CHAPTER IV

FINDINGS AND INTERPRETATION

This chapter presents: (1) findings and (2) interpretation.

4.1 Findings

The findings of this research cover: (1) data descriptions; (2) prerequisite analysis; and (3) result of hypothesis testing.

4.1.1 Data Descriptions

In data descriptions, there were two analyses. They were distributions of frequency data and descriptive statistics.In the distribution of data frequency, score, frequency, and percentage were analyzed, and in the descriptive statistics, the total of sample (N), minimum and maximum scores, mean scores, standard deviation were analyzed. The scores were acquired from: (a) pretest scores of recount writing achievement in control group, (b) posttest scores recount writing achievement in control group, (c) pretest scores of recount writing achievement in first experimental group, (d) posttest scores recount writing achievement in first experimental group

4.1.1.1. Students' Pretest Scores in Control Group

The result analysis of distribution of data frequency and descriptive statistic from the pretest scores in control group is described in table below:

Table4. Pretest Scores in Control Group

Writing Achievement Categories (Range of Score)	N	Frequencies (Percentage)	Minimum	Maximum	Mean	Std.Deviation
Excellent (21-25)		0 (0%)				
Good (16-20)		0 (0%)				
Fair (10-15)		7 (29.1%)	6.00	14.00	9.09	2.104
Poor (<10)		17 (70,9%)				
Total		24 (100%)				

Based on the table above, it was found that there wereone student (4,2%)got6, five students (20,8%)got7 ,five students (20,8%)got8 ,six students(25%) got 9, one student (4,2%) got 10, two students (8,3%) got 11, two student (8,3%) got 12 , one student (4,2%) got13, One student(4.2%) got 14 The total number of samples was 24 students. The minimum Pretest scores was 9.00, the maximum score was 17.00, the mean score was 12.88and the standard deviation was 2.193. it means that, most of students were in poor category (fair category)

4.1.1.2 Students' Posttest Scores in Control Group

The result analysis of distribution of data frequency and descriptive statistic from the post test scores in control group is described in tablebelow:

Table5. Posttest Scores in Control Group

Writing Achievement Categories (Range of Score)	N	Frequencies (Percentage)	Minimum	Maximum	Mean	Std.Deviation

Excellent (21-25)	30	0 (0%)				
Good (15-20)		0 (0%)				
Fair (10-14)		14 (58,3%)	7.00	14.00	10.38	2.356
Poor (<10)		10 (4,16%)				
Total		24 (100%)				

Based on the table above, it was found that there were three students (12,5%)got 7, five students(20.8%)got8, two students (8,3%)got 2, one students(4.2%) got 10, three students (12.5%) got 11, five students (20,8%) got 12, three students (12.5%) got 13 , two students (8.3%) got14,The total number of samples was 24 students. The minimum Pretest scores was 7.00, the maximum score was 14.00, the mean score was 10.38 and the standard deviation was 2.356. it means that, most of students were in fair category (fair category)

4.1.1.3 Students' Pretest Scores in Experimental Group

The result analysis of distribution of data frequency and descriptive statistic from the pretest scores in experimentsl group is described in tablebelow:

Table 6. Pretest Scores in experimental Group

Writing Achievement Categories (Range of Score)	N	Frequencies (Percentage)	Minimum	Maximum	Mean	Std.Deviation
Excellent (21-25)		0 (0%)				
Good (15-20)		0 (0%)				
Fair (10-14)		4 (16.8%)	6.00	14.00	8.33	1.926
Poor (<10)		20 (82.8%)				
Total		24 (100%)				

Based on the table above, it was found that there werethree student (12,5%)got 6, six students(25%)got7, six students (25%)got 8, five students(20.8%) got 9, one student (4,2%) got 10, one student (4,2%) got 11, one student (4.2%) got 12 , one students (4.2%) got14,The total number of samples was 24 students. The minimum Pretest scores was 6.00, the maximum score was 14.00, the mean score was 8.33 and the standard deviation was 1.926 it means that, most of students were in fair category (poor category)

4.1.1.4. Students' Posttest Scores in Experimental Group

The result analysis of distribution of data frequency and descriptive statistic from the posttest scores in experimentsl group is described in tablebelow:

Table 7. Posttest Scores in experimental Group

Writing Achievement Categories (Range of Score)	N	Frequencies (Percentage)	Minimum	Maximum	Mean	Std.Deviation
Excellent (21-25)	30	0 (0%)				
Good (15-20)		10(41,67%)				
Fair (10-14)		12 (50%)	7.00	20.00	13.33	3.306
Poor (<10)		2 (8.33%)				
Total		24 (100%)				

Based on the table above, it was found that there wereone student (4.2%)got 7, one student(4,2%)got8, two students (8,3%)got10, four students(16,7%) got 11, four student

(16,7%) got 12, one students (4.2%) got 13, one student (4,2%) got 14 , three students (12,5%) got15, three student (12,5%) got16, one student (4.2%) got 17, two students(8,3%) got 18, one student (4,2%) got 20 .The total number of samples was 24 students. The minimum Pretest scores was 7.00, the maximum score was 20.00, the mean score was 13.33 and the standard deviation was 3.306. it means that, most of students were in fair category (fair category)

4.1.2 Prerequisite Analysis

In prerequisite analysis, there were two analyses conducted done. They were normality test and homogeneity test.

4.1.2.1Normality Test

In measuring normality test, *1 Sample Kolmogorov-Smirnov* was used. The normality test was used to measure students' pretest and posttest in control and experimental group

(1) Students' Pretest Scores in Control and Experimental Groups

The computations of normality used the computation in SPSS 21. The result of analysis is figured out in Table 8 below:

Table 8
The Result of Normality Test of Students' Pretest in Control and Experimental Groups

No	Students' Pretest	N	Kolmogrov Smirnov	Sig.	Result
1	Control Group	24	1.098	0.179	Normal
2	Experimental Group	24	0.970	0.304	Normal

Based on the table above, the result showed that the significance value of the students' pretest in control group was 0.179, while the experimental group was 0.304. therefore, it could be stated that the students' pretest score in experimental and control groups were considered normal since the result of the 1-sample kolmogronov smirnov were higher than 0.05.

(2) Students' Posttest Scores in Control and Experimental Groups

The computations of normality used the computation in SPSS 21. The result of analysis is figured out in table 9below:

Table 9

The Result of Normality Test of Students' Posttest in Control and Experimental Groups

No	Students' Posttest	N	Kolmogrov Smirnov	Sig.	Result
1	Control Group	24	0.865	0.442	Normal
2	Experimental Group	24	0.767	0.598	Normal

Based on the table above, the result showed that the significance value of the students' posttest in control group was 0.192, while the experimental group was 0.160. From the score, it could be stated that the students' posttest score in experimental and control groups were considered normal since the result of the 1-sample kolmogronov smirnov were higher than 0.05.

4.1.2.2Homogeneity Test

In measuring homogeneity test Levene statistics was used. Levene statistics is a formula that issued to analyze the homogeneity of the data. The homogeneity test was used to measure students' pretest scores in experimental and control groups, and students' posttest scores in experimental and control groups.

(1) Students' Pretest Scores in Control and Experimental Group

Table 10

Homogeneity Test of Students' Pretest Scores in Control and Experimental groups

No	Students' Pretest	N	Levene Statistics	Sig.	Result
1	Control Group	24	2.916	0.94	Homogenous
2	Experimental Group	24			

Based on table above, it was found that the p-output is 0.94. Therefore, it could be stated that the obtained score from students' pretest in experimental and control groups are homogenous, because it is higher than 0.05

(2) Students' Posttest Scores in Control and Experimental Group

Table 11
Homogeneity Test of Students' Posttest Scores in Control and Experimental group

No	Students' Posttest	N	Levene Statistics	Sig.	Result
1	Control Group	24	0.294	0.590	Homogenous
2	Experimental Group	24			

Based on table above, it was found that the p-output was 0.590. Therefore, it could be stated that the obtained score from students' posttest in experimental and control groups are homogenous, because it is higher than 0.05.

4.1.3 The Result of Hypotheses Testing

In this study, Paired sample t-test used to measure significant improvement on students' recount writingachievement score taught by using Concept Map Technique at SMA Aisyiyah Palembang before and after treatment. Independent sample t-test was used to measure a significant difference on students'recount writing achievement score taught by using Concept Map Technique and those who were not at SMA Aisyiyah.

4.1.3.1 Measuring Significant Improvement on Students' Writing Achivement in Experimental Group

In this study, paired sample t-test was used to measure the significant improvement on

the tenth grade students'recount writing achievement taught by using Concept Map Technique by company the result of students' pretest and posttest scores. The result analysis of paired sample t-test is described in Table 12.

Table 12

Result Analysis of Measuring Significant Improvement from Students' Pretest to Posttest Scores in Experimental Group

Using Concept Map Technique	Paired Sample T-Test					Ho	Ha
	Test	Mean	T	Df	Sig. (2-tailed)		
	Pretest Posttest	10.83 1.5000	19280	47	0.000	Rejected	Accepted

Based on the table analysis, it was found that the p-output was 0.000 and t-value was 19.280 therefore, it could be stated that there was a significant improvement on students recount writing who are taught by using Concept Map Technique since the p-output was lower than 0.05 and the t-value was higher than t-table withdf=47. Thus, it can be concluded that the null hypothesis (Ho) was rejected, and the alternative hypothesis (Ha) was accepted.

Moreover, it was found that t-value was 19.280 which that the means score of pretest was lower than mean score of pretest was lower than mean score of posttest. Therefore, it could be said that the treatment by using Concept Map Technique could improve the students' score.

4.1.3.2 Result Analysis of Independent Sample T-test from Students' Posttest Scores in Control and Experimental Groups.

In this research, independent sample t-test was used to measure the significant difference on students' recount writing scores between those who are taught by using Concept

Map Technique and those who were not at SMA Aisyiyah Palembang. The analysis result of independent sample t-test was figured out in table 13 below.

Table 13
Result Analysis of Independent Sample T-test from Students' Posttest Scores in Control and Experimental Groups

Using Concept Map Technique	Independent Sample t-Test					Ho	Ha
	Group	Mean	T	Df	Sig. (2-tailed)		
	Control	10.38	-3.570	46	0.001	Rejected	Accepted
	Experimental	13.33					

Based on the table above, it was found that the p-output was 0.001 with df=46 (1.9955), and t-value= 3.570. The null hypothesis (Ho) was rejected, and the alternative hypothesis (Ha) was accepted. Therefore, it could be stated that there was significant difference on the tenth grade students'recount writing achievementwho are taught by using Concept Map Technique and those who were not a SMA Aisyiyah since the p-output was lower than 0.05 and the t-value (-3.570) was higher than t-table.

4.2 Interpretation

Based on the findings which have been described in the previous section, it was found that there were two conclusions. First, there was significance improvement from students' pretest to posttest scores in experimental group taught by using Concept Map Technique, the benefit of this technique can make the students easy to write down recount text by giving them so many ideas about the topic in order to easier the students write the sentences. The students divided to some groups and they make a recount writing with the theme already prepare by reseacher and than they do in group, after that they essay change with other group and they correction their friends writing and give comments about it. Students more active in steps they write the essay in group because they exchance thoughts in making up stories in

steps they so happy because they should liken the opinion so that the story is connected.

Second, there was significant difference between students' posttest score in control and experimental groups the differentiate both experimental and control group, in control group the students some have quite a few ways to compused but they are not still free writing systems in writing, while in experimental group the students many still do not understand how to compused because they do not understand the meaning of the English language so that they face difficulty to compused. In terms make they different about an understanding of their writing habits makes a difference.In do the pretest the control group the students are more concocted and some of his essay is good although there are many structures that are wrong, while in experimental group students really do not understand what they want to write due to their limited time and understanding of writing and they find it difficult to determine the title of the given theme by reseacher but in post test, the experimental group have started to understand how to write well so they can easily while writing and they have started to excel from the control group in terms of wtiting. The result indicated that Concept Map Technique could be used as good technique in teaching recount writing.

Before the students were given the treatment, the students inexperimental and control groups were given pretest. Then, students' pretest score in experimental and control groups were obtained. In doing the pretest the students felt confused and difficult to write a recount text. And the result could be seen in the table of students' pretest scores in control (table) and experimental groups (table). The result showed that X IPS got lower than X IPA. It was proven by the mean score of pretest in X IPA which was higher than X IPS. It could be assumed that experimental group was X IPS and control group was X IPA. In this case, the experimental group needed treatment by using Concept Map Technique to get better than before.

During the treatment, there were 7 meetings including pretest and posttest in

experimental group. In the first meeting, the reseacher focused on the explaining about recount text and then how to use Concept Map Technique. In the second and the third meeting, the students were still confused to use Concept Map Technique. They could not follow the procedure of Concept Map Technique easily, so the writer explain again about the procedure and discuss the generic structure recount text. In the fourth meeting, the students have begun to understand how to use Concept Map Technique, but they still get difficulty to developed their writing because they limitation in their vocabulary.

Besides, the students were also guided by Concept Map Technique. Concept Map Technique allowed the students to participate in brainstorming the idea and exchange ideas each other confidently, students are given plently of opportunities to mind mapping and developing their writing from those ideas. In the fifth to tenth meeting the students could adapt with this strategy, they could develop their writing better. They also to develop the generic structure of their recount text, and improve their mastery of grammar and vocabularies although still with help of a dictionary.

Furthermore, by using Concept Map Technique the students felt enjoyable in writing a recount text since the researcher have write their mind mapping, they could exchange their ideas, such as in giving their idea about a topic. Each student can give their idea about the topic in writing whether the ideas or information are not suitable or support in the paragraph, mistakes in grammar etc. Besides, the students felt more confident in doing their writing since they could help each other and allowed to share ideas and information with their partner by using their first language.

After conducting the treatment, both control and experimental groups were given postest. It was found out that students' pretest and posttest score in experimental and control groups. Then, the data from both of groups in pretest and posttest were analyzed by SPSS version 23 software. In analyzing normality, 1-sample kolmogrov smirnov were used. The

result students' pretest and posttest score in experimental and control groups were categorized normal. To anayzed the homogeneity, Levene statistic was used. From the result, it showed that students' pretest and posttest score in experimental and control group were homogenous. In conclusion, the data show that the abilities of the students were same.

Then, In analyzing hypothesis testing, paired sample t-test and independent sample t-test were used. The result of paired sample t-test shared that there was significant improvement between students' pretest and posttest in experimental and control group. The students of experimental group were taught by using Concept Map Technique, and the students of control group were not taught by using Concept Map Technique. Both of groups were taught recount writing achievement. It means that the students' recount writing achievement in experimental group was improved after they were taught by using Concept Map Technique.

Moreover, students' recount writing achievement in control group also got improvement but it was not as significant as the experimental group. Meanwhile, the result of independent sample t-test, it was found that there was significant difference between the students' posttest score of experimental groups who were taught by using Concept Map Technique and the control group who were taught by using strategy that was used by the teacher of English at SMA Aisyiyah Palembang. This result was consistent with many studies; some of them were conducted by Fitriyah in 2013 which prove that Concept Map is applicable be used for recount writing to the tenth grade students.

Based on the data analysis, there were significant improvement and difference on students' recount wrriting achievement taught by using Concept Map Technique. The findings proved theories explaining some advantages of this technique could be accepted. Novac and Canas (1984) state that Helping students to keep searching their cognitive structures for relevant concepts. Therefore, this technique is very effective for the students in

writing achievement to make inference from students' existing knowledge and prior knowledge.

Finally, it was inferred that the implementation of Concept Map Technique showed significant improvement and significant difference on students'recount writing achievement at SMA Aisyiyah Palembang. Concept Map Technique