CHAPTER IV

FINDINGS AND DISCUSSION

In this chapter, the writer presents discussion about research findings, normality and homogeneity testing, hypothesis testing and discussions of the research findings.

A. Research Findings

This part discusses an analysis of the ability of the first grade of MA Hasanuddin Siraman in reading comprehension when they were taught using Cooperative Script and when they were taught reading comprehension without using Cooperative Script. The samples of this research are two classes. The data of this research were the pre-test scores and post-test scores of experimental group and control group. After getting the result of the pretest and posttest of experimental group, the researcher showed the data below:

Table 4.1
Descriptive analysis of pre-test in experimental group

Statistics

pretest_eksp

N	Valid	30
	Missing	0
Mean		59.67
Std. Error of Mean		1.589
Median		57.50
Mode		55
Std. Deviation		8.703
Range		45
Minimum		35
Maximum		80
Sum		1790
Percentiles	25	55.00
	50	57.50
	75	65.00

Table 4.1 above, it showed that the mean 59.67, the median is 57.50, mode is 55, and the standard deviation is 8.703. The maximum score obtained is 80 and the minimum score is 35.

Table 4.2
Descriptive analysis of post-test in experimental group

Statistics

posttest

N	Valid	30
	Missing	0
Mean		80.00
Std. Error of Mean		1.888
Median		75.00
Mode		75
Std. Deviation		10.339
Range		40
Minimum		60
Maximum		100
Sum		2400
Percentiles	25	73.75
	50	75.00
	75	86.25

Table 4.2 above it showed the mean 80.00, the median is 75.00, mode is 75, and the standard deviation is 10.339. The maximum score obtained is 100 and the minimum score is 60.

Based on the table 4.1 and 4.2 above, shows that mean of pre-test is in experimental group was 59.67 and in post-test improved to be 80.00 . The median in the pre-test was 57.50 and 75.00 in the post-test. The mode I the pre-test was 55 and 75 in the post-test. The standard deviation in the pre-test was 8.703 and 10.339 in the post-test. The range in the pre-test was 45 and in the post-test were 40. The minimum score in the pre-test was 35 and 60

in the post-test. The maximum score in the pre-test was 80 and 100 in the post-test. The summary of pre-test was 1790 and in the post-test was 2400.

Table 4.3

Frequency of pre-test score of Experimental group

Pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	35	1	3.3	3.3	3.3
	50	2	6.7	6.7	10.0
	55	12	40.0	40.0	50.0
	60	4	13.3	13.3	63.3
	65	6	20.0	20.0	83.3
	70	3	10.0	10.0	93.3
	75	1	3.3	3.3	96.7
	80	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

In the table 4.3, 1 student or 3,3 % got 35, 2 students or 6,7 % got 50, 12 students or 40% got 55, 4 students or 13,3 % got 60, 6 students or 20% got 65, 3 students or 10% got 70, 1 student or 3,3 % got 75, 1 student or 3,3% got 80. The result considered that the students only used their background knowledge without any input about reading comprehension.

Table 4.4
Frequency of post-test score of Experimental group

Posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	60	1	3.3	3.3	3.3
	70	6	20.0	20.0	23.3
	75	9	30.0	30.0	53.3
	80	4	13.3	13.3	66.7
	85	3	10.0	10.0	76.7
	90	1	3.3	3.3	80.0
	95	4	13.3	13.3	93.3
	100	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

In the table 4.4 above, after getting the treatment students got improved their result in the post-test. The researcher organized the percentage and frequency of the test can be seen in the table 4.4. 1 student or 3.3 % got 60, 6 students or 20% got 70, 9 students or 30% got 75, 4 students or 13, 3 % got 80, 3 students or 10 % got 85, 1 student or 3,3 % got 90, 4 students or 13,3 % got 95, 2 students or 6,7 % got 100.

Table 4.5
Descriptive analysis of pre-test in the control group

Statistics

Pretest

N	Valid	30
	Missing	0
Mean		53.67
Std. Error of Mean		1.267
Median		55.00
Mode		50
Std. Deviation		6.940
Range		30
Minimum		40
Maximum		70
Sum		1610
Percentiles	25	50.00
	50	55.00
	75	60.00

Table 4.5 above, it showed that the mean 53.67, the median is 55.00, mode is 50, and the standard deviation is 6.940. The maximum score obtained is 70 and the minimum score is 40.

Table 4.6
Descriptive analysis of post-test in the control group

Statistics

Posttest

N	Valid	30
	Missing	0
Mean		60.33
Std. Error of Mean		1.173
Median		60.00
Mode		55
Std. Deviation		6.424
Range		25
Minimum		50
Maximum		75
Sum		1810
Percentiles	25	55.00
	50	60.00
	75	65.00

Table 4.6 above, it showed that the mean 60.33, the median is 60.00, mode is 55, and the standard deviation is 6.424. The maximum score obtained is 75 and the minimum score is 50.

Based on the table 4.5 and table 4.6 above, it show that mean of pre-test is in control group was 53.67 and in post-test improved to be 60.33. The median in the pre-test was 55.00 and 60.00 in the post-test. The mode in the pre-test was 50 and 55 in the post-test. The standard deviation in the pre-test was 6.940 and 6.424 in the post-test. The range in the pre-test was 30 and in the

post-test were 25. The minimum score in the pre-test was 40 and 50 in the post-test. The maximum score in the pre-test was 70 and 75 in the post-test. The summary of pre-test was 1610 and in the post-test was 1810.

Table 4.7
Frequency of pre-test score of Control Group

Pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40	2	6.7	6.7	6.7
	45	2	6.7	6.7	13.3
	50	10	33.3	33.3	46.7
	55	8	26.7	26.7	73.3
	60	5	16.7	16.7	90.0
	65	2	6.7	6.7	96.7
	70	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

In the table 4.7, 2 student or 6,7 % got 40, 2 students or 6,7 % got 45, 10 students or 33,3% got 50, 8 students or 26,7% got 55, 5 students or 16,7% got 60, 2 students or 6,7 % got 65, 1 student or 3,3 % got 75.

Table 4.8
Frequency of post-test score of Control Group

Posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50	2	6.7	6.7	6.7
	55	10	33.3	33.3	40.0
	60	8	26.7	26.7	66.7
	65	5	16.7	16.7	83.3
	70	4	13.3	13.3	96.7
	75	1	3.3	3.3	100.0
	Total	30	100.0	100.0	

In the table 4.8 After the treatment, the students got improved their score. Based on the table 4.8 above 2 students or 6, 7% got 50, 10 students or 33, 3 % got 55, 8 students or 26,7%, 5 students or 16,7% got 65, 4 students or 13,3% got 70, 1 student or 3,3 % got 75.

B. Normality and Homogeneity testing

1. Normality Testing

Normality test is used to know whether the data is in normal distribution or not. The data is called normal distribution which in the form of bell shaped. It means that the distribution of data was symmetrical it does not

skew to left or right. In calculating the normality, researcher used SPSS 23.0 for windows application.

From the *One-Sample Kolmogorov-Smirnov Test table,* the probability number or *Asymp. Sig (2-tailed)* is obtained. This value is compared with 0.05 (in this case using a significance level or α = 5%) for decision making with guidelines:

1. If the value of significance or probability < 0.05 it means that the distribution data is not normal.
2. If the value of significance or probability > 0.05 it means that the distribution data is normal.

Table 4.9 Normality Test Pre-Post Test Experimental Group

One-Sample Kolmogorov-Smirnov Test

		pretest_eksperimn	posttest_eksperimn
N		30	30
Normal Parameters[a,b]	Mean	51.83	84.50
	Std. Deviation	10.127	9.130
Most Extreme Differences	Absolute	.189	.189
	Positive	.118	.189
	Negative	-.189	-.142
Kolmogorov-Smirnov Z		1.037	1.035
Asymp. Sig. (2-tailed)		.232	.234

a. Test distribution is Normal.

b. Calculated from data.

Based on the table 4.9 above, output One Sample Kolmogorov-Smirnov Test shows that sample of experimental class are 30 students. The Asymp. Sig (2-tailed) test pretest in Experimental class was 0.232 and test posttest was 0.234.

Table 4.10 Data Normality Test Decision

Nama variabel	Asymp. Sig *(2-tailed)*	Taraf signifikasi	Keputusan
Pretest	0.232	0,05	Normal
Posttest	0.234	0,05	Normal

Table 4.11 Normality Test Pre-Post Test Control Group

One-Sample Kolmogorov-Smirnov Test

		pretest_control	posttest_control
N		30	30
Normal Parameters[a,b]	Mean	53.67	60.33
	Std. Deviation	6.940	6.424
Most Extreme Differences	Absolute	.168	.197
	Positive	.168	.197
	Negative	-.165	-.137
Kolmogorov-Smirnov Z		.920	1.078
Asymp. Sig. (2-tailed)		.365	.196

a. Test distribution is Normal.

b. Calculated from data.

Based on the table 4.11 above, output One Sample Kolmogorov-Smirnov Test shows that sample of control class are 30 students. The Asymp. Sig (2-tailed) test pretest in Experimental class was 0.365 and test posttest was 0.196

Table 4.12 Data Normality Test Decision

Nama variable	Nilai Asymp. Sig *(2-tailed)*	Taraf signifikasi	Keputusan
Pretest	0,365	0,05	Normal
Posttest	0,196.	0,05	Normal

2. Homogeneity Testing

Homogeneity test intended to show two or more group of data sample come from population having the same variance. Homogeneity testing is conducted to know whether the gotten data has a homogeneous variance or not. The basis of decision making in this homogeneity test is:

1. If the value of significance < 0.05 it means that the variant of two or more groups is not the same.
2. If the value of significance > 0.05 it means that the variant of two or more groups is the same.

Table 4.13 Test of Homogeneity of Post –Test Variances of Experiment Group

Test of Homogeneity of Variances

posttest_eksperimn

Levene Statistic	df1	df2	Sig.
1.620	5	22	.196

Based on the output table above it is known that the Sig. student learning outcomes in the experiment class based on the value of the pretest and posttest is 0.196, meaning that the data on student learning outcomes in the experiment class was based on the pretest and posttest values have the same or homogeneous variant.

Table 4.14 Test of Homogeneity of Post –Test Variances of Control Group

Test of Homogeneity of Variances

posttest_control

Levene Statistic	df1	df2	Sig.
1.359	5	23	.276

Based on the output table above it is known that the Sig. student learning outcomes in the control class based on the value of the pretest and posttest is

0.276, meaning that the data on student learning outcomes in the control class was based on the pretest and posttest values have the same or homogeneous variant.

C. Hypothesis Testing

There were two hypotheses here that was f and t hypothesis. Before discussing the t-test, the researcher needed to test the f-test. F-test is used to know the equality of variance of the two groups. And, the t-test was used to test the two means (experimental and control group). Although, the f-test was automatically serve in the SPSS table of t-test, the researcher write down f hypothesis as the requirement in quasi experiment (experimental and control group). The hypotheses of this research are as follow:

1. Hypothesis testing of F-test
    a. Ho: Both variance are the same (experimental and control group).
    b. Hα : Both variance are different (experimental and control group).

If p-value (Sig) bigger than 0.05 the null hypothesis (Ho) is not rejected. As such, *equal variance is* used. Then If *p*-value (Sig) less than 0.05 the null hypothesis (Ho) is rejected. As such, equal variance not assumed is used.

2. Hypothesis testing of T-test

a. Null Hypothesis (Ho)

There is no significant different score on the students' reading comprehension between students' taught with and without using Cooperative Script at the first grade of MA Hasanuddin Siraman in the academic year 2018/2019.

b. Alternative Hypothesis (Ha)

There is significant different score on the students' between students' reading comprehension taught with and without using Cooperative Script at the first grade of MA Hasanuddin Siraman in the academic year 2018/2019.

1) If sig (2-tailed) > 0, 05 the alternative hypothesis (Ha) is rejected and the null hypothesis (Ho) is accepted.
2) If sig (2-tailed) < 0, 05 the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected.

To know whether there is any significant different students' reading comprehension between the students who are taught and the students who are no taught by using Cooperative Script, the researcher analyzed the data by using SPSS 23.0 version, the result can be seen on table as below:

Table 4.15
The Result of Independent Samples Test

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
nilai	Equal variances assumed	6.515	.013	11.857	58	.000	24.167	2.038	20.087	28.247
	Equal variances not assumed			11.857	52.060	.000	24.167	2.038	20.077	28.256

Based on the table 4.15 above, it showed that F was 6.515 it meant that F (6.515) was bigger than 0.05 and Ho was accepted. It can be concluded that both variance experimental and control group are the same. The result is the writer used Equal Variance Assumed in making decision of t-test.

Based on the table 4.15, the significant value of the t (2-tailed) was 0.000. Because it was lower than the significant 0.05, it was concluded that there was a significant difference in the students' achievement between the experimental and the control groups in reading comprehension. It meant that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. In other words, it could be concluded that there was a significant difference on students' Cooperative Script technique and those who were not**.**

D. Discussion

Regarding to the research findings above, the data were analyzed with the helped of SPSS program 23.0 version. The calculation of the achievement using t-test showed that there was significant difference of students' achievement before and after those who were taught by using Cooperative Script and those who were not. The mean of control group in pre-test was 53.67 and in post-test improved to be 60.33. Then, the mean of experimental group of pre-test was 59.67 and in posttest improved to 80.00.

It can be interpreted that the reading comprehension of the student had been improved after getting the treatment. On the output of t-test showed that the significant value of the t (2-tailed) was 0.000. Because it was lower than the significant 0.05, it was concluded that there was a significant difference in the students' achievement between the experimental and the control groups in mastering reading comprehension. It meant that the alternative hypothesis (Ha) was accepted and the null hypothesis (Ho) was rejected. In other words, it can be concluded that there was a significant difference on students' score in the teaching reading comprehension between those who were taught by using Cooperative Script and those who were not.

From the result of data analysis above, technique in teaching reading comprehension very influential to the students likes Cooperative Script. According to According Slavin (1995) says Cooperative learning refers to

instructional methods in which teachers organize students into small groups, which then work together to help one another learn academic content. The researcher used Cooperative Script Technique to improve students reading comprehension at the first grade students of MA Hasanuddin Siraman in the Academic year 2018/2109.

The result of this research was also similar to the previous studies. The first previous study was conducted by Yeni Suci (2018) from IAIN SALATIGA. The design of this study was CAR (Classroom Action Research). The result of the study was that post-test mean score of experimental class was 48,38% while post-test mean score of controlled class was 32, 27% .compared with the previous research, this research used quasi experimental design. However the result of the study was that post-test mean score of experimental score was 80.00, while the post-test mean score of controlled class were 60.33. Therefore, it means that there is significant different from the result findings from the previous study with this research.

The second study was a study from Nurhafani (2016). She used pre experimental research design by using one group pre-test with quantitative approach. She found that Cooperative Script technique was had positive effect toward students' interest in reading comprehension. The result of this study was that pre-test 63, 17 and mean score of post-test increased was 77, 73. Compared with previous research, this research used quasi experimental research design.

Although the findings of this research and Nurhafani's research were same, that Cooperative Script Technique was effective to improve students reading comprehension.

The third study came up from Esti polaswati (2014), this research is used a Classroom Action Research design. She found that Cooperative Script Technique was effective to improve students reading comprehension. Compared with previous research, this research used Classroom Action Research design while Yeni's research used Classroom Action Research design too. However, the result of this research the same that Cooperative Script Technique was effective in improve students reading comprehension.

Meanwhile, the researcher wants to conduct a study with the same technique that is cooperative script technique, but in this research the researcher has differences with the previous research. In this research the researcher used Quosai- experimental research study while I the previous study it used CAR and the second previous study used Pre-experimental research design. Then, the population of the study also different, the population is students of the first grade students of MA Hasanuddin Siraman while in previous study conducted at SMK N 1 Salatiga and SMP Muhammadiyah Mataram.

Based on the result of this study above indicates that Cooperative Script treatment increase reading comprehension. And also it proved that this technique is also effective to use in Senior High School. It's stated by Slavin (1995) that

the students may able to working together in a group; students can be more active in the classroom than working by their own. It is because they can make interaction among group members so the learning process is more active. It meant that Cooperative Script could support them to do cooperation each other in the class during the lesson. The researcher used Cooperative Script to improve students reading comprehension of the first grade students at MA Hasanuddin Siraman in the academic year of 2018/2019.