

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

The research has been done at SMAN 4 Banjarbaru which is located on Jl.Ayani Km 21 Landasan Ulin Utara, Kec Liang Anggang, Kalimantan Selatan . In data presentation, the researcher describes the result of the on-field research that has been done in the second semester at the tenth grade students at SMAN 4 Banjarbaru School Year 2018/2019.

As mentioned in statement problem and objectives of the research, the researcher would like to find out the reading and writing ability at the tenth grade, and to analyze the degree of correlation between students' achievement in reading ability as variable X and their writing ability as variable Y. The data are obtained on both variables by using test.

1. Measuring Validity and Reliability Test

In this research, the researcher has done conducted good test for the sample of the research. The test was done to 33 students in the tenth grade, the students was chosen from one class. The tests which given to the students were multiple choice item for reading comprehension test and essay writing test. In reading test, it consisted of 20 items of multiple choice. While writing test, the students were asked to write an essay

around 150-200 words with chose one of some topics given. After that, the researcher measures the validity and reliability test.

Based on the explanation on chapter III p.35-36, the researcher used two kinds of validation that is construct validity and content validity. In calculated construct validity for reading comprehension test, the writer used IBM SPSS 22 version. The result can be seen on table 4.1.

Table 4.1 The Result of Validity Test in Reading Ability

No	R_x	$R_{table} (5\%)$	Explanation
1	0,561	0,355	Valid
2	0,373	0,355	Valid
3	0,726	0,355	Valid
4	0,542	0,355	Valid
5	0,425	0,355	Valid
6	0,516	0,355	Valid
7	0,552	0,355	Valid
8	0,556	0,355	Valid
9	0,586	0,355	Valid
10	0,589	0,355	Valid
11	0,515	0,355	Valid
12	0,425	0,355	Valid
13	0,443	0,355	Valid
14	0,425	0,355	Valid
15	0,383	0,355	Valid
16	0,506	0,355	Valid
17	0,551	0,355	Valid
18	0,491	0,355	Valid
19	0,525	0,355	Valid
20	0,425	0,355	Valid

than r_{table} at 5% significant value. It means that the test of reading comprehension is valid.

Table 4.2 The Result of Reliability Test in Reading Ability

Variable	R_x	$R_{table} (5\%)$	Explanation
X	0,801	0,355	Reliable

Based on table 4.2, it can be concluded that the r_x value was higher than r_{table} at 5 significant value. It means that the test of reading comprehension was reliable. For more information about reliability test in IBM SPSS 22 version, it can be sen on appendix 5.

2. Scoring Students' Answer in Reading Test and Writing Test

a. Students' Reading Comprehension Ability (X)

The data of reading comprehension were gathered by using objective test. It was consist 20 items of multiple choice in which each true answer had 5 (five) scores and 0 (zero) for false answer. The maximum score was 100 (one hundred). The test was given to 33 students in the second semester at SMAN 4 Banjarbaru. The result or score of each students were presented of the following table :

Table 4.3 The Result of Students' Reading Ability

No	The Name of Students	Score
1	MA	95
2	AL	85
3	RS	85
4	AMS	85
5	SFM	80
6	IL	80
7	MA	80
8	SA	75
9	AJA	75
10	AAF	75
11	GF	75
12	AR	70
13	T	70
14	EN	70
15	SU	70
16	RGR	70
17	GRJ	70
18	YD	70
19	IPS	65
20	MD	65
21	DP	60
22	ED	60
23	MRT	60

24	MD	60
25	NHP	60
26	N	55
27	R	55
28	PSN	50
29	MN	50
30	MS	50
31	DA	45
32	AY	40
33	YM	40
	Total	2195
	Average	66.5
	The Lowest Score	40
	The Highest Score	95

To know the students' reading comprehension ability, the writer applies "mean" statistical formula below :

$$M_x = \frac{\sum X}{N}$$

M_x = Mean of reading comprehension score

$\sum X$ = Total score of students' reading comprehension

N = Total students of the respondent

$$\begin{aligned}
 M_X &= \frac{\Sigma X}{N} \\
 &= \frac{2195}{33} \\
 &= 66.5
 \end{aligned}$$

Based on the result of the applied the formula, the total score is 2195 of 33 students, and mean score is 66.5 which showed that the students' reading comprehension ability was good category. Distribution of the students' scores can be seen in the following table:

Table. 4.4 The Frequency Distribution of Reading Score and Classification

No	Score	Frequency	Percentage	Category
1	80-100	7	21%	Very Good
2	66-79	11	33%	Good
3	56-65	7	21%	Enough
4	46-55	5	15%	Low
5	0-45	3	9%	Fail
	Total	33	100%	

Sudijono (2003) in Kasdi (2006:21)

The table 4.4 reveals that 7 students (21%) are in very good category of reading comprehension ability. 11 students (33%) are in good category, 7 students (21%) are in enough category, 5 students (15%) are in low category, and 3 students (9%) are in fail category.

b. Students' writing ability (Y)

The researcher took the result of the writing test from the students' writing ability. In the test, the students were asked to write a short essay by choosing the topic which one was given. It was given to 33 students at the tenth grade students at SMAN 4 Banjarbaru. The test was assessed through writing rubric by Brown and Bailey (2003, p. 244:245). The result of the test is presented in the following table:

Table 4.5 The Result of Students' Writing Ability

No	The Name of Students	Score
1	AAF	83
2	AJA	85
3	EN	85
4	SFM	86
5	PSM	73
6	SL	90
7	DA	62
8	GRJ	63
9	N	80

10	IL	63
11	GF	68
12	NHP	65
13	IPS	64
14	AL	85
15	SA	70
16	YD	86
17	MRT	30
18	MA	55
19	MDS	25
20	ED	65
21	AR	70
22	DPC	80
23	MNA	48
24	AMS	52
25	RBV	45
26	ALY	63
27	MS	55
28	RS	46
29	YM	50
30	MD	30
31	TQS	30
32	RGR	78
33	MA	70
	Total	2100
	Average	63,6

	The Lowest Score	25
	The Highest Score	90

Based on the table 4.7, the researcher calculated mean score of the students' ability in wrting, by statistically as follow :

$$M_Y = \frac{\Sigma Y}{N}$$

M_Y = Mean of writing ability score

ΣY = Total score of students' paragraph writing ability

N = Total students of the respeondent

$$M_Y = \frac{\Sigma Y}{N}$$

$$= \frac{2100}{33}$$

$$= 63.6$$

Based on the result of the applied the formula, the total score was 2100 of 33 students, and mean score was 63.6 which showed that the students' writing ability was fair category. Distribution of their scores in paragraph writing can also be seen in the following table :

Table. 4.6 The Frequency Distribution of Writing Score and Classification

No	Score	Frequency	Percentage	Category
1	80-100	7	21%	Very Good
2	66-79	11	33%	Good
3	56-65	7	21%	Enough
4	46-55	5	15%	Low
5	0-45	3	9%	Fail
	Total	33	100%	

Sudijono (2003) in Kasdi (2006:21)

The table above reveals that the students' writing ability based on the categories are 9 students are in excellent category (27%), 6 students are in good category (18%), 7 students are in enough category (21%), 6 students are in low category (18%) and 5 students (15%) who got fail category.

3. Measuring Assumption Test

The researcher measured the assumption test that is the normality test and linearity test by using IBM SPSS 22 version.

a. Normality Test

In this research, the researcher measured the normality test used Kolmogorov-Smirnov of IBM SPSS 22 version. The result of normality test was described as following table:

Table 4.7 The Result of Normality Test

Variable	Significance	(α) value	Criteria
X	0,070	0,05	Normal
Y	0,163	0,05	Normal

Based on the result, it shows that the value of variable X (0,070) and the value of variable Y (0,163) are higher than the significant value (0,05). Therefore, it can be concluded that the data is normal. For more information about the result, it can be seen in the appendix 6.

b. Linearity Test

In this research, the researcher measured the linearity test used IBM SPSS 22 version. The result of linearity test was described in the following table:

Table 4.8 The Result of Linearity Test

Variable	Significance	(α) value	Criteria
XY	0,166	0,05	Linear

The result of linearity test between students' in reading comprehension (X) and students' writing ability (Y) showed that the significant value 0,166 which was higher than 0,05. Therefore, it can be concluded that variable X and variable Y is linear. For more information about the result, it can be seen in the appendix 6.

Because of the data were normal and linear, the researcher can be used Pearson product moment formula to analyze the correlation between reading and writing ability in English of the tenth grade students of senior high school.

4. Analyzing The Correlation Between Reading and Their Writing Ability in English

It has been mentioned before, the data were gained from the students' score of reading comprehension test and writing essay test. The next step in this research is the researcher to analyze the correlation between two variables by finding the X,Y,XY,X²,Y² of the data. They were seen in the following table:

Table 4.9 Working table of Correlation Analysis

No	X	Y	X ²	Y ²	XY
1	95	83	9025	6889	7885
2	85	85	7225	7225	7225
3	85	85	7225	7225	7225
4	85	86	7225	7396	7310
5	80	73	6400	5329	5840
6	80	90	6400	8100	7200
7	80	62	6400	3844	4960
8	75	63	5625	3969	4725
9	75	80	5625	6400	6000
10	75	63	5625	3969	4725
11	75	68	5625	4624	5100
12	70	65	4900	4225	4550
13	70	64	4900	4096	4480
14	70	85	4900	7225	5950
15	70	70	4900	4900	4900
16	70	86	4900	7396	6020
17	70	30	4900	900	2100
18	70	55	4900	3025	3850
19	65	25	4225	625	1625
20	65	65	4225	4225	4225
21	60	70	3600	4900	4200
22	60	80	3600	6400	4800
23	60	48	3600	2304	2880
24	60	52	3600	2704	3120
25	60	45	3600	2025	2700
26	55	63	3025	3969	3465
27	55	55	3025	3025	3025
28	50	46	2500	2116	2300
29	50	50	2500	2500	2500
30	50	30	2500	900	1500
31	45	30	2025	900	1350
32	40	78	1600	6084	3120
33	40	70	1600	4900	2800
Σ	2195	2100	151925	144314	143655

$$\begin{aligned}
r_{xy} &= \frac{N\Sigma XY - (\Sigma X)(\Sigma Y)}{\sqrt{\{N\Sigma X^2 - (\Sigma X)^2\}\{N\Sigma Y^2 - (\Sigma Y)^2\}}} \\
&= \frac{33 \times 143655 - 2195 \times 2100}{\sqrt{\{33 \times 151925 - 2195^2\}\{33 \times 144314 - 2100^2\}}} \\
&= \frac{4740615 - 4609500}{\sqrt{\{5013525 - 4818025\}\{4762362 - 4410000\}}} \\
&= \frac{131115}{\sqrt{\{195500\}\{352362\}}} \\
&= \frac{131115}{\sqrt{68886771000}} \\
&= \frac{131115}{262462,895} \\
&= 0.500
\end{aligned}$$

Based on the calculation, the value of Pearson correlation (r_{xy}) is 0,500. Furthermore, the value of r_{xy} (0.500) is compared to the value of r_{table} with the significant value 0,05 with $df = 31$.

$$df = N - k = 33 - 2 = 31$$

Therefore, by looking the table of product moment at significant value 0,05 with $df = 31$, the value of r_{table} is 0.355. Based on the findings, the value of Pearson correlation (r_{xy}) between students' achievement in reading comprehension and their paragraph writing ability is 0.500 which is the value of r_{table} at significant value 0,05 with $df = 31$ was 0,355. It can be concluded that $r_{xy} (0,500) > r_{table} (0,355)$ which means there is correlation between students' achievement in reading comprehension and their paragraph writing ability. Moreover, the result of analysis can be seen in the following table:

Table 4.10 Correlation between Reading and Writing Ability

Correlations			
		Reading	Writing
Reading	Pearson Correlation	1	,500**
	Sig. (2-tailed)		,003
	N	33	33
Writing	Pearson Correlation	,500**	1
	Sig. (2-tailed)	,003	
	N	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Based on the table 4.10, the value of correlation between reading comprehension and paragraph writing ability is 0,500 which means there is correlation between students' achievement in reading comprehension

and their paragraph writing ability. Moreover, the value of sig (2-tailed) is 0,003 which means $0,003 < 0,05$. Therefore, the correlation is significant.

B. Discussion

Based on the findings, the researcher found some information about how students' in reading and writing ability in English of the tenth grade students of senior high school. In addition, the researcher also found the correlation between them.

1. Students in Reading Ability

Based on the findings of the reading ability test, the researcher found the reading ability in English of the tenth grade students had a score of 66.5, which means it is in a good score category. According to Sudijono (2003) in Kasdi (2006) reading ability is included in the good score category around 66-79.

Wasik & Tumer (1991) in Graham (2007, p. 3) stated that "good readers understand and learn from text suggest that they coordinate a set of highly complex and well-developed skills and strategies before, during, and after reading that assist them in understanding and remembering what they read". Harrison (2004, p. 50) stated that "the part of reading that's beyond word recognition, it's about understanding what you read, and it develops gradually and 'naturally' as a reader becomes more fluent, more experienced and more confident". When students often reading in English

then their ability in reading and understand texts or sentences in English also increases and better.

There is a previous study relating this study, it is come from Nurul (2018) “ The Correlation Between Students’s Reading Habit and Their Writing Ability Second Year Students of SMAN 4 Banda Aceh” in this previous study the score of their reading habit is 69 which mean in good category. The study showed that a good reading habit supported by their motivation in reading English and their eagerness to spend time in reading various types of English text regularly.

From this test, the researcher knows the student's ability to answer the test. With their understanding of text, they can answer questions correctly. The problem is that there are still some students who do not understand the text well and they also have different abilities in mastering English, especially in reading comprehension in English. According to Dawson and Bamman (1967, p.220) stated that “Students have different intelligence, so it will be possible for them to produce different reading comprehension”. Automatically, students have provided different ways of learning English. They sometimes have a little difficulty in finding the main idea or topic sentence whose answer can be found in the text. However, students have been able to answer the questions well. It can be said that the students already understand the techniques and strategies for understanding the text. Thus, students have been good at the reading comprehension and understand question items in English.

2. Students in Writing Ability

Based on the findings of writing ability test from the statistical measurement of 33 students, the researcher found the students writing ability in English of the tenth grade is a score 63.6, which means it is in the fair score category. According to Sudijono (2003) in Kasdi (2006) writing ability is included in the fair score category around 56-65.

According to Tarigan (1994, p. 6) stated that “a good writing result shows the abilities of the writer to write clearly (unambiguous), to use the sentence structure well, language, and examples. Therefore, it makes the understanding of explicit and implicit meaning easier for the reader”.

There is a previous study relating this study, it is come from Khalipah (2017) “ The Correlation Between Students’ Achievement In Reading Compherension and Their Paragraph Writing Ability in the Fourth Semester at English Department of UIN Antasari Banjarmasin”. In the thesis, the reading Compherension received a score 50.5 which means it is in the low category. Based on the result of the calculation, the total score was 2022 of 40 students, and mean score was 50.5 which showed that the students’ paragraph writing ability was low category. Thus, the reseach concluded that the students have a low ability in writing paragraphs because the students still have difficulties to write and to write what they are thingking.

In this study students have a fair score in the writing ability. The test made students think hard about how to write in a way that they can explain for the reader in English. This is because some of the students lack vocabulary and grammar, but some are competent in this. Boardman (2002, p. 11) states that “writing is a continuous process of thinking and organizing, rethinking, and reorganizing”. The students also rarely write essay in English because they often learn to translate writing in English rather than writing essay in English. so when asked to write an essay they still have difficulty writing and thinking what they will write. For example, when students are asked to write an essay about their vacation activities or about their activities on weekends, some of them write their activities on weekends or their holiday well but some of them again just wrote a few sentences without completing their writing because they still lacked the vocabulary they had and many of them still wrote with wrong grammar.

3. The Correlation between Reading and Writing Ability in English

The researcher also found there was a correlation or not between students in reading and their paragraph writing ability. The findings shows the value of Pearson correlation (r_{xy}) between reading ability and writing ability is 0.500, while the value of r_{table} at significant value 0.05 with $df = 31$ was 0.355. Therefore, $r_{xy} (0.500) > r_{table} (0.355)$ which means there was a correlation between variable X and variable Y. The r_{xy} value (0.500) was fair category, it based on the correlation index number (0.40–

0.599), for more information, see table 3.4 of correlation interpretation. In addition, the value of r_{xy} (0.500), which means there was correlation between variable X and variable Y. Moreover, based on the table of correlation with IBM SPSS 22 version (Table 4.10), the value of significant correlation or Sig. (2tailed) was 0,003. It can be concluded that the value of significant correlation ($0.003 < 0.05$) which means that the correlation was significant. Thus, H_a was accepted and H_0 was rejected. Based on the findings, the researcher found that there was a fair significant correlation between reading and writing ability in English of the tenth grade students of senior high school.

In conclusion, based on data analysis, it shows that the effect of reading and writing ability is fair. The test of reading comprehension made students quietly in answering the test and made them to be more carefully in choosing the answer. The researcher saw that students hardly in doing the test. According to Kanan (2009, p. 2) to learn English language requires constant practice. The kind of feeling that prevails among students was that is not possible to achieve fluency or mastery over English language. Therefore, if the students have good in reading comprehension, it will affect on their writing ability.

The result of this study is relevant to the findings of Simaremare (2012), “The Correlation Between Reading Habits And Writing Article Ability Of Students Majoring In Languages And Indonesia Literature At Medan University”. In the thesis the result of the frequency distribution of

reading habits (X) can be seen that the largest frequency value is at the value of 70. And the data distribution frequency writing ability of the article (Y) can be seen that the largest value of the frequency is at value 86. From the calculation of correlation can be obtained price $r_{xy} = 0.67$. Based on the formula $N-2$ is $25-2 = 23$. It turns out that the price r obtained through the calculation is greater than the r_{table} is $0.396 < 0.67 > 0.505$. Thus the research has a conclusion that there is a significant correlation between reading habits and writing article ability of students majoring in languages and indonesia literature at Medan university. Therefore, it can be concluded that the more students read the better writing skill they have.

According to Nelson and Calfee (1998) in Ming Yueh Shen (2009) said that both reading and writing required learners to actively involve in construction meaning. So, between reading and writing can not be separated each other. In reading comprehension, the students must be known the meaning of word, phrase and sentence on the text, so that they could answer the reading test well. It similar for writing, when students wanted to write, they must have many vocabularies which were poured in their writing. Wilson (1981, p.279) stated that the relationship between reading and writing is based on communication. Both processes should develop as a natural extension of the child is need to communicate. Thus, reading and writing have relation and mutual communicated each other.