CHAPTER III

METHODS AND PROCEDURES

This chapter presents: (1) research design; (2) variables of the study;(3) operational definition;(4) subject of the study;(5)data collection; (6) research instruments analysis;(7) data analysis; and(8) hypotheses testing.

3.1 Research Design

This study was conducted by using quantitative research. According to Creswell (2009) "Quantitative research is a means for testing objective theories by examining the relationship among variables. These variables in turn, can be measured. Typically on instruments, so that numbered data can be analyzed using statistical procedures" (p. 4). This study was conducted by using an experiment research. Considering the research of the problems and the purposes of the research, research design that used in this study is the pretest-post-test two treatment designs because there were two independent variables in this study. Cohen, Manion and Morrison (2007) state that Participants are randomly allocated to each of two experimental groups. First experimental group receives intervention 1 and second experimental group receives intervention 2. The true experiment can also be conducted with one control group and two or more experimental groups (p. 278).

Cohen, et.al (2007) defines the figure of the pretest-post-test two treatment designs as follows (p. 279):

Experimental1	**RO1 X1 O2**
Experimental2	**RO3 X2 O4**
Control	**RO5 O6**

Where:

RO1 : Pretest in first experimental group

RO3 : Pretest in second experimental group

RO5 : Pretest in control group

X1   : Treatment in first experimental group using Self-correction

X2   : Treatment in second experimental group using Peer-correction

O2   : Posttest in first experimental group

O4   : Posttest in second experimental group

O6   : Posttest in control group

3.2 Research Variables

In this study, there were two terms of variables that are frequently mentioned in the literature are independent and dependent variables. According to Cohen, et.al (2007), "a variable can be considered as a construct, operational construct or particular property in which the researcher is interested" (p. 504).There were two kinds of variable. They are independent variable and dependent variable. Creswell (2012) argues that"dependent variable is an attribute or characteristic that is dependent on or influenced by the independent variable. An independent variable is an attribute or characteristic that influences or affects an outcome or dependent variable" (p. 115).Therefore the independent variable in this study is self correction technique and peer correction technique, and the dependent variable is the students' recount writing comprehension achievement.

3.3 Operational Definitions

The title of this study is "The Comparative Study between Self-correction and Peer-correction in Improving Writing Achievement in Recount Text of the Tenth Grade Students of SMA Aisyiyah Palembang". In order to avoid the possibility of misinterpretation about the terms in this research, it is necessary for the writer to define them. They are:

1. **Writing Achievement**

    Writing achievement is the students' ability in expressing their ideas, thoughts and feelings in writing that is measured by a writing test which is the test assigned in the form of grades. In this study, the writing achievement of the tenth grade students of SMA Aisyiyah Palembang.

2. **Recount Text**

    Recount text is a text which retells events or experiences in the past. It has three types, they are; personal recount, factual recount, and imaginative recount. The purposes of recount text are either to inform an event or to entertain reader. In this study, recount text will be applied on students at SMA Aisyiyah Palembang.

3. **Self-correction**

    Self-correction is a personal correction of writing that there is a process of read, analyzed, correct, and evaluates our own writing. It is to measure how far the students' achievements in writing recount text after doing self-correction. In this study, the students in the first experimental class at SMA Aisyiyah Palembang will be taught by using self correction technique.

4. Peer-correction

Peer-correction is a process of students in read, analyzed and giving feedback to their peers' writing produce based on some items to be assessed. The students' will work with their classmates to check their writing and fill peer correction sheet.In this study, the students in the second experimental class at SMA Aisyiyah Palembang will be taught by using peer correction technique.

3.4 Subject of the Study

3.4.1 Population

In this study, I used population from senior high school. Creswell (2012) states that"population is a group of individuals who have the same characteristic" (p. 142). Population in this study is the tenth grade students of SMA Aisyiyah Palembang. The distribution of population of the study can be seen below.

Table 2
The Population of the Study

No. Class	Genre		Number of Students
	Female	Male	
1. X. IPS 1	14	16	30
2. X. IPS 2	17	13	30
3. X. IPS 3	16	17	33
4. X. IPA	18	22	30
Total	**64**	**60**	**127**

(*Source: SMA Aisyiyah Palembang in academic year 2017/2018*)

3.4.2 Sample

In this study, the sample was the tenth grade students in SMA Aisyiyah Palembang. In accordance with Fraenkel, et. al.(2012), "a sample in a research study is the group on which information is obtained" (p. 91). In this study, I will use

purposive sampling in choosing the sample of the study. According to Fraenkel and Wallen (2012), "purposive sampling is different from convenience sampling in that researcher do not simply study whoever is available but rather use their judgement to select a sample that they believe, based on prior information, will provide the data they need" (p. 100). The reason why this sampling technique is applied because after I had an interviewed and discussed with one of the English teacher at SMA Aisyiyah Palembang, the writer was asked to use three classes as the sample for first experimental group, second experimental group and control group. Then the teacher recommended class X. IPS 1, X.IPS 2, and X.IPA since they have the same criteria, both of first and second experimental group and control group sample are taught by the same teacher and same the number of students.

Table 3
Distribution of Sample

| No. | Class | Genre | | Number of Students |
		Female	Male	
1.	X. IPS 1	14	16	30
2.	X. IPS 2	17	13	30
3.	X. IPA	12	18	30
	Total	**43**	**47**	**90**

(*Source: SMA Aisyiyah Palembang in academic year 2017/2018*)

3.5 Data Collection

3.5.1. Test

In doing this study, I used test to collect the data. Brown (2004) states that "test is a method of measuring a person's ability, knowledge, or performance in a given domain" (p.3).The test that will be given by the researcher to the experimental

is writing test. The purpose of the test is to measure students' writing achievement before and after the treatments in the experimental group by using self-correction and peer-correction technique. The writer will use the pre-test and post-test. The instrument which is used in pre-test and post-test is the same. The students will be required to write recount text by choosing one of the topics that is given by the reseacher. The test is used to find out whether or not the implementing of self correction and peer correction technique significantly improves students' achievement in writing ability.

1. **Pre-test**

   Pre-test is done before the treatments in both groups, first experimental and second experimental group. The test is aim to measure the student's basic skill of writing recount text before give the treatment which is teaching writing by using self and peer correction strategy. This test asked students to create a recount text by choosing one of the topics that is given by the reseacher.

2. **Post-test**

   In this study, the writer will give post-test to the experimental group after conducting treatments. Creswell (2012) states that "a post-test is a measure on some attribute or characteristic that is assessed for participants in an experiment after a treatment" (p. 297).The type of posttest will be the same as the pretest. The aim of giving posttest to the students is to measure students' comprehension in writing after implementing self-correction and peer-correction. The result of this test will be compared with the result of pretest in order to know the effect of teaching writing using self-correction and peer-correction to the students'recount writing achievement.

3.6 Research Instrument Analysis

3.6.1. Validity of the Test

In this study, the test is valid. Fraenkel, et. al. (2012) argue that "validity is the most important idea to consider when preparing or selecting an instrument for use. Validity test is carried out to measure whether the instruments for pretest or post-test activities are valid or not" (p.147). There are two kinds of validity to be used. They are as follows:

1. Construct Validity

Construct validity was used to measure the instruments. Cohen, et.al (2007) argues that "a construct is an abstract; this separates it from the previous types of validity which dealt in actualities-defined content" (p. 138).The construct validity of this study involves items for pre-test and post-test and lesson plans for first experimental and second experimental group.After constructing the instruments related to some aspect measured, then it is consulted to achieve some expert judgments from at least three validators to evaluate whether the components of the instrument are valid or not to be applied in research activities. There are some characteristics of validators and raters, such as 1) English educational background, 2) Lecturer of English, and 3) Minimum 550 TOEFL score.

2. Content Validity

If the content of the test includes representative of the domain to be measured, then the test maintains content validity. Yaghmaie (2003) explains that "content validity is used to measure the variables of interest. It can be used to measure the appropriate sampling of the content domain of items in a test"(p. 25). In order to judge whether or not a test has content validity, a specification of the skills

or structures should be made based on the curriculum and syllabus.The instrument focused on recount text.

Table 5
Test of Specification Table

Objective	Material	Indicator	Types of Test	Number of Item
The students are able to write recount text by using self correction and peer correction technique.	Recount text - My holiday - Birthday's celebration - My unforgettable moment	The students are able to write a good recount text.	Written test	1

3.6.2. Reliability Test

Reliability means the stability of the test score. Fraenkel, et al. (2012) state that "reliability refers to the consistency of the scores obtained how consistent they are for each individual from one administration of an instrument to another and from one set of items to another" (p. 154). inter-rater reliability will be used to measure whether the test is reliable or not. Inter-rater reliability occures when two or more scores yield inconsistent scores of the same test, possibility for lack or attention for scoring criteria, inexperience, inattention, or even preconceived biases (Brown, 2004, p. 21). Further, the reliability of writing test was obtained. It was measured from the result of three experts judgement. The result showed that the writing test with aspects of instruction, aspects of cognitive achievement test coverage, aspects oflanguage were appropriate. All in all, the writing test was reliable.

1.6.3 Recount Writing Rubric

For the writing rubric, recount writing rubric from www.rcampus.com will be used which is divided the scale of writing composition into five aspects namely structure, language, editing, spelling, and paragraphs which have different details of criteria. The recount writing scoring rubric is described in the following table:

Table 5
Recount Writing Rubric

	Partial 1 Point	Partial 2 Point	Partial 3 Point	Partial 4 Point	Partial 5 Point
STRUCTURE • Use of Recount Text	• Text is not structured	• Minimal Evidenc of an orientation,sequence of events, orientation	•Some evidence of an orientation,sequence of events and are orientation	• Shows evidence of anorientation, sequence of events and areorientation	• Sows clear evidence of anorientation, sequence of events and are orientation.
• Sequences		• are not sequenced	•events mostly sequenced	• events are sequenced chronological order	• events are sequenced in avery clear and chronological order
LANGUAGE • Sequencing Language	• No usage of sequencing language	• Little usage Of sequencing language	• Evidence of usage of sequencing language	• Good usage Of sequencing language	• Excellent usage of sequencing language
• Tense	• No use of correct tense	• Low frequency of correct tense	• Correct tense mostly used	• Use of correct tense	• High frequency of correct tense
EDITING	Work is not Edited	Little editing is evident	Editing is Evident	Text is edited	Text is well Edited

SPELLING	Most familiar words are spelt incorrectly	Some spelling errors of familiar words	Accuracy in spelling with most familiar words, some correct spelling with specialized	All familiar words are spelt correctly, most specialized words are spelt correctly	All words are spelt correctly
PARAGRAPHS	No evidence Of paragraphing	No evidence Of paragraphing	Some usage Of paragraphing, related to structure	Evidence of short paragraph for each main ideas	Evidence of short paragraphs with detail for each main idea

Source: www.rcampus.com

1.7 Research Treatment

I taught recount writing to the first experimental and second experimental group. In conducting the study, the first experimental group will be given treatment by using Self Correction Technique for 12 meeting, and the second experimental group will be given treatment by using Peer Correction Technique for 12 meeting. The meeting are including pre-test and post-test. The time allocations for each meeting 2 x 45 minutes. I divides the procedure in teaching the experimental group into three stage:

3.7.1 Research Treatment in First Experimental Group

    a. Pre –Activities (10 minutes)

1) Greetings

Teacher greets students by saying good morning and asks the students' condition.

2) Teacher checks the students' attendance list by calling their name.

3) Introducing material

Teacher gives the brainstorming by asking the students about their experience and the students answer it orally

4) The teacher gives motivation to the students

5) Teacher introduces topic to the students

b. While – Activities (60 minutes)

1) The teacher explains the material about recount text such as the definition and purpose of recount, generic structure and language feature.

2) The teacher gives the example of recount text.

3) The teacher lets students to ask some questions about recount text.

4) Teacher explains to the students how to make a recount text.

- Teacher asks students to make a recount text about holiday.

- Students list some vocabularies related to their experience in holiday, it is about "when, who, and where" and events in the holiday.

- Teacher is directs students to make sentences and paragraphs based on the vocabulary.

- Student writes a recount text.

- After finishing their writing, they start to revise the draft. Teacher tells procedures how to do peer correction.

- Each student exchanges their text with their peers.

- Student reads and reviews their peer draft.

- To knowing their mistakes and the problem, the teacher will outline the mistakes that may occur in their writing that contains five items/ aspects:

- Students will check their text and underline the mistakes with using the coding that the teacher have given.

- Students write comments and suggestions after revise in the text. Students are asked to return the draft and guideline sheets to the owner.
- The teacher check the feedback and then students are asked to rewrite their recount text based on their peer feedback

c. Post – Activities (10 minutes)

1) Teacher asks students if they have difficulties about the material that was given and to revise their written text.

2) Teacher concludes the material

3) Teacher ends the meeting.

Table 6

Teaching Material of First Experimental Group

No	Meeting	Time Allocation	Activity	Resources	Date
1	1st Meeting	1x 60 Minutes	Pre-Test		April 11th 2018
2	2nd Meeting	1x60 Minutes	Generic structure, Language Features, Example Introduction of Peer Correction Technique	*Interlanguage: English for Senior High School Students X*	April 16th 2018
3	3rd Meeting	1x60 Minutes	Factual recount:Biographical Recount : Talking about Important Person in the World	*Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014* http://www.manythings.org/voa/people/	April 18th 2018

4	4th Meeting	1 x 60 Minutes	Factual Recount: Biographical Recount: Talking about an Idol	*Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014* *BSE: Developing English Competencies for Senior High School (SMA/MA) / Departemen Pendidikan Nasional 2008*	April 23rd 2018
5	5th Meeting	1x60 Minutes	Factual Recount Biographical Recount: writing biographical recount and do peer correction	Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014	April 25th 2018
6	6th Meeting	1x60 Minutes	Factual Recount: Historical Event: History of Palembang	http://www.britannica.com/place/Palembang	April 30th 2018
7	7th Meeting	1x60 Minutes	Personal Recount: Keeping A Diary	Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014	April 2nd 2018
8	8th Meeting	2x40 Minutes	Personal Recount: writing recount text "Unforgettable Experience" and do peer correction	*Interlanguage: English for Senior High School Students X*	May 5th 2017
9	9th Meeting	1x60 Minutes	Personal Recount: Wonderful Holiday	*BSE: Developing English Competencies for Senior High School (SMA/MA) / Departemen Pendidikan Nasional 2008*	May 7th 2017
10	10th	1x40	Personal Recount: writing recount text "childhood	*Interlanguage: English for Senior High School*	May 9th 2017

	Meeting	Minutes	experience" and do peer correction	*Students X*	
11	11st Meeting	1x 60 Minutes	Procedural Recount: My friends' Science Project	http://estijatenglishlesson.blogspot.co.id/2014/02/a-procedural-recount-text.html	May 12nd2017
12	12th Meeting	1x60 Minutes		Post-Test	May 14th2017

1.7.2 Research Treatment in Second Experimental Group

a. Pre –Activities (10 minutes)

1) Greetings

   Teacher greets students by saying good morning and asks their condition

2) Teacher check the students' attendance list by calling their names

3) Introducing material

   Teacher gives the brainstorming by asking the students about their experience and the students answer it orally

4) The teacher gives motivation to the students

5) Teacher introduces topic to the students

b. While – Activities (60 minutes)

1) The teacher explains about recount text to the students

2) The teacher explains the generic structure and language features and types of recount text.

3) The teacher gives the example of recount text.

4) The teacher lets students to ask some questions about recount text.

5) Teacher explains to the students how to make a recount text.

- Teacher asks students to make a recount text about holiday.

- Students list some vocabularies related to their experience, it is about "when, who, and where" and events.

- Teacher is directs students to make sentences and paragraphs based on the vocabulary.

- Student writes a recount text.

- After finishing their writing, they start to revise the draft. In this step, the self-correction is used. To knowing their mistakes and the problem, the teacher will outline the mistakes that may occur in their writing that contains five items/ aspects

- Students will check their text and underline the mistakes with using the coding that the teacher have given.

- Students rewrite their text, following the result from the revising activity.

c. Post – Activities (10 minutes)

1) Teacher asks students if they have difficulties about the material that was given and to revise their written text.

2) Teacher concludes the material

3) Teacher ends the meeting.

Table 7
Teaching Material for Second Experimental Group

No	Meeting	Time Allocation	Activity	Resources	Date
1	1st Meeting	1x 60 Minutes	Pre-Test		April 12th2018

No	Meeting	Time	Material	Source	Date
2	2nd Meeting	1x60 Minutes	Generic structure, Language Features, Example Introduction of Peer Correction Technique	*Interlanguage: English for Senior High School Students X*	April 17th 2018
3	3rd Meeting	1x60 Minutes	Factual recount:Biographical Recount : Talking about Important Person in the World	*Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014* http://www.manythings.org/voa/people/	April 19th 2018
4	4th Meeting	1 x 60 Minutes	Factual Recount: Biographical Recount: Talking about an Idol	*Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014 BSE: Developing English Competencies for Senior High School (SMA/MA) / Departemen Pendidikan Nasional 2008*	April 24th 2018
5	5th Meeting	2x40 Minutes	Factual Recount Biographical Recount: writing biographical recount and do self-correction	Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014	April 26th 2018
6	6th Meeting	1x60 Minutes	Factual Recount: Historical Event: History of Palembang	http://www.britannica.com/place/Palembang	April 28th 2018
7	7th Meeting	1x60 Minutes	Personal Recount: Keeping A Diary	Bahasa Inggris: Buku Siswa Kelas X / Kementerian Pendidikan dan Kebudayaan 2014	April 1rd 2018

8	8th Meeting	2x40 Minutes	Personal Recount: writing recount text "Unforgettable Experience" and do self-correction	*Interlanguage: English for Senior High School Students X*	May 3rd2017
9	9th Meeting	1x60 Minutes	Personal Recount: Wonderful Holiday	*BSE: Developing English Competencies for Senior High School (SMA/MA) / Departemen Pendidikan Nasional 2008*	May 4th2017
10	10th Meeting	2x40 Minutes	Personal Recount: writing recount text "childhood experience" and do self-correction	*Interlanguage: English for Senior High School Students X*	May 8th2017
11	11st Meeting	1x 60 Minutes	Procedural Recount: My friends' Science Project	http://estijatenglishlesson.blogspot.co.id/2014/02/a-procedural-recount-text.html	May 12nd2017
12	12th Meeting	1x60 Minutes		Post-Test	May 14th2017

1.8 Data Analysis

3.8.1 Instrument Analyses

The data from students' writing test (pretest-postest) was analyzed by two raters. The raters were Beni Wijaya, M.Pd (Lecturer of Sriwijaya and UIN RF University), and Deta Desvitasari, M.Pd (Lecturer of Sriwijaya and UIN RF University). They were analyzed the data by using rubric for writing recount from recount assessment for year 3/4 built saraaylett. There are five aspects of writing scoring system: structure (1-5), language (1-5), editing (1-5), spelling (1-5), and paragraphs (1-5).

After collecting data to know the result of the students writing. The writer asked expert judgments to analyzed and done the scoring based on the rubric. The data were analyzed by using t-test. It was run SPSS version 24. There were two types of t-test, one-way ANOVA and two ways ANOVA to answer the research problem. The one-way ANOVA and post hoc tests to measured whether or not there were significant difference on the tenth grade students' recount writing achievement who were taught by using Self Correction, Peer Correction Technique and those who were not. Meanwhile, two-ways ANOVA to measure whether or not there was any significant difference on the tenth grade students' achievement in writing recount text on excellent category, good category, average category and poor category between self correction class, peer correction class and control class at SMA Aisyiyah Palembang.

3.8.2 Data Description

Before the data is analyzed, distribution of the data is used to see the distribution of frequency the data and descriptive statistics. The procedure in distribution of the data is described as follow:

1. **Distributions of Frequency Data**

In distributions of frequency data, the students' score, frequency, percentage is achieved. The distributions of frequency data are obtained from students' pretest-posttest scores in both experimental groups.

2. **Descriptive Statistics**

In descriptive statistics, number of sample, the score of minimal, maximal, mean, and standard deviation are analyzed. Descriptive statistics are obtained from students' pretest and posttest scores in both experimental groups.

3.8.3 Prerequisite Analysis

Before analyzing the data, pre-requisite analysis will be done to see whether the data obtain are normal and homogenous. The procedures in pre-requisite analysis as follow:

1. Normality Test

Normality test is used to measure whether the obtained data is normal or not. According to Flynn (2003) states that "a value less than 0.05 indicate that the data are non-normal" (P.17). In measuring normality test, the writer will use *1-SampleKolmogorov Smirnov* in SPSS program. The normality test is used to measure students pretest and posttest scores in experimental group. Then, the result analysis in measuring the normality test of the students pretest scores in experimental group.

2. Homogeneity Test

Homogeneity was used to measure the ability of students in self correction, peer correction and control class. According to Flynn (2003), "the data can be categorized homogenous whenever it is higher than 0.05" (p. 18). The homogeneity test is used to measure students' pretest and posttest scores in the experimental group. In measuring homogeneity test, *Levene Statistics* in SPSS program softwarewill be used.

3.8.4 Hypothesis Testing

In measuring significant difference on students' recountwriting achievementby using self-correction and peer-correction technique, as follows:

1. In measuring a significant difference between two variables, one way anova was used for testing the students' post-test scores in writing recount text in first experimental group,second experimental group and control group. A significant

difference is found whenever the p-output is lower than 0.05 and t-obtained is higher than t-table.

2. In measuring a significant difference between excellent category, good category, average category, and poor category, two ways anova was used for testing the students' post-test scores in writing recount text in first experimental group,second experimental group and control group.