Chapter Three

Methodology

This chapter presents the methodology used in this study. In this chapter, it includes the research design, research setting and population and sample. The instrument of the study and data collection procedure are presented in the data collection method as well. The last part of this chapter deals with data analysis. Several theories are also included in this chapter to support the research methodology.

Research Design

This study used quantitative research approach and the purpose of this study was to find out the correlation between reading English novel habit and English sentence structure mastery of ELED students of a private university in Yogyakarta batch 2015. This study provided two variables, and those were reading English novel habit as the first variable and English sentence structure mastery as the second variable. Then, this research adopted correlational research design. As mentioned by Creswell (2012), the purpose of using correlational research design is to know and apply statistical knowledge based on calculating of correlation statistical test. Hence, this research design was appropriate to see two variables which have correlation each other or not.

Setting of the Research

The researcher collected the data at ELED of a private university in Yogyakarta. There were two reasons why this research was conducted at ELED of a private university in Yogyakarta. For the first reason, some ELED teachers of a private university in Yogyakarta used novel as a teaching material, so the students were formed to have good habit to read novel. The

second reason was that the researcher had an access to gather the data to this private university. This research conducted in July 2018.

Population and Sample

The respondents of this research were ELED students of a private university in Yogyakarta batch 2015. There were two reasons of choosing ELED students batch 2015 as the respondents. The first reason was because there was possibility for the students of ELED to have reading habit especially in reading English novel which had been formed for six semesters. The second reason was because the students of ELED batch 2015 had followed some subjects which the teachers used novel as teaching material. The number of population of this research were 118 students. Creswell (2012) stated that population is a group of individuals who have the same characteristics in conducting the research.

Additionally, the researcher chose the respondents who were accessible and available at that time. The researcher used convenience random sampling to conduct this research. Cohen, Manion, and Morrison (2011) mentioned that convenience sampling is sometimes called accidental or opportunity sampling which involves to choose the nearest individuals to serve as respondents and continuing process. Then, the required sample was obtained from those who happend to be available and accessible at the time. Likewise, there were 91 respondents of batch 2015 from three classes who became sample of this research. Cohen et al. (2011) asserted that if the population of this research was 118 with the confidence level of 95 % and convidence interval of 5 %, the total number of the sample would be 91.

Data Collection Method

The researcher used questionnaire as the method to collect the data. The detailed explanation of the research instrument and the data collection procedure are presented in the following paragraphs.

Instrument of the Research. The researcher used questionnaire as the instrument. Questionnaire is an instrument in collecting the data and it is used for gathering the information from respondents (Abawi, 2013). This study used closed-ended question since the researcher wanted to give direct answer representing the respondents' opinion. As mentioned by Wilson and McLean (1994), closed-ended question is really fast and easy to complete and code the data especially in computer analysis. Also, it does not really discriminate on the basic of how the opinions of the respondents are.

The researcher used questionnaire to measure the reading English novel habit of ELED students at a private University of Yogyakarta. Then, the researcher modified the questionnaire from Gaona (2010) which consists of seventeen items. Moreover, the questionnaire items used Indonesian language in order to ease the respondents in understanding the questionnaire items , so they did not have difficulties in answering the questionnaire.

The researcher utilized Likert scale in the questionnaire. Sugiyono (2009) explained that Likert scale is the scale used to measure attitude, opinion and perception of someone, and group of social phenomenon. In this scale, the respondents should state their agreement and disagreement. Therefore, the researcher decided to use 1-4 scale. The scale is displayed in the following table.

Table 1

Response's Scales of Questionnaire Score Alternative Answer

Scale	Score
Sangat Setuju / Strongly Agree	4
Setuju / Agree	3
Tidak Setuju / Disagree	2
Sangat Tidak Setuju / Strongly Disagree	1

Additionally, to gather the data of the students' English sentence structure mastery, the research used a document of English Proficiency Test score especially number 1-15 in section two as the instrument to know the students' English sentence structure mastery. The number 1-15 in section two was appropriate because the questions were aimed to assess English sentence structure. The researcher asked the document of English Prficiency Test score from the teacher who taught International Language Testing (ILT) at ELED of a private university in Yogyakarta.

Validity of the Instrument. Crocker and Algina (2006) mentioned that two major questions have to be answered when discussing the validity of instruments. Crocker and Algina (2006) also mentioned for the first instrument of validity, it included about "(1) is the scale measuring the construct intending to be measured?" For the second instrument validity, it provides the question about "(2) is there sufficient evidence to support the intended uses or interpretations of the test?". To measure the validity of the instrument, the researcher asked two experts from ELED teachers who are expert in this research topic to check the items.

The researcher used construct validity and instrument piloting to check whether the instrument can be used to measure reading English novel habit or not. Sugiyono (2013) stated

that the criteria are used to know the valid or not valid statement is if $r_{xy} \geq 0,30$ is valid and $r_{xy} \leq 0,30$ is not valid. The result from piloting the validity of instrument is as follow below:

Table 2			
The Validity of Questionnaire			
No.	R count	r table	Information
1	0,572	0,3	Valid
2	0,610	0,3	Valid
3	0,369	0,3	Valid
4	0,448	0,3	Valid
5	0,306	0,3	Valid
6	0,586	0,3	Valid
7	0,602	0,3	Valid
8	0,306	0,3	Valid
9	0,405	0,3	Valid
10	0,447	0,3	Valid
11	0,679	0,3	Valid
12	0,602	0,3	Valid
13	0,306	0,3	Valid
14	0,448	0,3	Valid
15	0,488	0,3	Valid
16	0,405	0,3	Valid
17	0,679	0,3	Valid

Reliability of the Instrument

According to Joppe (2000), in reliability of instrument, the extent to which results are consistent overtime, and an accurate represe notion of the total population under study is referred as reliability. Besides, if the results of a study could be reproduced under a similar methodology, the research instrument was considered to be reliable. Creswell (2012) also mentioned that

reliable data is individual's scores from an instrument which should be near same or stable on the

the administration instrument. Also, the statements should be free from sources of measurement

error and consistent. Then, the researcher used Cronbach's alpha to measure the reliability. As

mentioned by Creswell (2012), Cronbach's alpha is a measure of specific internal consitency.

Additionally, this study used statistical tools version 2.0 to check wether the questionnaire items

was reliable or not reliable. Therefore, Cronbach's Alpha was used to show the criteria of

reliability of questionnaire's items. Sakaran (2000) divided the reliability indicator into three

levels. The table of the indicator of reliability showed as the following:

Table 3

Criteria of Reliability of Cronbach's Alpha

Cronbach's Alpha	Criteria
0,8 – 1,0	Good
0,6 – 0,799	Moderate
<0,6	Not Good

The result of the reliability instrument using Cronbach's Alpha is 0.734 as shown in the table below:

Table 4.		
The Table of Reliability		
Cronbachs' Alpha	Cronbachs' Alpha Based on Standardized Items	N of Items
.734	.846	17

Based on reliability indicator from Sakaran (2000), the value 0.734 is in the moderate category. The mean of good or moderate category includes in the reliable value. Therefore, the questionnaire could be used to conduct this study.

Data Collection Procedure

There were two variables included in this study. For the first variable, the researcher did some steps in collecting the data. Firstly, the researcher distributed the questionnaires using google form. In the google form, the questionnaire included a permission to the respondents to fill the questionnaire, the statement of the questionnaire, and thanking to the respondents from the researcher. Secondly, to distribute the questionnaire, the researcher contacted some respondents that the researcher knew. Then, the researcher shared the link and asked them to help the rsearcher to also share the link to other respondents from four classes batch 2015. Thirdly, the researcher analyzed the results as soon the data had been gathered. Additionally, for

the second variable, the researcher contacted the teacher who taught International Language

Testing (ILT) class to ask a document of students' English proficiency test score.

Data Analysis

This study utilized descriptive correlation method to analyze the data. The research

method answered the independent variable about reading English novel habit using the

questionnaire. Besides, the dependent variable was English sentence structure mastery measured

by using a document of students' English proficiency test score in grammar and structure

section.

Moreover, this study used statistic tool to analyze the data. Besides, the scores of English

sentence structure mastery in grammar mastery were categorized by using interval formula to

devide the range of category. Thus, the range of category by interval formula were mentioned as

follow.

$$c : \frac{X_n - X_1}{K}$$

c : the range prediction (class width, class size, class length)

k : the number of class that research wants

X_n : the maximum score of variable

X_1 : the minimum score of variable

(Supranto, 2000)

Table 5	
The Category of Reading Habit	
Scale	Category
17.00-34.00	Low

34.01-51.00	Moderate
51.01-68.00	High

The number of the table displayed was calculated based on the data. There were 17 question items and 4 scales in the questionnaire. The low value was 17 from amount of the question items. Furthermore, for high value the researcher provided 17 multiplication question items with 4 scales, so the total number for high value was 68. Additionally, for the moderate value, the researcher took in the middle of the number among low value and high value.

Table 6	
The Category of English Sentence Structure	
Scale	Category
0.00-5.00	Low
06.00-10.00	Moderate
11.00-15.00	High

In addition, to know the correlation between two variables, this research adopted Pearson Product Moment correlation using statistic tool 22.0 version. Besides, Sugiyono (2003) asserted that there are five criteria of correlation. The following table is the table of correlation criteria value.

Table 7

Table of The Correlation Criteria Value

Interval of coefficient	The Level of Correlation
0.00 - 0.199	Very Low
0.20 - 0.399	Low
0.40 - 0.599	Moderate
0.60 - 0.799	Strong
0.80 - 1.000	Very strong