III. METHOD

This chapter discusses some aspects. They are classified like the following: research design, population and sample, data collecting technique, validity and reliability, scoring criteria, procedure of data collecting technique, advantages and disadvantages, data treatment, data analysis and hypothesis test.

3.1 Design

In this research, the researcher would find out the correlation between watching English movie habit and vocabulary size. This research would take the vocabulary size as the dependent variable and watching English movie habit used by learner as the independent variable. According to Setiyadi (2006), the design of the research was as follows:

\[ T1 \rightarrow T2 \]

Where:

T1 = watching English movie habit

T2 = Vocabulary size
3.2 The Variables

This research consisted of the following variables:

1. The students’ vocabulary size (Y), and

2. Students’ watching English movie habit (X)

3.3 Population and Sample

In this research, the students of Frontrunner Class (senior high school students) of English First (EF) Bandarlampung would be taken by the researcher as the population. There were 30 students from three classes. Three classes namely Frontrunner 8, Frontrunner 3, and Frontrunner 4 of English First (EF) Bandarlampung would be used by the researcher as the subject to collect the data.

3.4 Data Collecting Techniques

In collecting the data, the researcher used:

1. Questionnaire

   After deciding the subject, the researcher would give the questionnaire to the subject. To find out how many students had watching movie habit of the Frontrunner class students of English First (EF) Course. There were 15 questions and the students have to checklist the optional honestly.

2. Vocabulary Size Test

   This step was done after the researcher had given the questionnaire to the subject. The researcher would give vocabulary test to find out their vocabulary size. There were 90-items of vocabulary size test.
3.5 Instruments

This current study would use two instruments, that was, watching movie habit questionnaire and vocabulary size test.

3.5.1. Watching Movie Habit Questionnaire

This watching movie habit questionnaire was used for this research based on Verplanken (2010) about key factor of habit and adapted from related research conducted by Syafi’i (2013). There were 15-items of questionnaire. The researcher chose this questionnaire because this test was suitable with the subjects’ background knowledge, competence level, and learning environment of the researcher’s subject of this study. The questionnaire test was given to the students had been translated into Indonesian in order to facilitate the students in understanding the questionnaire.

This questionnaire had two sections. The first section was designed to know the student’s identity. Data in this section included the respondents’ details about their age, gender, level and class. The respondent in this part must fill their identity honestly. The second section was the questionnaire about students’ watching English movie habit. The 15-item questionnaires were about the frequency of the watching English movie habit implemented by respondent.

After section one, the researcher gave the questionnaire to the sample. The questionnaire items were intended to measure the watching English movie habit preferences. The questionnaire instruments consisted of 15 items, there were 5 questions for each factor (frequency, repetition, and behavior). It was designed specifically based on Verplanken (2010) that tells about key factor of
habit and used by the previous researcher by Syafi’i (2013) (see Appendix 11). In addition, the result of the questionnaire was scored based on Likert Scale. There are two options to answer the question in one item of questionnaire. They are 0 (no), 1 (yes).

3.5.2. Vocabulary Size Test

*Vocabulary Level Test (VLT)* which was originally created by Nation (1983; 1990), revised and expanded by Schmitt, and Clapham (2001) would be used by the researcher. *Receptive Vocabulary Test (RVLT)* would be used in this study. It is considered that VLT was as a ‘nearly’ standard test since there was no truly standard test for vocabulary. This test categorized the knowledge of vocabulary based on the word frequency: 1,000 word level, 2,000 word level, 3,000 word level.

Normally, in curriculum, there was a core, basic competence and goal that defined that in Frontrunner class (senior high school students), the students must achieve 3000 words of vocabulary. It is in line with Senior High School English Curriculum Guidelines (1996) that senior high school students were expected to learn 2,800 words.

The test would be given to the subject of in order to know their vocabulary size. The receptive version of VLT named RVLT is created to measure a controlled receptive vocabulary. The test was a mixed version of the original new version of Vocabulary Size Test designed by Schmitt and Clapham.
The format of the test was like the following example (with the expected answers):

1 birth
2 dust ___5__ permainan
3 operation ___6__ kemenangan
4 row ___1__ dilahirkan
5 sport
6 victory

The test aimed to measure receptive vocabulary size through word recognition. Basically, to measure word knowledge, it includes spelling, word associations, grammatical information and multiple meanings of the target words.

3.6 Validity of the Instrument

Generally, the validity of a test showed how far the test measures what was supposed to be measured (Setiyadi, 2006). Validity could be defined as the degree to which a test actually test what it is intended to test.

3.6.1 The Validity of Watching English Movie Questionnaire

The validity of questionnaire was also measured to find if the components were suitable and related to the relevant theories of watching movie habit based on Verplanken (2010) that told about key factor of habit. Hatch and Farhady (1978) stated that there are at least two validities should be fulfilled namely content and construct validity.
Table. 2

Specification Table of Watching English Movie Habit Questionnaire

<table>
<thead>
<tr>
<th>Aspects of questionnaire</th>
<th>Number of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>1-5</td>
</tr>
<tr>
<td>Repetition</td>
<td>6-10</td>
</tr>
<tr>
<td>Behavior</td>
<td>11-15</td>
</tr>
</tbody>
</table>

From the table above can be seen that the watching habit as measured based on the factors of habit, that all of aspects of habit have been included in the questionnaire. Thus, it is considered that the construct validity of the questionnaire has been standardized.

3.6.2 The Validity of Vocabulary Size Test

Validity is a matter of relevance. It can be said that validity is the test measures what is claimed to measure. To measure whether or not, the test is good. It can be analyzed from its content validity and construct validity. The construct validity of VLT was analyzed by Schmitt (1997) and Clapham (2001) (RVLT) Laufer and Nation’s (PVLT).

The analysis of validity by using Pearson Product Moment formula showed that all items in the questionnaire of watching English movie habit were valid (Appendix 3). The $r$ values of the 15 statements were above the $r$ table (2,048). Therefore, the questionnaire was used completely as what has originally been conducted from the previous research (Syafi’i, 2013).
3.7 The Reliability of the Instruments

To estimate the reliability of the test, the researcher used the split half technique. Split half technique that uses one achievement test and test once. There are several steps of this technique. This achievement test is equally separated into two parts, first half and second half. Those data are calculated firstly by using Pearson Product Moment correlation formula. It is used to analyze the odd number (X) and the even number (Y) of the test items. Then, the correlation coefficient from calculation is calculated by using Spearmen-Brown formula. To know the coefficient of correlation of a half of the test items, the researcher use Product Moment formula as follows:

\[ r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2] \cdot [N \sum Y^2 - (\sum Y)^2]}} \]

In which,

\[ r_{xy} \]: the correlation of the score from one half of the test with those from the other half

\[ X \]: the odd-numbered items (variable)

\[ Y \]: the even-numbered items (variable)

\[ N \]: total number of the students

After that, the correlation coefficient is interpreted to find out its strength to follow (Arikunto, 2003).
The interpretation is presented as follow:

-0.80-1.00  : very strong
-0.60-0.80  : strong
-0.40-0.60  : moderate
-0.20-0.40  : weak
-0.0-0.20   : very weak

Then, to know the coefficient of correlation of the whole test items, the researcher used Spearman-Brown formula as follow:

\[ r_{11} = \frac{2}{(1 + \frac{11}{2})} \times r_{\frac{11}{2}} \]

In which,

\( r_{11} \): reliability of instrument (the whole test items)

\( r_{\frac{11}{2}} \): reliability of a half of the whole test items

If the coefficient of correlation is higher than the value of Product Moment (r) table, it can be said that the instrument is reliable (Arikunto, 1993).

### 3.8 Scoring System of Measuring Vocabulary Size

Since the purpose of the test is to measure learners’ vocabulary size, the scoring is based on correct response; one correct answer was scored 1; one wrong answer was scored 0. As already explained, the learners’ vocabulary size is obtained by counting the number of correct answers to be divided by the number of items (sample) in every vocabulary level test.
### Table. 3

**Scoring System of Measuring Vocabulary Size**

<table>
<thead>
<tr>
<th>Words Level</th>
<th>Scoring System</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; 1000 words level</td>
<td>$S_1 = \frac{r}{n} \times 1000$</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; 1000 words level</td>
<td>$S_2 = \frac{r}{n} \times 1000$</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; 1000 words level</td>
<td>$S_3 = \frac{r}{n} \times 1000$</td>
</tr>
</tbody>
</table>

Where:

- $S_1; S_2; S_3$ = the total words that students mastered in each level
- $r$ = the total of the right answer
- $n$ = the total of test items in each level

Total words that students mastered,

$$W = S_1 + S_2 + S_3$$

Where:

- $W$ = the total words that students mastered in vocabulary size test
- $S_1$ = the total words that students mastered in 1<sup>st</sup> 1000 words level
- $S_2$ = the total words that students mastered in 2<sup>nd</sup> 1000 words level
- $S_3$ = the total words that students mastered in 3<sup>rd</sup> 1000 words level
In scoring students’ result of the test, Percentage Score was used. The ideal highest score was 100. The score of vocabulary size calculated by using as follow:

\[
S = \frac{r}{n} \times 100
\]

Where:

S = the score of the test

r = the total of the right answer

n = the total of test items

3.9 Research Procedures

To conduct the research, the researcher would use some procedures. It started from determining the research problem to making a report and discussion of findings. The procedures of the research were as follows:

1. Determining Research Problem

   The research determines the research question of this research. There was one research problems in this research, whether was there any correlation between watching English movie habit and vocabulary size.

2. Determining Population and Sample

   The population of the research would be the students of Frontrunner class of English First (EF) Bandarlampung. There were 30 students in that class. The subjects’ age ranged between 16 and 18 years of age. There were more female than male subjects.
3. **Preparing the Instrument**

After decided the sample, the researcher gave two test of this research. First one was students’ watching English movie habit questionnaire (SWEMQ) and the last was vocabulary size test.

4. **Administering Questionnaire**

Participants would be asked to answer the SWEMQ. The respondent filled the questionnaire honestly based on what they fell. The researcher would give the learners time to fill the questionnaire about 15 minutes.

5. **Administering Vocabulary Size Test**

Afterwards, participants would be given vocabulary size test. The participant had to do the test honestly. This test would be given after the subject doing the questionnaire. The researcher would give 60 minutes for the test.

6. **Analysing the Data**

The researcher would analyse the result of SWEMQ and their vocabulary size using Correlation in SPSS (Statistical Program for Social Science). The researcher would see whether there was correlation between watching English movie habit and vocabulary size among foreign language learners.

7. **Making a Report and Discussion of Findings**

After having all of the data, the researcher would make a report and discussion on finding the relationship between watching English movie habit and vocabulary size.
3.10 Data Analysis

The researcher made steps after conducting a research by using tests, the researcher would analyze the data by using Correlation in SPSS (Statistical Program for Social Science. The result of the test would be in form of score or interval data. After getting the result, the researcher analyzed the correlation between students’ watching English movie habit and their vocabulary size.

3.11 Hypothesis Testing

After finding the coefficient correlation between students’ watching English movie habit and vocabulary size, the researcher used the criterion of hypothesis acceptance. The researcher proposed the hypothesis as follows:

\[ H_0=r_{\text{value}} < r_{\text{table}} \]

- There was no significant correlation between students’ watching English movie habit and vocabulary size among English foreign language learners. We can accept this hypothesis if \( r_{\text{value}} \) is lower than \( r_{\text{table}} \).

\[ H_1=r_{\text{value}}>r_{\text{table}} \]

- There was a correlation between students’ watching English movie habit and vocabulary size among English foreign language learners. We could accept this hypothesis if \( r_{\text{value}} \) is higher than \( r_{\text{table}} \).