

CHAPTER III

METHOD OF THE RESEARCH

A. Research Design

This research is correlation research, which is a research method that is based on the philosophy of positivism, it is used to examine the population or a particular sample, data collection using research tools, the characteristics of the data analysis is a quantitative / statistical, to test the hypotheses that have been made (Prasetyo and Jannah, 2005: 24, 26). Besides, its goal is to provide analysis description in the correlation between the interest in English songs on students' listening proficiency, and the process of data analysis uses SPSS (*Statistical Package for Social Science*). In this correlation research, there are two variables (Independent variable and dependent variables)

Variables are things that are the object of research, which stated in a research activity, which shows variations, both quantitative and qualitative (Arikunto, 2010: 17). The variables of this research are the student's interest in English songs which is the independent variable (variable x) and the results of the proficiency test listening is the dependent variable (variable y).

B. Research Setting

This research takes place in the twelfth grade of senior high school at MAN 3 Mulawarman Banjarmasin in academic year 2016/2017. It is located in South Kalimantan, Banjarmasin, Batu Benawa I street no. 61. The research will be conducted in 13 October until 23 November 2016.

C. Population and sample

1. Population

The population of this research is all students of class XII which is from four classes. The total of XII class students is 209.

Table 3.1 Population of Research

No	Class	Population
1	IPA I	34
2	IPA II	37
3	IPA III	36
4	IPS I	35
5	IPS II	31
6	AGAMA	36
Total		209

2. Sample

Sample is a part of population that is observed. In determining the total of sample of the research, the researcher uses the table of Isaac and Michael with significant of error 5%. Furthermore, random sampling method is used in determining the sample of this research. So, the researcher takes 131 students as the sample of this research.

Table 3.2 Sample of Research

No	Class	Population	Sample
1	IPA I	34	22
2	IPA II	37	22
3	IPA III	36	22
4	IPS I	35	22
5	IPS II	31	21
6	AGAMA	36	22
Total		209	131

D. Technique of Collecting Data

This research used two instruments in collecting the data. The instruments are questionnaires and test:

1. Questionnaire

Questionnaire is a research instrument in the form of a list of questions to get information from a number of respondents. This instrument is used to get the data about students' interest in English songs. There are 20 questions.

Moreover, the questions are based on the interest in English songs indicators. It can be seen on the table below:

Table 3.3 Indicators of Interest in English Songs

No	Indicators	Item Number
1	Felling happy	1,2,3
2	Students' interest	4,5,6,7
3	Students' attention	8,9,10,11,12
4	Students' involvement	13,14,15,16,17,18,19,20

2. Test

Test is a way (that can be used) or procedure (to be implemented) in the framework of measurement and assessment, in the form of giving the task or series of tasks in the form of questions (to be answered), or commands (to be done) by the participants test, so that (on the basis of data obtained from the results of these measurements) can be generated value that symbolizes behavior or achievement of participants test; where value can be compared with the values achieved by other participants test, or compared with the value of a certain standard.

The test is used to gather students' listening proficiency which consists of 15 questions taken from the National Examination test for High School 2015/2016 listening section.

Table 3.4 Indicators of listening test

No	Indicators	Item Number
1	Short Conversation	1,2,3,4
2	Questions/Statements-Responses	5,6,7
3	Pictures	8,9,10,11
4	Short Talk (Monolog)	12,13,14,15

E. Technique of Data Analysis

After collecting data, the writer takes some steps to analyze data. The analysis steps are as follows:

a. Questionnaire Data

The writer categorizes the scores of questionnaire result or also called independent variable (X) into the following criteria:

Table 3.5 Scoring The Questionnaire

Category	Score
Totally disagree	1
Disagree	2
Uncertain	3

Agree	4
Totally agree	5

After that, the researcher interprets the scores of interest in English song by classifying it into three categories. They are up rank (good), middle rank (fair), and bottom rank (bad). According to Sudijono (2006, pp.175-176), the formula in interpreting the score into three categories is:

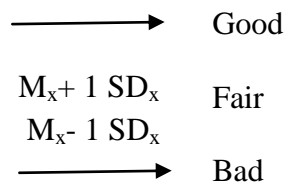
1. Finding the mean

$$M_x = \frac{\sum fX}{N}$$

2. Finding the standard deviation

$$SD_x = \sqrt{\frac{\sum fx^2}{N}}$$

3. Classifying the scores into three categories



- Top up of interest in English songs score = $M_x + 1 SD_x$
- Bottom of interest in English song score = $M_x - 1 SD_x$

Explanation:

M_x = mean of students' interest in English songs

SD_x = Standard deviation of students' interest in English songs

$\sum fX$ = Total score of students' interest in English songs

N = Total Number of the respondents

Table 3.6 Categories of Interest

Score	Category
> 78	Good
57-78	Fair
< 57	Bad

To test instrument before turn into field, the researcher will use validity test and Alfa Cronbach or reliability test with SPSS version 23, and the researcher takes 10 students of each class, so there are 60 students to conduct validity test and Alfa cronbach or reliability test.

Formula of alfa cronbach:

$$\alpha = \left(\frac{K}{K-1} \right) \left(\frac{s_r^2 - \sum s_i^2}{s_x^2} \right)$$

α = alfa cronbach reliability coefficient

k = total questioner number

$\sum s_i^2$ = total variants score item

s_x^2 = all variants score item

Crieteria of Alfa Cronbanch:

If $\alpha > 0.90$ the reliability is perfect

$\alpha = 0.70-0.90$ the reliability is high

= 0.50-0.70 the reliability is moderate

= <0.50 the reliability is low

b. The score of listening test

While the students' listening test is also called dependent variable (Y) are classified into the following criteria:

Table 3.7 Categories of Listening test

Criterion	Score
Excellent	80-100
Good	60-80
Fair	40-60
Poor	20-40
Very Poor	0-20

If the answer is correct, they will get score 6,7. So, the total score of 15 items test is $15 \times 6,7 = 100$. In classifying the score, the researcher uses the categories which is submitted by David p. Harris (1969).

After that, the writer determinains the students' English listening test generally by applying this formula:

$$M = \frac{\sum X}{N}$$

N

M = Mean

$\sum X$ = total Score

N = Total Number of Students

After the questionnaire and listening test are collected. The writer examines

research hypothesis by calculating and correlate the data of X and Y variables. The examination uses Product Moment.

The equation for Pearson (r) is as follow:

$$r_{xy} = \frac{\sum x.y}{\sqrt{(\sum x^2)(\sum y^2)}}$$

r_{xy} = correlation coefficient between variable X and Y.

$\sum x$ = the values for the X variable.

$\sum y$ = the values for the Y variable.

$\sum x.y$ = the values for the XY variable.

$$r_{xy} = \frac{N. \sum x.y - (\sum X)(\sum Y)}{\sqrt{[N. \sum X^2 - (\sum X)^2][N. \sum Y^2 - (\sum Y)^2]}}$$

Explanation:

r_{xy} = Coefficient of correlation between variable x and variable y

N = Total respondent

$\sum x$ = Accumulative score of interest in English song questionnaire

$\sum x^2$ = Accumulative square score of interest in English song questionnaire

$\sum y$ = Accumulative score of listening test

$\sum y^2$ = Accumulative square score of listening test

$\sum xy$ = Accumulative score of multiplication of variable x and variable y

However, before using the formula, the researcher does normality test and linearity test because these tests are prerequisite in using Pearson product moment formula. Normality test is done to determine normal distribution and linearity test is

used to know the relation between dependent and independent variable. In doing normality test and linearity, the researcher uses SPSS version 23.

The criteria in determining normal distribution of the data are as follows:

- a. A normal distribution of data, if the value of significance $> 0,05$
- b. An abnormal distribution of data, if the value of significance $< 0,05$

The criteria in determining the linearity of the variables are as follows:

- a. If the value of significance $> 0,05$. It means that the variables are linear
- b. If the value of significance $< 0,05$. It means that the variables are linear

Then, the researcher will interpret the value of r_{xy} by comparing it with r_t with, significant value 0,05. Before that, the researcher determine the degree of freedom by using this formula :

$$df = N - nr$$

Explanation:

df = degree of freedom

N = Total respondent

nr = Total variable

Criteria in testing the hypotheses:

- If $r_{xy} > r_t$ means there is a significant correlation and H_a is accepted, H_o is rejected.
- If $r_{xy} < r_t$ means there is no significant correlation and H_a is rejected, H_o is accepted.

Criteria in detemining the significant correlation:

- If the value of significant correlation $< 0,05$. It means that the variabls are significant.
- If the value of significant correlation $> 0,05$. It means that the variabls are not significant.

When all the data have been calculated, the next step of data processing is to interpret the data which have been tabulated by using the following categories:

r_{xy}	Interpretation
0,00 – 0,20	There is a very low correlation between variable X and Y
0,20 – 0,40	There is a low correlation between variable X and Y
0,40 – 0,70	There is a medium correlation between variable X and Y
0,70 – 0,90	There is a high correlation between variable X and Y
0,90 – 1,00	There is very high correlation between variable X and Y

(Sudijono, 2006, p.193)