CHAPTER IV
FINDINGS AND DISCUSSION

4.1. Data Description

As mentioned in research methodology in chapter 3, to get the data for this study, the researcher distributed questionnaires to know students' motivation in learning writing to the students at the tenth grade TKJ 2 of SMKN 03 Jepara. After that, the researcher conducted writing test to know students' writing ability. After both of data collected, the researcher starts to analyzed each data.

The motivation questionnaire is assessed by Likert' scale rating and writing ability is measured by Brown (2007) scale rating scale. Finally, after each of the data analyzed, to see the correlation between students' motivation in learning writing and their writing ability score, the researcher analyzed both of the data by applying the formula of Correlational Product Moment by Pearson.

4.2. Findings

4.2.1. Students' Motivation in Writing Score

In this study, students' motivation in learning writing is as the independent variable (X). To measure students' motivation in learning writing, this study used one technique: it is distributing questionnaires to the students' in classroom.

4.2.1.1. Questionnaires

As mentioned in technique of data analysis, the questionnaires in this study is 12 items. Before the questionnaires were distributed, the questionnaires were trying out first with other class in SMKN 03 Jepara. The class that questionnaire distribute by the researcher is Tenth grade students of TKJ 01. It

means that the questionnaires were used content validity by calculating the validity of the data by SPSS program.

The questionnaires were assessed by Likert scale rating. This scale rating has five options. They are: *Strongly Agree* (Sangat Setuju), *Agree* (Setuju), *Undecided* (Ragu-Ragu), *Disagree* (Tidak Setuju), and *Strongly Disagree* (Sangat Tidak Setuju). The result of questionnaires are described in a table **(See appendix 2)**. The following table describes the result of questionnaires about students' motivation in learning writing after been accumulated.

Table 4.1

Score of Students' Motivation in Learning Writing (X Variable)

Students (N)	Motivation (X)	Motivation (X) (in 100 Percent)
1	39.0	65.0
2	27.0	45.0
3	36.0	60.0
4	32.0	53.0
5	32.0	53.0
6	26.0	43.0
7	31.0	51.0
8	32.0	53.0
9	35.0	58.0

10	24.0	40.0
11	26.0	43.0
12	32.0	53.0
13	33.0	55.0
14	33.0	55.0
15	31.0	51.0
16	33.0	55.0
17	32.0	53.0
18	24.0	40.0
19	33.0	55.0
20	34.0	56.0
21	33.0	55.0
22	35.0	58.0
23	38.0	63.0
24	25.0	41.0
25	24.0	40.0
26	24.0	40.0
27	26.0	43.0
28	32.0	53.0
29	33.0	55.0
30	33.0	55.0
31	31.0	51.0
32	26.0	43.0

33	32.0	53.0
34	33.0	55.0
35	33.0	55.0
36	31.0	51.0
N=36	$\sum X = 1114$	$\sum X = 1848$

Table 4.2

Descriptive Statistics of Students' Motivation

Motivation

N	Valid	36
	Missing	0
	Mean	51.3
	Median	53
	Mode	55
	Std. Deviation	6.735832
	Range	25
	Maximum	65
	Minimum	40

From the data above, we can see the total questionnaires of 36 respondents

is 1848. By applying SPSS program, it shows that the mean of the students'

motivation score is 51,3, the median is 53, the mode is 55, standard deviation is 6.735832, the minimum score of students' motivations is 40 when the maximum score of students' motivations is 65, and the range of the score is 25.

Table 4.3

Score Interpretation of Students Motivation

The score interpretation will be divided into 3 kinds as follows:
12-27 Score : Low degree of Motivation
28-43 Score : Moderate degree of Motivation
44-60 Score : High degree of Motivation

Low Degree of Students : 9 Students

Moderate Degree of Students : 27 Students

High Degree of Students : 0 Students

Based on the statistic above, there are 3 categories of motivation score. The first is low degree of motivation, moderate degree of motivation and the last is high degree of motivation. Students categorized by low degree motivation are score between 12 -27, students categorized by moderate degree motivation students are score between 28-43, and for high degree of motivation students are score between 44-60. Therefore, from the table above, it is considered that the mode of student's motivation score is 33 in 100% is 55.0. It means that most of

students have moderate motivation in learning writing. It is also confirmed by the result of classroom test score shows in explanation below, shows that students have a moderate to low score is also follow the teaching and learning process well, but still do not pay attention to the teacher's explanation. In result, when the teacher's conduct a English writing test, the result of students English test is not good enough to reach a minimum score in order to pass the English test. Just a few students that pass the English writing test.

4.2.2 Students' Writing Score

In this case, the students' writing ability is as the dependent variable (Y). To know students' writing ability score, the researcher conducted writing test to the students. The test is evaluated into five criteria; they are content, organization, grammar, vocabulary and mechanics. The five criteria are the components of writing skill. In this study, the students are scored based on five components of writing skill by using the rating scores of Brown (2007). Here are the results of students' writing ability score.

Table 4.4

Score of Students Writing Ability Test (Y Variable)

Students (N)	Writing (Y)	Students (N)	Writing (Y)
1	67.0	19	65.0
2	67.0	20	67.0
3	67.0	21	68.0
4	75.0	22	69.0

5	70.0		23	74.0
6	66.0		24	68.0
7	67.0		25	68.0
8	66.0		26	67.0
9	89.0		27	68.0
10	69.0		28	68.0
11	67.0		29	66.0
12	71.0		30	67.0
13	71.0		31	66.0
14	65.0		32	68.0
15	71.0		33	66.0
16	71.0		34	65.0
17	67.0		35	69.0
18	67.0		36	66.0
			N=36	∑ Y= 2468

Table 4.5

Descriptive Statistics of Students' Writing Score

N	Valid	36
	Missing	0
	Mean	68,5

Median	67
Mode	67
Std. Deviation	4.205061
Range	24
Maximum	89
Minimum	65

From the data above, we can see that the total score from 36 respondent of students' writing test score is 2468. By applying SPSS program, it shows that mean of the students' writing score is 68,5, the median of students' writing score is 67, the mode of students' writing score is also 67, the standard deviation of students' writing score is 4,205061, the range of students' writing score is24, the minimum score of students' writing score is 65 and the maximum score of students' writings is 89.

Based on the result statistic above, the average score is 67. It means that most of the students' writing ability is in the low level. Therefore, it can not meet the minimum level of pass score in the SMK N 03 Jepara which is 70. It also can be seen from the minimum writing score which is 65 and most of the students got score between 65-69.

4.3. The Correlation between Students' Motivation in Learning Writing and their Writing Ability.

In this case, both the score of students' motivation and students' writing ability are correlated by using Pearson's Product Moment formula in SPSS program. The data are described in the following table.

Table 4.6

The Calculation of Questionnaires of Motivation and Writing Score

Students (N)	Motivation (X)	Writing Ability (Y)	XY	X2	Y2
1	65	67	4355	4225	4489
2	45	67	3015	2025	4489
3	60	67	4020	3600	4489
4	53	75	3975	2809	5625
5	53	70	3710	2809	4900
6	43	66	2838	1849	4356
7	51	67	3417	2601	4489
8	53	66	3498	2809	4356
9	58	89	5162	3364	7921
10	40	69	2760	1600	4761
11	43	67	2881	1849	4489
12	53	71	3763	2809	5041
13	55	71	3905	3025	5041

14	55	65	3575	3025	4225
15	51	71	3621	2601	5041
16	55	71	3905	3025	5041
17	53	67	3551	2809	4489
18	40	67	2680	1600	4489
19	55	65	3575	3025	4225
20	56	67	3752	3136	4489
21	55	68	3740	3025	4624
22	58	69	4002	3364	4761
23	63	74	4662	3969	5476
24	41	68	2788	1681	4624
25	40	68	2720	1600	4624
26	40	67	2680	1600	4489
27	43	68	2924	1849	4624
28	53	68	3604	2809	4624
29	55	66	3630	3025	4356
30	55	67	3685	3025	4489
31	51	66	3366	2601	4356
32	43	68	2924	1849	4624
33	53	66	3498	2809	4356
34	55	65	3575	3025	4225
35	55	69	3795	3025	4761
36	51	66	3366	2601	4356

N=36	∑X=1848	∑Y=2468	∑XY=126917	∑X²=96452	∑Y²=169814

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

$$= \frac{36 \ x \ 126917 - 1848 \ x \ 2468}{\sqrt{36 \ x \ 96452 - 1848^2] [36 \ x \ 169814 - 2468^2}}$$

$$= \frac{4569012 - 4560864}{\sqrt{[3472344 - 3415104] [6113304 - 6091024]}}$$

$$= \frac{8148}{\sqrt{57240 \ x \ 22280}}$$

$$= \frac{8148}{\sqrt{1275307200}}$$

$$= \frac{8148}{357114}$$

$$= 0,228$$

From the calculation above, it is found that r_{xy} is 0,228. The next step is to find the significance of variable by calculating r_{xy}, the formula is tested by significance test formula.

$$t_{count} = \frac{r\ \sqrt{n-2}}{\sqrt{1-r^2}}$$

In which   : t_{count} = t value

r   = value of correlation coefficient

n   = total of sample

Therefore, it is calculated that:

$$t_{count} = \frac{r\ \sqrt{n-2}}{\sqrt{1-r^2}} = \frac{0.228\ \sqrt{36-2}}{\sqrt{1-0.228^2}}$$

$$= \frac{0.228\ \sqrt{34}}{\sqrt{1-0.051984}}$$

$$= \frac{0.228\ x\ 5.83}{\sqrt{0.94}}$$

$$= \frac{1.32}{0.96}$$

$$t_{count} = 1,380$$

Before tested by t_{count}, the researcher made two hypotheses of significance: an alternative hypothesis (Ha) and a null hypothesis (Ho).

Ha   = There is significant correlation between two variables.

Ho   = There is no significant correlation between two variables.

The formulation of test:

A. If $t_{count} > t_{table}$, it means that the null hypothesis is rejected and there is a significant correlation.

B. If $t_{count} < t_{table}$, it means the null hypothesis is accepted and there is no significant correlation.

Based on the calculation above, the result is compared by t_{table} in the significant 0.05 and N=36. The researcher found out the Degree of Freedom *(Df)* with the formula.

Df   = N-nr

        =36-1

        =35

From Df = 35, it is obtained t_{table} = 2.030. It means that t_{count} is lower than t_{table} or 1.380 < 2.030. Therefore, the alternative hypothesis is rejected. In other words, there is no significant correlation between students' motivation in learning writing and their writing ability.

4.4. The Test of Hypothesis

To prove the result of hypothesis in this study, the researcher calculated the obtained data by Pearson's coefficient correlation of Product Moment like the researcher mentioned. Below are the formulations of hypothesis of this study:

A. The null hypothesis (Ho) = There is no significant correlation between X variable and Y variable.

B. The alternative hypothesis (Ha) = There is significant correlation between X variable and Y variable.

From the formulation above, the researcher follows some assumptions as follow:

A. If the result of calculation r_o is lower than r_t (r table) $r_o < r_t$, the null hypothesis is (Ho) is accepted, and the alternative hypothesis (Ha) is rejected.

B. If the result of calculation ro is bigger than rt (r table) ro > rt, the null hypothesis is rejected, and the alternative hypothesis (Ha) is accepted.

The result of r_{count} value (0.228) is lower than r_{table} (0.334 in 0.05 and 0.430 in 0.01) value with significant value 0.05 and 0.01. So, the conclusion is:

a. Ho is accepted.

b. Ha is rejected.

c. There is weak correlation between students' motivation in learning writing and their writing ability at Tenth Grade of SMKN 03 Jepara.

4.5. Discussion

After the writer calculated the data by applying the correlation of Product Moment formula and finding the result of r_{xy}, the next step is to give interpretation of the r_{xy}. From the analyzing data of students' motivation in learning writing (X) and students' writing score (Y), it appeared that the correlation index between X variable and Y variable is 0.228. It means that between both of variables has a low/weak correlation between them. It can be

seen at simple interpretation toward the correlational index "r" Product

Moment (r_{xy}) on the following table.

Table 4.7

The Simple Interpretation of r_{xy}

"r" Product Moment ($r_{xy)}$	Interpretation
0.00 – 0.20	Very low/ weak
0.20 - 0.40	Weak
0.40 – 0.70	Medium/Moderate
0.70 – 0.90	High
0.90 – 1.00	Very High

Therefore, Therefore, from the calculation of both variables above and indicated to the table of interpretation of rxy above, it interprets that in both of variables has correlation but it is in a low/weak scale. By calculation above, it indicates that between X variable and Y variable has a negative correlation. It means that both of variables have negative correlation (one-way correlation). It is considered that the lower motivation of students in learning writing, the bad writing ability score of students will get. In other words, students with low motivation in learning writing will get a bad writing ability.

By looking at the result of rxy = 0.228, It shows in the interval 0.20 – 0.40. It indicates the gravity of correlation in this study is in the low/weak level. It concluded that there is a low/weak correlation between students' motivation in

learning writing and students' writing ability. It means the alternative hypothesis of the study is rejected.

Then, in order to complete the result of the study, the interpretation of r_{table} is also used in the study. Firstly, the writer found out the Degree of Freedom (Df) with the formula:

$$Df \quad = N - nr$$
$$= 36 - 1$$
$$= 35$$

Secondly, by checking the r_{table} (rt) in Df = 35, it is found that at the degree of significance 5% is 0.334 and at degree of significance 1% is 0.430.

$$5\% = r_o: r_t = 0.228 < 0.334$$

$$1\% = o: r_t = 0.228 < 0.430$$

To know the correlation between r_o (r_{xy}) = 0.228 and rt with the Df (35) in the significance 5% and 1%, it can be concluded as follows:

The significance 5% = r_o : r_t = 0.228 < 0.334, it means that in the significance 5% r_o (r_{xy}) is lower than r_{table}. So, the null hypothesis (Ho) is accepted and the alternative hypothesis (Ha) which states there is correlation between students' motivation in learning speaking and their speaking ability is rejected. It is not that there is no correlation between student's motivation in learning writing and their writing ability. There is a correlation between them. But in this study, it is showed that the result that researcher found by calculating the questionnaire and

student's writing test showed that the correlation between them is only 0.228, which is categorized weak in the interpretation of the data (0.20 – 0.40 = low/weak).

Besides, in the significance 1% = r_o : r_t = 0.228 < 0.430, it means that in the significance 1% r_o (r_{xy}) is lower than rt. It is considered that the null hypothesis (Ho) which state there is no correlation between students' motivation in learning speaking and their speaking ability is accepted and the alternative hypothesis (Ha) is rejected. In other words, the null hypothesis (Ho) is accepted both in significance 5% and 1%.

In contrast with the research conducted by Nerfi Istianti in 2013 entitled by "The Correlation Between Students Motivation in Learning Speaking and Their Speaking Ability" which the result of r_{xy} is 0.555 that categorized medium in the interpretation of the data. The X variable is students' motivation in learning speaking, and Y variable is students' speaking ability which is similar with the researcher but different Y variable, which Nerfi is Speaking and the researcher Y variable is Writing.

Second research is a research conducted by Septa Aryanika in 2010 entitled by "The Correlation Between the Students' Writing Motivation and the Writing Ability". This research is basically same with the researcher title but his result which r_{xy} is 0.506 and the sample is 52 students. The result of his data analysis is r_{count} is bigger than r_{table} (0.506 > 0.273). So, the result of his research it was found there is a medium correlation between students' motivation and their writing ability which the researcher was found that there is weak significant

correlation between students' motivation in learning writing and their writing ability in Tenth grade Students of SMKN 03 Jepara.

Furthermore, from the result above, it is considered that the lower motivation in learning writing, the lower writing ability will be achieved by the students. On the other side, the students who have high motivation will make an effort to follow the learning process intensively, and they learn the lesson as well as possible not only in the school but also out of the school. They are motivated to enrich their vocabulary and to practice their speaking ability. Moreover, motivated students usually feel enjoyable in their learning. It makes them easier to speak up confidently wherever they are although English is a foreign language.