CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

To conduct the research, the researcher uses a correlational method of *ex post facto designs*). The main purpose of ex post facto research is to find some the cause or problem that can change the attitude of someone, symptom, or phenomenon which is caused by some events (Widarto,2013). In correlational method, the researcher uses the correlation statistical test to describe and measure between two or more variables. In other words, it is used to analyze whether there is any correlation between two or more variables.. This study is conducted to know the correlation between two variables. They are students' motivation in learning writing as the independent variable and students' writing ability as the dependent variable. .

The writer will use descriptive writing test to get data of students' writing ability. To get student motivation score, the writer distributed questionnaires and conduct writing test to the students' in the classroom to confirm students' motivation in learning writing. Then, after data completed, the data will be analyzed by the formula of correlation product moment.

3.2 Population and Sample

Population is a group of samples that researcher wants to conduct or all of the sample that have characteristics or all data that researcher wants to research. Sample is some part of the total population in study that picked by some method.

The population of this study is class 10,11 and 12 in SMK Negeri 3 Jepara. Total students of class 10 is 468 students, then total students of class 11 is 441 students and total students of class 12 is 470 students. So, the total students of SMK Negeri 3 Jepara is 1379 students.

The sampling technique used by researcher is simple random sampling. The researcher asks the English teacher which class that the researcher can conduct a research. The teacher tells the researcher that he can conduct a research in class 10. Then the researcher makes a lottery from a piece of paper and then pick one of those papers. From 7 course in SMK Negeri 3 Jepara, the researcher got 10 TKJ 2 class.

The writer uses simple random sampling. Kerlinger (2006:188) states that, simple random sampling is a method of sampling that picked from population with a certain method so that every member of sample or that population have a fair chance to be picked by the researcher. It was found that the sample of this study was the students of Tenth Grade of TKJ 02 that consist of 36 male students.

3.3 Technique of Collecting the Data

3.3.1 Questionnaire

Questionnaire is a list of written questions which is used to get information from respondent about his/her personal. The writer used questionnaire to measure the students' writing motivation. In this research, the writer used closed form.

To make students easy to understand, the researcher makes the questionnaire in Bahasa Indonesia. The indicator of questionnaire is specified in

intrinsic motivation instead, because researcher wants to analyse the student's motivation in general. The following is the indicators of questionnaire:

Table 3.1

The Indicators of the Motivation Questionnaire

Aspects	Indicators	Question Number	Statements
Effort	Students attempt to learn English hard by: ▪ Practice writing English every day.	Number 3	▪ I'm still write English even though it is difficult for me.
	▪ Students have a high motivation in doing English writing task from the teacher.	Number 4	▪ I always do my best in my English writing activity task
	▪ Students have a tendency to practice English writing everyday	Number 6	▪ I always practice my English writing every day.

Desire	• Students have strong desire to be able to write English.	Number 1	• I like to write English fluently.
	• Students have a tendency to write down his/her though or ideas in their notebook.	Number 2	• I like to write down my ideas or though in a note.
	• Students exercise English writing assignment diligently	Number 7	• I want to write English assignment fluently
	• Students have a high motivation to get a better score in their writing assignment.	Number 11	• I want to get a better score in my English writing assignment.
	• Students have a	Number 12	• I hope in the future I will

	burning desire to become a good in writing English.		get a better score in English writing.
Attitude	▪ Students have a big confidence and attitude towards writing.	Number 5	▪ Writing is easy activity for me.
	▪ Students have awareness that English is important for them.	Number 8	▪ English language lesson is an important lesson for me.
	▪ Teacher always help the students when they face a difficulty in learning English.	Number 9	▪ My teacher always helps me when I face a difficulty in learning English.
	▪ Students feel happy when they are	Number 10	▪ Learning English in classroom is very fun because my friends in

	learning writing in the classroom because their environment is fully support them in learning English.		the class always support me in learning English.

3.3.2 Writing Test

To collect and measure the data of the students'writing ability, the writer conducted writing test designed and developed by the English teacher. Moreover, the writer uses descriptive text as data collection method to measure the dependent variables, writing ability. The writer measured the students' writing ability by use these categories like content, vocabulary, organization, grammar and mechanics as mainly focused in assessing student writing ability in conduct a data collection.

3.4 Validity of the data

Validity is an accurate or precise instrument in measure some data that researcher wants to be measure. This validity will be tested using SPSS 16 on the writer computer and then the writer will analyze it. This analysis will using Bivariate pearson formula in SPSS Program. This formula is correlate each item

score with total score. This testing by two tailed test with significance at 0,05. The criteria for this is as follow:

- If r scale is > r table (two tailed with 0,05 significance) so the instrument or the items of the questions is correlate and significance through total score or clarify valid.

- If r scale is < r table (two tailed with 0,05 significance) or r table is negative, so the instrument or the items of the questions is not correlate and significance through total score or clarify not valid.

After the researcher find the validity of 12 items from the questionnaire, it was found that the 12 items are valid. The result is as following below:

Table 3.2

The Content Validity of the Questionnaire Items

Number of items	r_{count} value	r_{table} value	Conclusion
1	0,511	0,329	Valid
2	0,439	0,329	Valid
3	0,474	0,329	Valid
4	0,560	0,329	Valid
5	0,348	0,329	Valid
6	0,412	0,329	Valid
7	0,652	0,329	Valid

8	0,821	0,329	Valid
9	0,542	0,329	Valid
10	0,594	0,329	Valid
11	0,363	0,329	Valid
12	0,616	0,329	Valid

From the result above, it can conclude that 12 items in the questionnaire is valid.

Next step is to find the reliability of the questionnaire by using Cronbach alpha

formula in SPSS. The reliability test result is as follow:

Table 3.3

Reliability Test

Case Processing Summary

		N	%
Cases	Valid	36	100.0
	Excludedᵃ	0	.0
	Total	36	100.0

a. Listwise deletion based on all variables

in the procedure.

Table 3.4

Reliability Test Result

Reliability Statistics

Cronbach's Alpha	N of Items

Case Processing Summary

		N	%
Cases	Valid	36	100.0
	Excluded[a]	0	.0
	Total	36	100.0

.762	12

The output (table 3.3) above told us about the total of the data that proved the validity to be process and the data that will be excluded. From the output above, it can be found the data or case that valid is 36 with a percentage 100% and no data that excluded from the output. The validity test on the writing test will be using Expert Judgement. The researcher discusses the writing test that will be spread to the students of Tenth Grade TKJ 02 of SMKN 03 Jepara with one of the lecturers from the University. Mr Hariyanto that teach specifically in writing will be researcher expert judgement in discussing the reliability of the writing test that researcher will conduct in this study.

After discussion, the result is the writing test that researcher made was reliable according to the expert. With the writing test was found reliable, the researcher continues the research in SMKN 03 Jepara.

The Output (table 3.4) is a result from reliability analysis by using Cronbach Alpha formula in SPSS program. From the result above, it was found out that the value of Cronbach Alpha is 0. 762 and categorized good. While the total item (N) is 12 questions.

3.5 Reliability of the data

Edi in Aryanika (2016) states that reliability is the index that shows how far the instrument can be trusted or can be pledged. In other word, whether it consistent, predictability, and accuracy. The reliability of the quessionnaire will using Brown (2007) scale in assessing students writing test based on descriptive text paragraph making. According to the statement above, the writer can conclude that reliability is the accuracy of the measurement result.

3.6 Technique of Data Analysis

After the writer got the data from questionnaires of motivation and learning writing test of wriing abiility, the writer measured each of data:

3.6.1 Assessing Motivation

The questionnaires in this research have questions. See appendix 1 on the back of the paper for the details. The questionnaires are assessed by Likert scale rating. This scale rating has five options. They are: Strongly Agree/Sangat Setuju (SS) , Agree/Setuju (S), Undecided/Ragu-Ragu (RG), Tidak Setuju/Disagree (TS), and Sangat Tidak Setuju/Strongly Disagree (STS). Each option also has score based on the Likert Scale Rating below:

Table 3.5

The Likert Scale Rating

Option	Score
Strongly Agree	5
Agree	4
Undecided	3
Disagree	2
Strongly Disagree	1

Based on the question above, the researcher will calculate the result and give the value based from Mind Tools Content Team on the statement below:

Table 3.6

Score Interpretation of Motivation

Score	Comment
12-27	You allow your personal doubts and fears to keep you from succeeding. You've probably had a few incomplete goals in the past, so you may have convinced yourself that you aren't self-motivated and then you've made that come true. Break this harmful pattern now and start believing in yourself again. The tools and tips below will help you get back your motivation.

28-43	You're doing OK on self-motivation. You're certainly not failing - however, you could achieve much more. To achieve what you want, try to increase the motivation factors in all areas of your life. Read the relevant sections below, and work on them to strengthen your self-motivation.
44-60	Wonderful! You get things done, and you don't let anything stand in your way. You make a conscious effort to stay self-motivated, and you spend significant time and effort on setting goals and acting to achieve those goals. You attract and inspire others with your success. Treasure this - and be aware that not everyone is as self-motivated as you are!

(https://www.mindtools.com/pages/article/newLDR_57.htm) (October 2018)

The score interpretation will be divided into 3 kinds as follows:

12-27 : Low degree of Motivation

28-43 : Moderate degree of Motivation

44-60 : High degree of Motivation

3.6.2 Assessing Writing

The writer will ask the students to make descriptive text about subject like: your favorite place, food, your school or idol. See appendix 2 in the back of paper

for details. The assessing writing will be focused in the criteria like Content, Organization, Grammar, Vocabulary and Mechanics.

Table 3.7

Rubric of Writing Test

Aspect	Score	Performance Description	Weighting
Content	4	The topic is complete and clear and the details are relating to the topic.	3x
	3	The topic is complete and clear but the details are almost relating to the topic.	
	2	The topic is complete and clear but the details are not relating to the topic.	
	1	The tpic is not clear and the details are not relating to the topic.	
Organizatio n	4	Identification is complete and description are arranged with proper connectives.	2x
	3	Identification is almost complete and description are arranged with proper connectives.	
	2	Identification is not complete and descriptions are arranged with few misuses of connectives	
	1	Identification is not complete and descriptions are arranged with misuse of connectives	
Grammar	4	Very few grammatical or agreement inaccuracies	2x

	3	Few grammatical or agreement inaccuracies but not effect on meaning	
	2	Numerous grammatical or agreement inaccuracies	
	1	Frequent grammatical or agreement inaccuracies	
Vocabulary	4	Effective choice of words and word form	1,5x
	3	Few misuses of vocabularies, word form, but not change the meaning	
	2	Limited range confusing words and word form	
	1	Very poor knowledge of words, word forms, and not understandable	
Mechanics	4	It uses correct spelling, punctuation, and capitalization	1,5x
	3	It has occasional errors of spelling, punctuation, and capitalization	
	2	It has frequent errors of spelling, punctuation, and capitalization	
	1	It is dominated by errors of spelling, punctuation, and capitalization	

Score = $\underline{3C+2O+2G+1,5V+1,5M}$ x10   Adapted from Brown (2007)

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The Rubric for Assessing Writing Descriptive Text

From the analytic scoring rubric for writing, each unit is scored from 1 to 4 and weighted based on its worth to the final draft of the descriptive text. The content is weighted 30% since it can be more worth that the other aspects. The organization and the grammar are weighted 20% respectively as they are more worth than vocabulary and mechanic. As there is a little anxiety around the last two aspects, vocabulary and mechanic, the small weighting is attached to them. They are weighted 15% respectively.

3.6.3 Assessing Two Variabels (Motivation and Writing ability of the students) Pearson Product Momen Correlation Coefficien Formula.

All of the data above were analyzed by using the formula of correlation product moment to know the correlation between students' motivation in learning writing and their writing ability (Sudijono,2010).The data will be calculate using SPSS 16 on the the writer computer. The students' motivation in learning writing is independent variable and students' writing ability is dependent variable.

The correlation product moment is one of techniques commonly used to seek the correlation between two variables.

3.6.7 Normality Test

Normality test is a test that done by the purpose to find a value in spread of the data in a group or variable, the data which distribute normal or not. According to empiric experience in field of study from some veteran philosophers, data that have more than 30 number (n > 30), so the data can be assumption distribute normal. Normally called the big sample. But for giving a certainly, the data which contribute normal or not, it is best to do a normality test. Because the data that

have more than 30 is not yet can distribute normal. Thus, the data that have no more than 30 cannot called not distribute normal.

3.6.7.1 Kinds of Normality Test

In this research, the researcher uses Kolmogorov Smirnov test. Kolmogorov -Smirnov test is not too different from Lilliefors method. The steps of finishing and use of formula is same, but in a different significance. The advantage of formula is simple and not cause different perception between an expert with other experts, which is occur in other normality test that uses a graphic in the formula. The researcher will use SPSS in calculate two variable, X and Y in Kolmogorov-Smirnov to find whether the data is distributing normal or not.

3.6.8 Simple Regression Linear

Simple regression linear is a method of approach for model of relationship between one dependent variable and one independent variable. In regression model, independent variable told about the dependent variable. In analysis of simple regression variable, the connection between variable have a stable characteristic, where the change between variable X (independent) will be followed by the change in variable Y (dependent). While in the connection between non-linear, the change of variable X is not followed by the change of variable Y in proportional.

3.6.8.1 The Formula of Simple Regression Linear

Y= a + b (X)

Where the interpretation is:

Y= Dependent Variable

X= Independent Variable

a= Constanta

b= Coefficient Regression

3.6.9 T test

Hypothesis t test is a kind of test that have a purpose to find out if there is a significance between two variables by using t table to compare the t table and researcher result.

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

In which　　　: t_{count}　= t value

r　　= value of correlation coefficient

n　　= total of sample