CHAPTER III

METHOD OF THE RESEARCH

A. Design of the Research

The design of this reseach is correlation. According to Ary, Jacobs, Sorensen & Razavieh (2010, p.349) correlational research is a research that assesses the relationships among two or more variables in a single group. In line with this idea, Fraenkel & Wallen (2012 p.331) stated that in their simplest form, correlational studies investigate the possibility of relationships between only two variables, although investigations of more than two variables are common. In contrast to experimental research, however, there is no manipulation of variables in correlational research.

In addition, there are two types of correlational research design; these are "Explanatory Design" and "Prediction Design". In this research, the researcher used the type of explanatory design. According to Cresswell (2012, p. 340), an explanatory correlation design explains or clarifies the degree of association among two or more variables at one point in time. It means that, when the researcher collects the data, the researcher correlate two or more variables and then collect the data at one point in time.

In this research, the researcher has two kinds of variables, the independent variable and dependent variable. The independent variable is students' reading interest symbolized by "X" and the dependent variable is students' writing ability symbolized by "Y".

B. Location and the Time of the Research

The research was conducted at State Senior High School 1 Kampar. It is located in Kampar Regency. The research was conducted on November, $20^{th} – 28^{th}$ 2017.

C. Subject and Object of the Research

The subject of this research was the tenth grade students of State Senior High School 1 Kampar, while the object of this research was the correlation between students' reading interest and writing ability.

D. Population and Sample of the Research

1. Population

The population of this research was the tenth grade students of State Senior High School 1 kampar. The students were divided into 8 classes. The total number of this population was 288 students.

Table III.1
The total population and sample of the tenth grade students of State Senior High School 1 Kampar

No	Class	Number of Students	Sample
1	XMIPA 1	37	6
2	XMIPA 2	36	5
3	XMIPA 3	36	6
4	X MIPA 4	36	5
5	X IPS 1	37	6
6	X IPS 2	35	5
7	X IPS 3	35	5
8	X IPS 4	36	6
Total		288	44

2. Sample

The population of this research was 288 students. Because the population was too large, so the researcher used random sampling, especially simple random sampling technique. According to Ary, Jacobs, Sorensen & Razavieh (2010, p.150), simple random sampling technique is a sampling technique which all members of the population have an equal and independent chance of being included in the random sample.

Moreover, Arikunto (2006) states that if the total population is less than 100, it is better to take all of them as the sample but if the total populations are more than 100 students, the sample can be taken between 10-15 % or 20-25% or more. Regarding the previous idea, the researcher took 15% of the sample. Thus, the researcher took 44 students as sample of the research.

The sample were taken randomly from 8 classes of the tenth grade which consisted of 288 students by using lottery technique. Every students had the same opportunity to be sample of this research. The researcher took 5-6 students per class. Here are the steps to take the sample:

a) The researcher cut paper into 37 pieces.
b) The researcher wrote number 1 to 6 in the six pieces of paper and the the other pieces of paper were blank.
c) The researcher rolled them and put them into a bottle.
d) The researcher shook the bottle, then asked the students from the population to take the pieces of paper.

e) The students who got the number would be the sample of the research.

f) Then, the sample chosen were collected in one class.

E. Technnique of Collecting Data

In this research the researcher used two kinds of techniques for collecting the data, they were:

1. Questionnaire

According to Arikunto (2006, p. 151), questioners are the statements or questions used to get the particular information from the respondent. In this study, the researcher makes 25 questions based on the indicators of students' reading interest that discussed in operational concept. And it will be indicated by using the scale information of the sample rating schedule items namely; Always, Often, Seldom, and Never.

For further information about the contents of the questionnaire, the researcher shows the blueprint of the questionnaire as follows:

Table III.2
Blue Print of Students' Reading Interest

No	Indicator	Question	Number of item
1	The students read in their spare time	1,4,13,16,20	5
2	The students read with their own willingness	3,7,11,14,23	5
3	The students read continuously	2,6,8,12,18	5
4	The students makes reading as a necessity	5,10,15,21,24	5
5	The students feel enjoy when reading	9,17,19,22,25	5
TOTAL		**25**	

After the students do the questionnaire, the researcher then takes total score from the result of reading interest. The classification of the students' score is as follows (Arikunto, 2011, p.245)

Table III.3
The Classification of Students' Score

Score	Category
80-100	Very Good
66-79	Good
56-65	Enough
40-55	Less
30-39	Fail

2. Test

As Brown (2003, p. 3) stated that a test is a technique of measuring a person's ability, knowledge or performance in a given domain. This technique was used to find out the students' ability in writing descriptive texts. Hence, the researcher used written test to assess students' writing ability. As Hughes (1989) in Weigle (2002, p. 1) stated that the best way to test people's writing ability is to get them to write. In this research, the type of students' writing performance was responsive. As Brown (2003) stated that the students at responsive level should be able to perform at a limited discourse, connecting sentences into a paragraph and creating a logically connected sequence of two or three paragraphs. Therefore, the researcher asked the respondents to write simple descriptive paragraphs.

Hughes (1989, p. 104) stated that assessing and scoring students' writing can be done by using ESL Composition Profile. ESL

Composition Profile provides some criterias that should be measured by the teacher. It can be seen as follows:

Table III. 4
ESL Composition Profile

	Score	Criteria
CONTENT	30-27	Excellent to very good: knowledgeable; substantive; thorough development of thesis; relevant to assigned topic
	26-22	Good to average: some knowledge of subject; adequate range; limited development of thesis; mostly relevant to topic, but lacks detail
	21-17	Fair to poor: limited knowledge of subject; little substance; inadequade development of topic
	16-13	Very poor: does not show knowledge of subject; non-substantive; not pertinent; or not enough to evaluate
ORGANIZATION	20-18	Excellent to very good: fluent expression; ideas clearly stated/supported; succinct; well organized; logical sequencing; cohesive
	17-14	Good to average: somewhat choppy; loosely organized but main ideas stand out; limited support; logical but incomplete sequencing
	13-10	Fair to poor: non-fluent; ideas confused or disconnected; lacks logical sequencing and development
	9-7	Very poor: does no communicate, no organization or not enough to evaluate
VOCABULARY	20-18	Excellent to very good: sophisticated range; effective word/idiom choice and usage, word form mastery; appropriate register
	17-14	Good to average: adequade range; occasional errors of word/idiom form, choice, usage but meaning not obscured
	13-10	Fair to poor: limited range; frequent errors of word/idiom form, choice, usage; meaning confused or obscured
	9-7	Very poor: essentially translation; little knowledge of English vocabulary, idiom, word form; or not enough to evaluate
LANGUAGE USE	25-22	Excellent to very good: effective complex constructions; few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions
	21-18	Good to average: effective but simple constructions; minor problems in complex constructions; several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions but meaning seldom obscured
	17-11	Fair to poor: major problems in simple/complex constructions; frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions; meaning confused or obscured
	10-5	Very poor: virtually no mastery of sentence construction rules; dominated by errors; does not communicate; or not enough to evaluate
MECHANICS	5	Excellent to very good: demonstrates mastery of conventions; few errors of spelling, punctuation, capitalization, paragraphing
	4	Good to average: occasional errors of spelling, punctuation, capitalization, paragraphing but meaning not obscured
	3	Fair to poor: frequent errors of spelling, punctuation, capitalization, paragraphing; poor handwriting; meaning confused or obscured
	2	Very poor: no mastery of conventions; dominated by errors of spelling, punctuation, capitalization, paragraphing; handwriting illegible; or not enough to evaluate

Explanation of the score:

Content : 30
Organization : 20
Vocabulary : 20
Syntax : 25
Mechanics : 5
Total : 100

After the students do the test, the researcher then takes total score from the result of writing ability. The classification of the students' score is as follows (Sudijono, 2007, p.35):

Table III.5
The Classification of Students' Score

No.	Score / Range	Criteria
1.	80 – 100	Very Good
2.	70 – 79	Good
3.	60– 69	Sufficient
4.	50 – 59	Less
5.	0 – 49	Fail

3. Validityof the Instruments

In conducting research, the instrument that the researcher used to collect the data should be valid and reliable. Validity and Reliability are the standardized criteria of instruments. As Brown (2003) stated that validity is criteria of an instrument which measures what it is supposed to be measured. In line with the idea above, Hughes (1989, p. 22) also stated that a test is said to be valid, if it measures accurately what it is intended to measure.

In this research, the researcher used construct and content validity. Construct validity was used to know the validity of questionnaire. As Weigle (2002, p. 49) pointed out that construct validity refers to the

process of determining whether a test is actually measuring what it is intended to measure. While the content validity was used to know the validity of written test. According to Brown (2003), content validity refers to the content of the test that provides samples about the subject matter being measured. It means that the design of the test should be based on the material that the students have learned. Hence, the researcher gave the test based on the material that the students have learned.

To know whether the data is valid, the data was calculated by using SPSS 16.0 windows program. The researcher examined and noted the differences between $r_{item}$and $r_{table.}$ Siregar (2017) stated that the item is valid if the value of $r_{item}$is higher that r_{table} at significance level of 5%. The data was consulted with r_{table} at significance level of 5% (α = *alpha* = 0.05). The questionnaire and the test were tried out to 20 students, meaning that N= 20 with. The researcher took N 20, so r_{table} acquired was 0.444 (See in appendic r table).

The result of questionnaire indicated that all items were valid. It can be seen as follow:

Table III.6
The Validity of Students' Reading Interest Questionnaire

Items	r_{item}	r_{table}	Status	Information
1	0.507	0.444	Valid	Used
2	0.493	0.444	Valid	Used
3	0.497	0.444	Valid	Used
4	0.498	0.444	Valid	Used
5	0.527	0.444	Valid	Used
6	0.548	0.444	Valid	Used
7	0.589	0.444	Valid	Used
8	0.65	0.444	Valid	Used
9	0.49	0.444	Valid	Used
10	0.527	0.444	Valid	Used
11	0.558	0.444	Valid	Used
12	0.58	0.444	Valid	Used
13	0.525	0.444	Valid	Used
14	0.559	0.444	Valid	Used
15	0.619	0.444	Valid	Used
16	0.542	0.444	Valid	Used
17	0.484	0.444	Valid	Used
18	0.505	0.444	Valid	Used
19	0.555	0.444	Valid	Used
20	0.495	0.444	Valid	Used
21	0.68	0.444	Valid	Used
22	0.592	0.444	Valid	Used
23	0.499	0.444	Valid	Used
24	0.488	0.444	Valid	Used
25	0.536	0.444	Valid	Used

The table above shows the validity of students' autonomy in reading questionnaire try out. Based on the table, all items are valid because $r_{item} > r_{table}$. Because all items are valid, the researcher used all the items to be tested to the sample.

4. Reliability of the Instruments

Brown (2003, p. 20) says that reliability has to do with accuracy of measurement. This kind of accuracy was reflected in obtaining of similar results when measurement was repeated on different occasion or with different instruments or by different person. The characteristic of

reliability was sometimes termed consistency. The following table is the level of internal consistency of Cronbach Alpha (Cohen, 2007, p. 506).

Table III.7

A commonly accepted rule of thumb for describing internal consistency by using Cronbach Alpha

Cronbach Alpha	Internal Consistency
>0.90	Very highly reliable
0.80 - 0.90	Highly reliable
0.70 – 0.79	Reliable
0.60 – 0.69	Minimally reliable
<0.60	Unacceptably low reliability

To obtain the reliability of the questionnaire given, the Researcher used SPSS 16.0 program to find out whether or not the questionnaire is reliable.

Table III.8
Cronbach Alfa Table
Reliability Statistics

Cronbach's Alpha	N of Items
.897	25

Based on analysis above, the value of Cronbach's Alpha was 0.897 which was higher than 0.60. It could be said that the questionnaire is reliable. Due to 0.71-1.0, the level of reliability was highly reliable.

5. The Normality Test of the Data

Kadir (2015, p.143) said that when researchers want to do an inferential statistic, they should do the normality test for the data. The normality test is used to know the distribution of data was normal or not. In order to know whether the data were normally distributed, the

researcher did the test by using SPSS 16.0 versions. The result can be seen as follows:

Table III.9
Normality test of the data

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Students' Reading Interest	.087	44	.200*	.974	44	.414
Students' Writing Ability	.087	44	.200*	.975	44	.448

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

If the significance level sig. value> 0.05, the data distribution is normal. From the output of the table III.10 above, it can be seen that Kolmogorov-Smirnov sig. or p-value of students' reading interest is 0.200 and sig or p-value of writing ability is 0.200, it is compared with 0.05 that 0.200> 0.05 and also 0.200> 0.05, it means that the data is normally distributed. On the other hand, the data of students' reading interest scores and their writing ability scores are normal.

F. Technique of Analyzing Data

In order to find out whether there is a significant correlation between students' reading interest and their writing ability, the data was analyzed by using statistical formula. Because the data is normally distributed, the researcher used Pearson product-moment correlation technique to analyze the data. The hypothesis are as follow:

H_0 : Sig. (2-tailed) > α (0.05)

H_a : Sig. (2-tailed) < α (0.05)

H_0 is accepted if the value of sig. (2-tailed) > α (0.05). It means that there is no significant correlation between students' reading interest and their writing ability at tenth grade of state senior high school 1 Kampar.

H_a is accepted if the value of sig. (2-tailed) < α (0.05). It means that there is a significant correlation between students' reading interest and their writing ability at tenth grade of state senior high school 1 Kampar.