 |  | 20 |

Based on analysis above, the value of Cronbach's Alpha was 0.926 which was higher than 0.60 . It could be said that the questionnaire is reliable. Due to $0.71-1.0$, the level of reliability was very high reliable.

The following table is the reliability test of listening comprehension test try out:

Table III. 8
Cronbach Alfa Table Reliability Statistics

Listening Comprehension

| Cronbach's Alpha | N of Items |  |
| ---: | ---: | ---: |
| .882 |  | 20 |

Based on analysis above, the value of Cronbach's Alpha was 0.882 which was higher than 0.60 . It could be said that the test is reliable. Due to $0.71-1.0$, the level of reliability was very reliable.

## F. Technique of Data Analysis

In order to find out whether there is a significant correlation between students' motivation in listening to English songs and their listening comprehension, the data was analyzed by using statistical formula, because the


(a)data is normally distributed, the writer used Pearson product-moment correlation technique to analyze the data. The hypothesis as follows:
$\mathrm{H}_{0} \quad:$ Sig. (2-tailed) $>\alpha(0.05)$
$\mathrm{H}_{\mathrm{a}} \quad$ : Sig. (2-tailed) $<\alpha(0.05)$
$\mathrm{H}_{\theta}$ is accepted if the value of Sig. (2-tailed) $>\alpha(0.05)$. It means that there is no significant correlation between students' motivation in listening to English songs añd their listening comprehension at the eleventh grade of Senior High School 1 Pekanbaru.
$\mathrm{H}_{\mathrm{a}}$ is accepted if the value of Sig. (2-tailed) $<\alpha(0.05)$. It means that there is a significant correlation between students' motivation in listening to English songs and their listening comprehension at the eleventh grade of Senior High School 1 Pekanbaru.

