

## **Chapter Four**

### **Findings and Discussions**

In this chapter, the researcher discusses findings of each research questions. The researcher gives an explanation based on the finding of three research questions. Actually, the finding of this research is presented in statistical form.

#### **Findings**

In this part, the researcher explains the findings of each research question. The first research question is “How is the linguistic intelligence of university students in Yogyakarta?”. The second research question is “how is student writing skill of university students in Yogyakarta?”. And the last research question is about “What is the correlation between students’ linguistic intelligence and their writing skill of university students in Yogyakarta?”. Therefore, the results are presented in this following below.

#### **Finding 1. The linguistic intelligence of university students in Yogyakarta.**

The first research question aims to know the linguistic intelligence of university students in Yogyakarta. There are 18 items of questionnaire distributed to ELED students’ batch 2017. The questionnaire was used to investigate the frequency of students’ linguistic intelligence.

The researcher used class interval to determine the categories of linguistic intelligence based on the result of questionnaire (see table 3.4). Then,

after analyzing questioner items, the researcher found that the mean of linguistic intelligence questionnaire is 56.0927. The researcher used SPSS software application to analyze the data of linguistic intelligence questionnaire. Through SPSS program, the research could reveal the finding of linguistic intelligence of university students in Yogyakarta batch 2017. The results are presented below:

### Descriptive Statistics

	N	Sum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic
Q1	151	403	2.67	0.650
Q2	151	475	3.15	0.761
Q3	151	438	2.90	0.772
Q4	151	450	2.98	0.812
Q5	151	459	3.04	0.756
Q6	151	500	3.31	0.602
Q7	151	449	2.97	0.808
Q8	151	514	3.40	0.506
Q9	151	421	2.79	0.639
Q10	151	489	3.24	0.660
Q11	151	520	3.44	0.718
Q12	151	483	3.20	0.740
Q13	151	399	2.64	0.926
Q14	151	433	2.87	0.806
Q15	151	538	3.56	0.536

Q16	151	554	3.67	0.472
Q17	151	523	3.46	0.513
Q18	151	422	2.79	0.724
TOTAL	151	8470.00	56.0927	5.37445
Valid N (listwise)	151			

Table 4.1. *The result mean score of linguistic intelligence questionnaire*

Based on the table above, the researcher found that the mean score is 56.0927. Then, the mean score of linguistic intelligence questionnaire is divided by the total of questionnaire items to find out the category of students' linguistic intelligence. It means that  $56.0927/18 = 3.1$ . The result is 3.1 which is based on the interval categories (table 3.4) included in high category of linguistic intelligence. Hence, the research question of "how is the linguistic intelligence of university students in Yogyakarta?" was answered. The results show that ELED students' batch 2017 has high linguistic intelligence.

Interval	Categories	Frequency
3.1 – 4	High	77
2.1 – 3	Intermediate	74
1 – 2	Low	0
TOTAL		151

Table 4.2. *frequency of students' linguistic intelligence*

As seen in the table above, there were 151 students filling in linguistic questionnaire on Google form. Based on the results of questionnaire, the category was divided into three categories which are high, intermediate, and low. Then, the researcher found out that 77 students had high level of linguistic intelligence, while the rest of 74 students had intermediate linguistic intelligence level. Therefore, most of ELED students' batch 2017 were in high linguistic intelligence level.

### **Finding 2. Students' writing skill of university students in Yogyakarta.**

The second research question were investigated is about "How is students' writing skill of university students in Yogyakarta?". The data was taken from writing score on Interpretive Reading and Argumentative Writing subject of ELED students' batch 2017. Actually, the data took from individual assignment with 20% maximum grade. The researcher believed that individual assignment of this subject will shows students' writing skill accurately.

Based on Supranto (2000), the formula that was written in chapter three, there was an interval category of students writing skill (see table 3.6). Then, the researcher used SPSS software application to find out the mean of ELED students' writing score. Based on the result, there were minimum score is 9.00 and maximum score is 20.00.

### Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic
WRITINGSORE	151	9.00	20.00	2335.50	15.4669	2.28414
Valid N (listwise)	151					

Table 4.3. *The mean score of students writing score*

As seen in the table above, the mean score of students writing score is 15.4669. It means that based on the interval categories (see table 3.6), and the level of students writing skill is in high category. Thus, the second research question was answered. The results show that ELED students' batch 2017 had high writing skill.

To know the level of students writing skill, the researcher provides a table which is presented below:

Interval	Categories	Frequency
13 – 20	Advanced	16
6.5 – 12.9	Intermediate	135
1 – 6.4	Low	0
		151

Table 4.4. *The frequency of students writing skill categories*

The table 4.4 indicates that there were 16 students are advanced writing skill. In addition, 135 students are intermediate writing level. Finally, it can be said that ELED students' batch 2017 are has intermediate writing skill. However, the results show that the mean score on table 4.3 is in advanced level.

**Finding 3. The correlation between students' linguistic intelligence and their writing skill of university students in Yogyakarta.**

In order to investigate the correlation between students' linguistic intelligence and their writing skill, the researcher used data analysis of Pearson product moment correlation. Therefore, normality test must be done before examining correlational test. Normality test was used to check whether the data is normally distributed or not.

**Normality test.** This study used P-P plot in an SPSS application program. In the P-P plot, the data is normal if the data are closed to each other. The result of normality test is presented below:

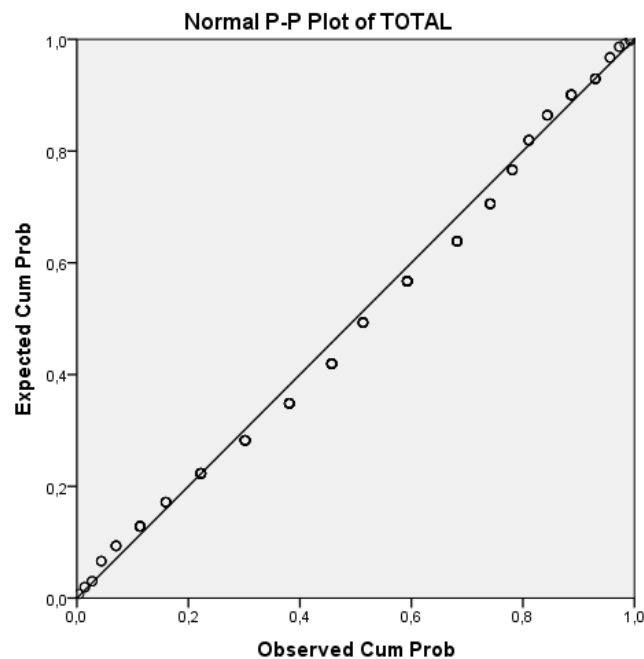


Figure 4.5. *The result of normality test using P-P Plot*

Besides, there is another way to check normality test which is by using skewness. In a skewness theory, the data called as normal if the graphic is -1 until

+1. Based on the table below, the data is normal because the questionnaire items are between -1 until +1. Thus, it implies that the data was normally distributed.

Skewness	
Statistic	Std. Error
.012	.197
-.620	.197
-.266	.197
-.342	.197
-.160	.197
-.258	.197
-.182	.197
.238	.197
.061	.197
-.583	.197
-1.116	.197
-.636	.197
.110	.197
-.064	.197
-.911	.197
-.725	.197
-.002	.197

.227	.197
.409	.197

Table 4.6. *The result of skewness data of normality test.*

After doing normality test, the researcher analyzed correlational test.

The result of correlational test is presented below:

### Correlations

		<b>Linguistic Intelligence</b>	<b>Writing Score</b>
<b>Linguistic Intelligence</b>	Pearson Correlation	1	0.107
	Sig. (2-tailed)		0.193
	N	151	151
<b>Writing Score</b>	Pearson Correlation	0.107	1
	Sig. (2-tailed)	0.193	
	N	151	151

Table 4.7. *Correlation result between two variables.*

After calculating the result of students' linguistic intelligence and students' writing skill, the researcher investigated the value of significant (2-tailed). Based on the table above, the researcher found that sig. (2-tailed) of this research was 0.193. The results show that the sig. (2-tailed) value is higher than 0.05 ( $0.193 > 0.05$ ). Actually, the sig. value should be  $<0.05$  which indicates that



there is a correlation between the two variables. However, the value is 0.193 revealing that there is no significant correlation between both variables.

According to Sugiyono (2011), the score between 0.00 – 0.199 indicates that there is very low-level correlation. It means that the value between students' linguistic intelligence and students' writing skill indicate positive correlation. Based on the table 3.7 in chapter three, the value of sig. (2-tailed) in this study was obtained in range of <0.20-0.35 which is included on very weak correlation. Therefore, the alternative hypothesis of this study is rejected because the sig. (2-tailed) value was more than 0.05.

## **Discussions**

On this part, the researcher describes the result of each questions. The first research question aims to measure students' linguistic intelligence of university level in Yogyakarta. The second research question is to reveal students' writing skill of university level in Yogyakarta. Then the last research question aims to investigate the correlation between linguistic intelligence and writing skill of university students in Yogyakarta. The discussion is presented below:

**Students linguistic intelligence.** As mentioned before that the first research question aims to measure students' linguistic intelligence of university level in Yogyakarta. The researcher distributed 18 items of linguistic intelligence questionnaire to 151 students of ELED batch 2017. The respondents filled in the questionnaire by entering a link in Google form. The questionnaire was analyzed by statistical application. Through using Statistical application program, the researcher found the mean score of students' linguistic intelligence. It showed that

the mean score is 56.0927. Then, the researcher checked the table 3.4 to know the level of students' linguistic intelligence. The result of students' linguistic intelligence is in high category. In conclusion. ELED students as language learner have high linguistic intelligence level.

Additionally, ELED students are language learners learning English as foreign language. Linguistic intelligence is an intelligence of person to organize a word and use it precisely in a certain goal. Samiyan (2013) stated that linguistic intelligence includes an ability to express language effectively and awareness of language as a means to remember information. Based on the result above, ELED students have highly linguistic intelligence. Thus, it could be revealed that students are able to prove their ability in understanding the use of foreign language.

**Students Writing Skill.** To determine the level of students' writing skill, the researcher used interval categories. The categories are divided into three levels which are low, intermediate, and advance. There were 151 students joining the Interpretive Reading and Argumentative Writing subject. The researcher already asked permission to the lecturer to use 151 students' writing score as a data collection of this study. The researcher also used statistical application program to process the data of students writing score. Based on the result of this study, the researcher found that writing skill of ELED students' batch 2017 called is in advance category. It is because the mean score of students writing value is 15.4669. It means that ELED students are able to perform their writing skill very well.

Even though writing skill is the most challenges skill for language learner, but this research revealed ELED have good writing skill. Furthermore, the students have advance writing skill because most of them often practice in academic learning process. The other factor is ELED students as non-native speaker are learning English as foreign language so they all have lot of inputs on English written technique. Besides, the lecturers of ELED often give an understandable feedback of students' writing assignment. According to Nguyen (2018), teachers' feedback was reported to bring advantages and remarkable reduction over students writing error.

**The correlation between linguistic intelligence and writing skill.** The third research questions were aimed to reveal the correlation of both two variables of this study. The first variable that researcher used was students' linguistic intelligence. In this way, the researcher gathered the data from a result of linguistic questionnaires and process it through statistical application program. Then, the other variable that researcher used was students' writing score. Besides, the researcher did normality test to check whether both of the data were normally distributed or not. The researcher used two ways to check the normality. The researcher assumed that using two different ways in checking normality test helped the researcher to get accurate results of the normality data. Firstly, the researcher was chosen to used P-P plot in software application of statistic. Based on the figure 4.5, the result shows that the data is closed each other in one line. It means that the data of this study was called normal. Besides, the other way the researcher used skewness theory. Based on the table 4.6, the researcher found that the data is normal because the all items in the graphic are between -1 until +1.

Based on the table 4.7, V1 and V2 have high value equally, so it means that there is positive correlation between two variables. Pearson correlation of linguistic intelligence is 0.107 and sig. (2-tailed) is 0.193. According to the table 4.7, the researcher found out that there is positive correlation.

The results showed that there are high category of both students' linguistic intelligence and writing skill, but the correlation of both variables was in very weak category. It is different from the result of Lunenburg and Lunenburg study. Lunenburg and Lunenburg (2014) said that people with high linguistic intelligence could be poets, author, orator, speaker or any profession that supported their language skills. So, there is strong correlation between people who have linguistic intelligence and people who have good writing skill. This is the opposite of this research that there is different result of correlation level on linguistic intelligence and writing skill. Besides, Hali (2014) supported that people with linguistic intelligence will have a profession such as lawyer, writer, broadcaster, editor, or teacher. So, the researcher assumed that people with high linguistic intelligence and high writing skill level will got advantages to be able to work as author, orator, poets and another appropriate job.

Therefore, the alternative hypothesis of this study is accepted. It means that even though there is very weak correlation of both variables, students with linguistic intelligence does affect their skill on English written form. Then, it will good for ELED students to get a job that supporting their language skills on linguistic intelligence. Additionally, ELED students have good linguistic intelligence, but there is very weak correlation between linguistic intelligence and students writing skill.