## CHAPTER III

## RESEARCH METHODOLOGY

### 1.1 The Research Design

The design of the research is correlational research. According to Emzir (2012. p.46), Correlational research is about association of two or more variables involve using correlational statistic. Furthermore, Creswell (2012) stated that, a correlation is a statically test to determine the tendency or pattern for two (or more) variables or two sets of data to vary consistently. The purpose of correlational research is to determine the relationship among two or more variables.

There were two variables in this study; they were the students' personality traits and their English achievement. The students' personality was as the independent variable symbolized by X and students' English achievement was as the dependent variable that symbolized by Y .

### 1.2 The Location and Time of the Research

The research was conducted at State Islamic Junior High School 8 Kampar. It was conducted from November to February 2018.

### 1.3 The Subject and Object of the Research

The subject of the research was the second year students at State Islamic Junior High School 8 Kampar in 2017/2018 academic year. Meanwhile, the object of the research was the correlation between students' personality traits and their English achievement.

### 1.4 The Population and Sample

### 1.4.1 Population of the Research

The population is the group of the research subject (Arikunto, 2010, p. 173). The population of this research was all of the second year students at State Islamic Junior High School 8 Kampar in academic year 2017/2018, consisting 70 students classified into 3 classes from VIII1 until VIII3.

## Table III. 1

The Total Population of the second year students at State Islamic Junior High School 8 Kampar

| No | Second year students | Population |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| 1 | VIII1 | 11 | 13 | 24 |
| 2 | VIII2 | 9 | 15 | 24 |
| 3 | VIII3 | 9 | 13 | 22 |
|  | Total | 26 | 36 | 70 |

### 1.4.2 Sample of the research

Sample is part of population that is surveyed. The researcher will used total sampling as sampling technique. According to Sugiono (2012) Total sampling is sampling technique where total of sample is the same as population. In this research, the researcher takes all of the population as sample. So, all of the second year students of State Islamic Junior High School 8 Kampar was a respondent in this research.

### 1.5 The Techniques of Collecting Data

In order to get the data needed to support this study, the researcher uses two instruments to get the data. They are:

### 1.5.1 Questionnaire

The questionnaire was used to find out how the personality traits of the second year students at State Islamic Junior High School 8 Kampar are. According to Wilson and McLean in Cohen (2007), questionnaire is a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administrated without presence of the researcher, and being comparatively straightforward to analyse (p. 317).

In this case, the researcher used a questionnaire adopted the Big Five Inventory (BFI). The questionnaires usually consist of a statement followed by a response continuum such as disagree strongly, disagree a little, neither agree nor disagree, agree a little, and agree strongly. The subject selects the response that best describes his reaction to the statement.

The questionnaire translated to Indonesia to make it easier for students to fill the questionnaire and avoid misunderstanding. The questionnaire consists of 44 questions describing five indicators of personality traits disposition that can be mapped as follows:

Table III. 2
The Blue Print of Big Five Inventory Scale

| No | Trait | Facet | Favourable | Unfavourable |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \frac{1}{z} \\ & \infty \\ & \vdots \\ & \vdots \end{aligned}$ | Extraversion | Gregariousness (Sociable) | $\begin{gathered} 1,11,16 \\ 26,36 \end{gathered}$ | 6, 21, 31 |
|  |  | Assertiveness (forceful) |  |  |
|  |  | Activity (energetic) |  |  |
|  |  | Excitement-seeking (adventurous) |  |  |
|  |  | Positive emotions (enthusiastic) |  |  |
|  |  | Warmth (outgoing) |  |  |
| 20 | Agreeableness | Trust (forgiving) | $\begin{gathered} 7,17,22, \\ 32,42 \end{gathered}$ | 2, 12, 27, 37 |
|  |  | Straightforwardness (not demanding) |  |  |
|  |  | Altruism (warm) |  |  |
|  |  | Compliance (not stubborn) |  |  |
|  |  | Modesty (not show-off) |  |  |
|  |  | Tender-mindedness (sympathetic) |  |  |
| $\left[\begin{array}{l} 3 \\ \frac{\omega}{2} \\ \hline \end{array}\right.$ | Conscientiousness | Competence (efficient) | $\begin{gathered} 3,13,28 \\ 33,38 \end{gathered}$ | 8, 18, 23, 43 |
|  |  | Order (organized) |  |  |
|  |  | Dutifulness (not careless) |  |  |
|  |  | Achievement striving (thorough) |  |  |
|  |  | Self-discipline (not lazy) |  |  |
|  |  | Deliberation (not impulsive) |  |  |
|  | Neuroticism | Anxiety (tense) | $\begin{gathered} 4,14,19 \\ 29,39 \end{gathered}$ | 9, 24, 34 |
|  |  | Angry hostility (irritable) |  |  |
|  |  | Depression (not contented) |  |  |
|  |  | Self-consciousness (shy) |  |  |
|  |  | Impulsiveness (moody) |  |  |
|  |  | Vulnerability (not selfconfident) |  |  |
|  | Openness | Ideas (Curious) | $\begin{gathered} 5,10,15 \\ 20,25,30 \\ 40,44 \end{gathered}$ | 35, 41 |
| os |  | Fantasy (Imaginative) |  |  |
| $\frac{5}{5}$ |  | Aesthetics (artistic) |  |  |
| 5 |  | Actions (wide interests) |  |  |
| $\cdots$ |  | Feelings (excitable) |  |  |
| $\stackrel{\sim}{2}$ |  | Values (unconventional) |  |  |

Favourable and unfavourable items for each trait are the rule to compute the score. For favourable items, the score remain as what the participant filled. For example, when a student gave himself 5, the score is 5. For unfavourable items, the score should be reserved by subtracting the score given by 6 . For example, when a student gave himself 5, compute 6 minus 5 and the recoded score is 1 . So, a score of 1 becomes 5,2 becomes 4,3 remains 3,4 becomes 2 , and 5 becomes 1 .

### 1.5.2 Documentation

According to Hartono (2011), Documentation means that the data are obtained by collecting the written archives such as books, documents, journals and so on (p. 128). In this research, the data about the students' English achievement were obtained by used list of students' score in 2016/2017 academic year. The score was documented by English teacher in the school that consist of score assessment aspect of knowledge (written test, oral test, and assignments), and score assessment aspects of skills (practice tests, projects, and portfolio). The category of students' score or English achievement based on curriculum (K13) as follows:

Table III. 3
The category of student's English achievement

| The Score Level <br> Scale $\mathbf{1 - 1 0 0}$ | Category | Grade |
| :---: | :---: | :---: |
| $86-100$ | Very Good | A |
| $71-85$ | Good | B |
| $56-70$ | Enough | C |
| $\leq 55$ | Less | D |

### 1.6 Validity and Reliability of the instrument

## 1. Validity

The researcher gave a briefing to the respondents before the questions were answered. There are 44 questions that were adapted from the Big Five Inventory to be questionnaire. The Big Five Inventory is a psychological test that has been the standard of personality test. According to Sugiyono (2009), it does not need to construct a validity test for a standardized instrument (p. 173).

In order to make the instrument understandable, the researcher briefly explained all of the questions until the respondents fully understand.

## 2. Reliability

Reliability has to do with accuracy of measurement. This kind of accuracy was reflected in obtaining the similar results when measurement was repeated on different occasion or with different instruments or by different person. The characteristic of reliability is sometimes termed consistency (Brown, 2003). The reliability test used in this research was internal consistency reliability. According to Creswell (2008), internal consistency reliability is the instrument administered once; using one version of the instrument and each participant in the study completes the instrument. The table below is the categories of reliability test used in determining the level of reliability of the tests.

Table III. 4
The Level of Acceptable Reliability

| No | Reliability | Level of Reliability |
| :---: | :---: | :---: |
| 1 | $>0.90$ | Very High |
| 2 | $0.80-0.90$ | High |
| 3 | $0.70-0.79$ | Reliable |
| 4 | $0.60-0.69$ | Marginally/Minimally |
| 5 | $<0.60$ | Unacceptably Low |

(Cohen, Manion, \&Morrison, 2007)
To obtain the reliability of the questionnaire given, the researcher used SPSS 16.0 program to find out whether the questionnaire was reliable or not. Below is the table of reliability test:

## Table III. 5

Cronbach Alpha
Reliability Statistics

| Cronbach's <br> Alpha | N of Items |
| ---: | ---: |
| .747 | 44 |

From the table above it can be seen that the value of Cronbach's alpha is 0.747 . The value is higher than the standard Cronbach's alpha which is 0.60 . Therefore, it can be concluded the questionnaire is reliable, and the level of reliability is reliable.

### 1.7 The Technique of the Data Analysis

In this research the data were analysed by using the statically analysis formula. The researcher used questionnaire data in variable X . The data were analyse by using formula (Anas Sudijono, 2011, p.43)

$$
\mathrm{P}=\frac{f_{\mathrm{L}}}{N} \times 100 \%
$$

Where:
P = Number of percentage
F = Frequency
$\mathrm{N}=$ Number of sample

To analyse the correlation between student's personality traits and their English achievement, the researcher used Pearson Product Moment Correlation (r) technique by SPSS 16.0 program for Windows. The product moment correlation coefficient was obtained by considering the degree of freedom $(\mathrm{df})=\mathrm{N}-\mathrm{nr}$; $(\mathrm{N}=$ number of sample, $\mathrm{nr}=$ number of variable)

Statistically the Hypotheses are:

$$
\begin{aligned}
& H_{a}: r_{o}>\text { rable } \\
& H_{o}: r_{o} \leq r_{\text {table }}
\end{aligned}
$$

$H_{a}$ is accepted if $r_{o}>r_{\text {table }}$ or there is a significant correlation between the students' personality traits and their English achievement. $H_{o i s}$ accepted if $r_{o} \leq r_{\text {table }}$ or there is no significant correlation between the students' personality traits and their English achievement.

Furthmore, to analyse the correlation between students' personality traits and their English achievement, Pearson Product Moment Correlation by SPSS 16.0 was used. To know the interpretation of correlation coefficient can be seen in the following table:

Table III. 6
Interpretation of Correlation Coefficient

| Interval Coefficient | Correlation Degree |
| :---: | :---: |
| $0.00-0.199$ | Very low |
| $0.20-0.399$ | Low |
| $0.40-0.599$ | Medium |
| $0.60-0.799$ | Strong |
| $0.80-1.000$ | Very Strong |

Adapted by Riduwan (2009, p. 218)

