#### **CHAPTER IV**

#### FINDINGS AND DISCUSSION

#### A. Findings

In this section the writer will explain the correlation of students' Indonesian language mastery and English academic writing of the sixth semester of English Department at UIN Antasari Banjarmasin, Tarbiyah and Teachers Trining Faculty, Academic year 2016/2017.

The data are about the students' Indonesian mastery and English academic writing. Then, the writer will describe the correlation between them. Variable X (Indonesian language mastery) and variable Y (English Academic writing) were acquired from Indonesian and English essay tests, the writer conducted the test four times from A, B, C, and D classes which lasted 2 hours each class.

After that, the writer does normality and linearity test, classifies students' Indonesian mastery and English Academic writing before analyzing the correlation between students' Indonesian mastery and student's English Academic writing, the data have been obtained are classified based on the thesis statements. Before being analyzed, the data are presented in the description as follows:

#### 1. Students' Indonesian mastery

These data about student's Indonesian mastery (variable x) were acquired from Indonesian language written test. The rubric of scoring is adapted from Burhan Nurgiyantoro. The result of Indonesian language written test is shown in the table as follows:

**Table 4.1 Indonesian Language Mastery** 

Student's Code Number	Student's Indonesian Mastery
1	70
2	71
3	85
4	84
5	69
6	79
7	71
8	71
9	60
10	80
11	92
12	84
13	46
14	86
15	62
16	73
17	82
18	73
19	85
20	77
21	91
22	70
23	65
24	62
25	68
26	86
27	61
28	91
29	89
N= 29	$\Sigma Y = 2183$

**Table 4.2 Classification of Students' Indonesian Writing** 

Score	Frequency	Percentage	Category
80- 100	12 students	41, 38%	Excellent
70- <80	9 students	31,03%	Good
60- < 70	7 students	24,14 %	Fair
50-<60	-	-	-
40- < 50	1 student	3,449 %	Very low
Total	29 students	100%	

The table above shows student's achievement in Indonesian mastery. There are 41,38% who are in the excellent level. 31, 03 % are in the good level. Then, 24, 14% in the fair level and 3, 449 % in very low level. The higher score is 92 and the lowest score is 46.

To know the students' Indonesia mastery, the writer applies 'mean' statistical below:

$$M_{x} = \frac{\sum x}{N}$$

$$= \frac{2183}{29}$$

$$= 75, 27$$

Based on the result of applied formula above, the total score is 2183 of 29 students, and the mean score is 75, 27 shows that the students' Indonesian mastery is good.

#### 2. Students' English Academic Writing

The data about students' achievement in English Academic Writing (variable Y) was acquired from English written test. The rubric of scoring is adapted from Brown and Bailey. The result of English Academic written test is shown in the table as follows:

**Table 4.3 English Academic Writing** 

Student's Code Number	Student's English Academic Writing
1	60
2	63
3	70
4	79
5	67

6	77
7	67
8	75
9	57
10	61
11	77
12	75
13	54
14	75
15	60
16	60
17	76
18	70
19	80
20	60
21	70
22	67
23	70
24	60
25	55
26	75
27	61
28	75
29	78
N= 29	$\Sigma X = 1,974$

Table 4.4 Classification of students' English Academic Writing

Score	Frequency	Percentage	Category
80- 100	1 students	3,449%	Excellent
70- <80	14 students	48,28%	Good
60- < 70	11 students	37,93 %	Fair
50-<60	3 students	10, 34%	Low
40-<50	-	-	-
Total	29 students	100%	

The table above shows student's achievement in English Academic writing. There are 3,449% who are in the excellent level. 48, 28 % are in the good level. 37, 93 % are in the fair level and 10, 34 % in low level. The highest score is 80 and the lowest score is 54.

To know the students' achievement in Academic writing, the writer applies 'mean' statistical below:

$$M_{y} = \frac{\sum y}{N}$$

$$= \frac{1,974}{29}$$

$$= 68,07$$

Based on the result of applied formula above, the total score is 1974 of 29 students, and the mean score is 68, 07. It shows that the student achievement in Academic writing is sufficient.

3. The analysis of correlation between Indonesian Mastery and English Academic Writing in the sixth semester students of English Department at UIN Antasari Banjarmasin Academic Year 2016/2017.

First, the writer does prerequisite test (normality test and linearity test) by using SPSS 22. They are used to measure wheather the variable X and variable Y are in normal and linear level. Then the results of normality and linearity test as follow:

Table 4.5 Result of Normality Test

Variable	Significance	Criteria
X	0,200	Normal
Y	0,11	Normal

Based on the normality test, it presents that the value of variable X (0,200) and variable Y (0, 11) are higher than 0, 05. Furthermore, it can be concluded that the data is normal. After that, the writer does the linearity test as follow:

Table 4.6 Result of Linearity Test

Variable	Significance	Criteria
X*Y	0,914	Linear

The result of linearity test above presents that the significant linear correlation between Indonesian language mastery and English Academic writing are 0, 914 higher than 0, 05. It can be concluded that variable X and variable Y are linear.

After measuring the normality and linearity, the next step in this research is finding the XY,  $X^2$  and  $Y^2$  of the data. The writer makes distribution table of Indonesian Language mastery and English Academic writing as follow:

**Table 4.7 Distribution Table of Data Analysis** 

Subje	X	Y	XY	$X^2$	$Y^2$
ct					
1	70	60	4,200	4,900	3,600
2	71	63	4,473	5,041	3,969
3	85	70	5,950	7,225	4,900
4	84	79	6,636	7,056	6,241
5	69	67	4,623	4,761	4,489
6	79	77	6,083	6,241	5,929
7	71	67	4,083	5,041	4,489
8	71	75	4,7575	5,041	5,625
9	60	57	5,325	3,600	3,249
10	80	61	3,420	6,400	3,721
11	92	77	7,084	8,464	5,929
12	84	75	6,300	7,0562	5625
13	56	54	2,484	2,116	2,916
14	86	75	6,450	7,396	5,625
15	62	60	3,720	3,844	3,600
16	73	60	4,380	5,329	3,600
17	82	76	6,232	6,724	5,776
18	73	70	5,110	5,329	4,900
19	85	80	6,800	7,225	6,400
20	77	60	4,620	5,925	3,600
21	91	70	6,370	8,281	4,900

22	70	67	4,690	4,900	4,489
23	65	70	4,550	4,225	4,900
24	62	60	3,720	3,844	3,600
25	68	55	3,740	4,624	3,025
26	86	75	6,450	7,396	5625
27	61	61	3,721	3,721	3721
28	91	75	6,825	8,281	5625
29	89	78	6,942	7,921	6084
N= 29	$\Sigma X = 2183$	$\Sigma Y = 1974$	$\sum XY =$	$\sum XY^2 =$	$\sum y^2 =$
			150,535	167,911	136,152

After that, the writer analyzes the data by using Pearson Product moment correlation form. The formula is:

$$r_{xy} = \frac{n(\sum xy) - (\sum x) \cdot (\sum y)}{\sqrt{\left\{n \cdot \sum x^2 - (\sum x)^2\right\} \cdot \left\{n \cdot \sum y^2 - (\sum y)^2\right\}}}$$

#### Where:

 $r_{xy}$ : coefficient of correlation between X variable and Y variable

 $\sum X$  : sum of score in X distribution

 $\sum Y$ : sum of score in Y distribution

 $\sum XY$ : sum of multiplication of X and Y

 $\sum X^2$  sum of X quadrate

 $\sum Y^2$  : sum of Y quadrate

$$\frac{29 (150,535) - (2183x 1974)}{= \sqrt{29 (167,911) - (2183)^2} - \{29 (136,152) - (1974)^2\}}$$
$$= \frac{4,365,515 - 4,309,242}{\sqrt{(4,869,419 - 4765,489) (3,948,408 - 3,896,676)}}$$

$$=\frac{56,\!273}{\sqrt{(103,\!930)}(51,\!732)}$$

$$=\frac{56,273}{\sqrt{5,376,506,760}}$$

$$=\frac{56,273}{73,324,666790923}$$

**= 0,767** 

After finding the result of the calculation by using correlation formula, the writer re- calculates the data by using SPSS (Statistical Package for Social Science) in order to confirm the calculation result, and the result is 0,767. The result from the SPSS is seen in the following table:

Table 4.8 Correlation between X and Y variables

Correlations				
		Indonesian Mastery	English Academic Writing	
Indonesian Mastery	Pearson Correlation	1	,767**	
	Sig. (2-tailed) N	29	,000 29	
English Academic Writing	Pearson Correlation	,767**	1	
	Sig. (2-tailed)	,000		
	N	29	29	
**. Correlation is significant at the 0.01 level (2-tailed).				

Based on the result of the calculation above, it is know that  $r_{xy}$  is 0,767. To test the hypothesis of the research there are two steps, it can be known whether there is a significant correlation or not.

Firstly, the writer consulted to the table of product moment. More detail about table of product moment can be seen in appendix. Then, the writer found out that the "r' value for N=29 is 0,367 for 5% significance degree and 0,470 for 1% significance degree. It is clear that  $r_{xy}$ ,  $r_t$ 

$$r_{xy} = 0.767$$
  
 $r_t = 0.367 \& 0.470$ 

 $r_{xy} > rt$ 

It means that null hypothesis (H0) is denied and alternative hypothesis (Ha) is accepted. It means that there is a significant correlation between Indonesian language mastery and English Academic writing.

Secondly, in order to confirm the first step, the writer consulted to the table standard classification of correlation degree from Anas Sudjono below:

**Table 4.9 Interpretation of Correlation** 

The value of "r"	Interpretation		
Correlation			
Coefficient (r <sub>xy</sub> )			
0.00, 0.20	<b>X</b> 7 1	1	TT1 1 1 1 1
0,00- 0,20	Very low		There is a correlation between
			variable X and variable Y but
			the correlation is so very low
			that the correlation is
			disregarded, or in other words,
			there is no correlation between
			variable X and variable Y.
0,20- 0,40	Low		There is a low correlation
			between variable X and
			variable Y.

0,40- 0,70	Sufficient	There is a fair or strong enough correlation between variable X and variable Y.
0,70- 0,90	High	There is a strong correlation between variable X and variable Y.
0,90- 1,00	Very high	There is a very strong correlation between variable X and variable Y.

From the table above, it is seen that rxy 0,767 means that the correlation between variable X and Y in this research is high level. It means that there is a strong correlation between variable X and variable Y in this research.

#### **B.** Discussion

Based on the result above, the writer found some information about Indonesian language mastery and English Academic writing in the sixth semester students of English Department at UIN Antasari Banjarmasin. Moreover, the writer also found the correlation between them:

### Students' Indonesian language mastery in the sixth semester of English Department at UIN Antasari Banjarmasin academic year 2016/2017.

Based on the findings of Indonesian written test, averagely there are 12 of 29 students or 41, 38% get score between 80 until 92 which are categorized in excellent level. Then, 9 students or 31, 03% are categorized in good level who get score more than 70. There are 7 students or 24, 14 % who get score more than 60 in fair level. In addition to, there is one student who gets the lowest score that is 46 or 3, 449%.

From the test, the writer found that most of the students have the good proficiency in Indonesian language. In another hand, Indonesian written test indicated that most of students have the good proficiency in L1 writing

## 2. Students' academic writing in the sixth semester of English Department at UIN Antasari Banjarmasin academic year 2016/2017.

The finding of English academic written test indicates that there are 14 students of 29 students or 48, 27 % in good level who get score between 70 and 79. There are 11 students who get score more than 60 or 37, 93% which are categorized in fair level. Furthermore, there is 1 student who gets 80 score or 3,449 and 3 students or 10, 34% who get score less than 60 which are categorized in low level.

Based on English academic written test, the writer found that their proficiency of Academic writing in the sufficient level. Moreover, most of students have difficulties in English writing, especially in Academic topic. They usually have the error grammatical convention and generating ideas problem. They often use the figurative language and the rule of Indonesian Language.

# 3. The correlation between Indonesian language mastery and English academic writing in the sixth semester of English Department at UIN Antasari Banjarmasin academic year 2016/2017

The writer also found the information about whether there is a correlation or not between Indonesian language mastery and English academic writing in the sixth semester of English Department at UIN Antasari Banjarmasin. Based on the findings, the value of Pearson Product correlation  $(r_{xy})$  between Indonesian

language mastery and English Academic writing is 0, 767 and the value of r table at significant value 0,05 with df= 0,367. So, it can be concluded that  $r_{xy}(0,767) > r_{table}(0,367)$  which means there is a significant correlation. It means Ha is accepted and Ho is denied. It is also concluded that there is the positive correlation between Indonesian language mastery and English academic writing. On the other hand, if the students have the good Indonesian mastery, so do their English Academic writing. Whereas their Indonesian mastery is poor, so do their English Academic writing.

Furthermore, the correlation index number indicates that value of  $r_{xy}$  (0, 767) is on high correlation. So, it means that there is high significant correlation between Indonesian language mastery and English Academic writing in the sixth semester of English Department at UIN Antasari Banjarmasin. This research supports the theory by Cummin (1983) in Mehrabi (2014: 1688) which stated the high level of L1 proficiency can help L2 acquisition, and high proficiency in L2 can have a positive effect on L1 development.

Furthermore, in the specific theory about the influence of L1 in L2 writing which stated by Myle (2002:2) L1 models have had a significant influence on L2 writing instruction and the development of a theory of L2 writing. Limited knowledge of vocabulary, language structure and content can inhibit a L2 writer's performance.