CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents research finding which has been collected during research and discussion about the data of the research.

A. Research Finding

This sub-chapter presents about data presentation that would like to discuss about the results of analyzing data.

1. Data Presentation

The data of students' reading comprehension was divided divide into 2 kinds. They were the data in experimental group and the data in controlled group. The data are from pre-test and post-test score which were gathered both experimental and controlled group. The tests were consists of 20 items. First, the researcher made the criteria of students' score to describe and easy to categorize the students' scores. This criteria aim was to know the students' score of reading comprehension is better or not. The researcher classifies the categories into five variances. The categories would be represented below:

Table 4.1 Score Criteria

NO	Interval Score	Criteria
1.	90-100	Very Good
2.	70-89	Good
3.	50-69	Fair
4.	30-49	Poor
5.	0-29	Very Poor

From the table above, the researcher explains the criteria of students' score in reading comprehension in both experimental and controlled class. To know the percentages of students' score both pre-test and post-test, the researcher will explain the results of both experimental and controlled class scores from pre-test and post-test. The results of the test will be presented below:

a) The Data of Experimental Group

The data will explain first is the data from pre-test score in experimental class. The test conducted in 7E class was consisted of 30 students. This test were consists of 20 items which were consists of multiple choices. After conducting pre-test, the researcher made the descriptive statistic of the data. Descriptive statistic are used to describe the basic futures of data in this study. The researcher used IBM SPSS 20 version to formulate the descriptive statistic. It means that researcher measured central tendency of pre-test score. Measures of central tendency are used to know whether the data values cluster around the

mean. They are included mean, median, and mode. The table of descriptive statistic would be presented below:

Table 4.2 Descriptive Statistic of Pre-test Score in Experimental Group

Statistics

PRETEST

N	Valid	30
	Missing	0
Mean		68.00
Median		65.00
Mode		75

The table showed that the mean of students score from pre-test in experimental class is 68. It meant that the average score from all of students' score is 68. Based on criteria of the students score 68 is fair score. Then the median was 65, it meant that the middle score in pre-test is 65. Finally, the mode was 75, it meant that the most frequently occurring scores in pre-test was 75.

Then the researcher measured the frequency of pre-test score. The aim was to know how many often the number appeared. The score started from minimum into maximum. It meant that the scores appeared from lowest until highest one. The table of frequency of pre-test scores in experimental class could be seen below:

Table 4.3 Frequency of Pre-Test Scores in Experimental Group

PRETEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	45	1	3.3	3.3	3.3
	50	1	3.3	3.3	6.7
	55	1	3.3	3.3	10.0
	60	7	23.3	23.3	33.3
	65	6	20.0	20.0	53.3
	75	10	33.3	33.3	86.7
	80	2	6.7	6.7	93.3
	85	2	6.7	6.7	100.0
	Total	30	100.0	100.0	

Based on the table above, the students who got the poor score are 1 student (3.3%). Then, students who got fair score are 15 students (49.9%). Also, students who got good score are 14 students (46.7%).

After the researcher calculated the pre-test scores from experimental class, then the researcher calculated the post-test scores one. The test had the same form of pre-test. This test was conducted after giving the treatment in experimental group. To know the students' score, the researcher measured central tendency and frequency of the score. The table of descriptive statistic would be presented below:

Table 4.4 Descriptive Statistics of Post Test Score in Experimental Group

Statistics

POSTTEST

N	Valid	30
	Missing	0
Mean		84.50
Median		85.00
Mode		80

From the table above, the researcher could conclude that the mean of post-test in experimental group was 84.50. Based on the criteria of students' score, the mean had a good score. Then, the median is 85, and the mode is 80.

Based on the students score in post test, the researcher knew the difference between before and after given the treatment. To know how much their score increase, seen the table (4.5) below:

Table 4.5 Frequency of Post-Test Scores in Experimental Group

POSTTEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	75	2	6.7	6.7	6.7
	80	11	36.7	36.7	43.3
	85	9	30.0	30.0	73.3
	90	4	13.3	13.3	86.7
	95	4	13.3	13.3	100.0
	Total	30	100.0	100.0	

The table shows that students who got good score were 22 students (73.4%), while students who got very good score were 8

students (26.6%). It means that students in experimental class got higher score than pretest. Most of them got a good score and 8 students got very good score based on the criteria students' score above.

b) The Data of Controlled Group

The researcher also conducted the test in control group. The first test was pre-test. The test was same as the experiment group which the question consist of 20 items and it were multiple choices.

Table 4.6 Descriptive Statistics of Pre Test Score in Control Group

Statistics

N	Valid	32
	Missing	0
Mean		79.16
Median		80.00
Mode		80

Based on the table above, the researcher could be concluded that the group consist of 32 students. The table showed that the mean of pre-test in control was group.16, it had good score, while the median is 80. Then, the mode is 80. The highest score was 100 and the lowest score was 60.

After knew the descriptive statistics of pre-test score in control group, then took a look the frequency of pre-test in control group. Based on the table below, there were 3 students (9.4%) who got fair score in this test. The students who got good score were 21 students

(65.6%) in this test. And there were 8 student (25%). The table of frequency of pre-test score in control group could be seen below:

Table 4.7 Frequency of Pre-Test Scores in Control Group

PRETEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	1	3.1	3.1	3.1
	60	2	6.3	6.3	9.4
	75	4	12.5	12.5	21.9
	80	12	37.5	37.5	59.4
	85	5	15.6	15.6	75.0
	90	8	25.0	25.0	100.0
	Total	32	100.0	100.0	

Then, the researcher calculated the post test scores from control group. The test was same with experiment class.

Table 4.8 Descriptive Statistics of Post Test Score in Control Group

Statistics

N	Valid	32
	Missing	0
Mean		80.47
Median		80.00
Mode		75

The table showed that the mean of students score from post-test in control group was 80.47. It meant that the average score from all of students' score was 80.47. Then, the median was 80, it meant that the middle score in post-test was 80. Finally, the mode was 75, it meant that

the most frequently occurring score in post-test was 75. The highest score was 90 and the lowest score was 70.

Table 4.9 Frequency of Post-Test Scores in Control Group

POSTTEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	70	1	3.1	3.1	3.1
	75	12	37.5	37.5	40.6
	80	6	18.8	18.8	59.4
	85	9	28.1	28.1	87.5
	90	4	12.5	12.5	100.0
	Total	32	100.0	100.0	

Based on the table above, the students who got the good score were 28 students (87.5%). There were 4 students (12.5%) who got very good score. It could be concluded that there is improvement of student's scores of the control group in posttest.

c) Difference of Statistical Data in Post-test of Control and Experimental Group.

Based on the result of students' pretest score of control and experimental group were normal and homogeneous so the researcher only compared the students' score of post-test.

The researcher compared students' score of posttest of both groups that consisted of the highest score, the lowest score and the mean score in reading descriptive text. After that the researcher found out the score of each group from students' score in post-test to know whether

the students' comprehension was getting down, same or different. The result of difference of statistical data in post-test of control group and experimental group could be seen in the table below.

Table 4.10 Difference of Statistical Data in Post-test of Control and Experimental Group

NO	NAME	POST-TEST	NAME	POST-TEST
1.	ACN	85	ATTAD	85
2.	ACN	80	APK	80
3.	AC	80	AIM	80
4.	ATW	85	DPAP	85
5.	CA	75	DAA	85
6.	DC	85	FSP	90
7.	DTK	85	FTC	85
8.	ENW	85	HSSR	85
9.	FTS	75	ISB	90
10.	FA	90	IM	85
11.	GP	85	IS	90
12.	GR	85	KL	95
13.	HAEB	90	LB	85
14.	INF	75	MFH	95
15.	IAL	75	MSN	80
16.	KJN	75	MAS	80
17.	LP	85	MFF	80
18.	MEP	80	MSA	80
19.	MAR	75	MAK	80
20.	MSA	80	NARB	95
21.	MB	75	QM	80
22.	MRNO	70	RDA	75
23.	MAR	75	RS	80

24.	PRBK	80	SA	75
25.	RAA	75	SDNF	80
26.	RS	75	TA	85
27.	SAE	75	VTA	90
28.	SPP	75	YBD	80
29.	SRS	85	YAW	85
30.	TAN	80	ZEF	95
31.	UUH	90	-	-
32	VAA	90	-	-

Table 4.11 Descriptive Statistic of Control and Experimental Group

Statistics

		TREATMENT	CONTROL
N	Valid	30	32
	Missing	2	0
Mean		84.83	80.47
Median		85.00	80.00
Mode		80	75

Based on the table above, it could be seen the difference of the students' score in post-test of control and experimental group in reading descriptive text. In post-test of control group showed that the highest score was 90, the lowest score was 75 and the mean score was 80.47,

while in post-test of experimental group showed that the highest score was 95, the lowest score was 75 and the mean score was 84.83.

The result above showed that the experimental group who were taught reading in descriptive text by using PALS was higher that the control group who were taught reading in descriptive text without using PALS. It showed that there was significant difference of the students' comprehension in reading descriptive text that were taught reading in descriptive text by using PALS and those were taught reading in descriptive text without using PALS. In other word, the using of PALS in teaching descriptive text was effective to improve the students at the seventh of SMPN 1 Ngantru Tulungagung on academic year 2017/2018. During the implementation of the actions, the students became interested and active in reading class English. They actively involved in improving their English reading comprehension. The students seemed to be enthusiastic and happy involved in the activities.

In this research, the researcher used statistical test using computation Independent Sample T Test by IBM SPSS Statistic 20. It was used to know the effectiveness of using PALS in teaching narrative text toward the students' reading comprehension. These subjects were referred to as independent because they were independently from the different subject. The result as follow:

Table 4.12 Group Statistics of Two Groups

Group Statistics

	GROUP	N	Mean	Std. Deviation	Std. Error Mean
NILAI	TREATMENT	30	84.83	5.796	1.058
	CONTROL	32	80.47	5.730	1.013

Based on the table 4.19, the data presented the performance scores of the members of two groups which the students who were taught reading descriptive text without using PALS and those were taught reading descriptive text by using PALS. Output independent sample statistics shows that there are mean scores differences between the control group and the experimental group. The mean score of control group is 80.47 and the mean score of experimental group is 84.83. The member of students (N) in the control group is 32 and in the experimental group is 30. The standard deviation of control group is 5.730 and the error mean 1.013. On the experimental group, the standard deviation is 5.796 and the error mean is 1.058.

B. Hypothesis Testing

Hypothesis testing was used to test the hypothesis of the research. The hypothesis was tasted by using t-test and f-test through IBM SPSS Statistic 20 version. The hypotheses testing of this research are as follows:

1. If the significant level score is smaller than significant value, the alternative hypothesis (Ha) is accepted.

It meant that there was different score of students' achievement in reading descriptive text who was taught without and using PALS. The different is significant.

2. If significant level is bigger than significant value, the Null hypothesis (Ho) is rejected.

   It meant that there was no different score of students' achievement in reading descriptive text who was taught without and using PALS. The different is not significant.

To know whether the significant level is bigger or smaller than significant value, the researcher analyzed the data by using IBM SPSS Statistic 20.

In addition, because the research consist of two samples that are experimental and control group, so the researcher needed to test the f-test in order to see the variance that the both groups were equal. The hypothesis for the f-Test can be seen below:

a. H_0: $\sigma^2_1 = \sigma^2_2$ or the null hypothesis states that there is an equal between the variance of experimental group and the variance of control group.
b. H_1: $\sigma^2_1 \neq \sigma^2_2$ or the alternative hypothesis states that there is not equal between the variance of experimental group and the variance of control group.

This research used standard significance 95% ($\alpha = 0.05$) to test the hypothesis. The interpretations to test the hypothesis were stated as follow:

a. If Sig greater than 0.05, then the null hypothesis is not rejected. Thus, *equal variance assumed* is used. In conclusion, the variance of experimental group and the variance in control group was equal.

If Sig smaller than 0.05, then the null hypothesis is rejected. Thus, *equal variance not assumed* is used. In conclusion, the variance of experimental group and the variance in control group is not equal.

Table 4.13 The Result of Analyzing Independent Sample T Test

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper

NILAI	Equal variances assumed	.247	.621	2.981	60	.004	4.365	1.464	1.435	7.294
	Equal variances not assumed			2.979	59.647	.004	4.365	1.465	1.434	7.295

In this research, before computing the t-test, the researcher did the homogeneity testing using F test to know whether to use *Equal Variances Assumed* or use *Equal Variances not Assumed*.

Based on the result of F test shows that p value (sig) is 0.621, and it was greater than 0.05. In consequence, the null hypothesis was not rejected. As such, equal variances assumed is used. So, on the basic of the result of the F test, the test with equal variances assumed was used.

Interpretation of the data above could be done by concerning on significant value (Sig). In this case, in interpreting significance value, if it is higher than 0.05 (Sig > 0.05), Ho is accepted while if it is lower than 0.05 (Sig < 0.05) Ho is rejected. In other words, Ho is rejected if Sig < 0.05.

Table 4.20 showed that the result of output independent sample t-test was 0.004. The researcher concluded that the significance value < 0.05 (0.004 < 0.05), so Ho is rejected and Ha is not rejected (accepted). It means that Ha which stated that there is significant difference on the students' reading comprehension those taught by using and without using peer-assisted learning strategy is not rejected (accepted). Whereas Ho which stated that there is no significant difference on the students' reading comprehension between those taught by using peer-assisted learning strategy and without using peer-assisted learning strategy is rejected.

C. Discussion

This research talked about the use of Peer-Assisted Learning Strategy in teaching reading of the seventh grade at SMPN 1 Ngantru Tulungagung. This research used quasi experimental design. This section was intended to analyze the result of research finding based on the related theory. All data collected from the research instrument provided information of the research finding. The result of the students' score was calculated by using t-test.

Regarding on the result of data analysis, the significant value of t-test was 0.004. It was smaller than 0.05, so based on those result, the null hypothesis (Ho) was rejected and the alternative hypothesis (Ha) was not rejected (accepted). It was found that peer-assisted learning strategy is effective to teach reading comprehension. The previous researchers also

had proved that peer-assisted learning strategy could be effective and improve the students' comprehension in reading. It was supported by some researchers, such as Abbondanza, his research PALS and control groups showed positive gains in comprehension and fluency over the course of the study which indicates that teaching reading comprehension strategies can assist students with nonfiction texts. The second research was conducted by Colon, his research was focused on peer-assisted learning strategies (PALS) on the reading skills of English language learners with and without disabilities. The last research is conducted by Douglas et.al, their research was focus on peer-assisted learning strategies for promoting word recognition, fluency, and reading comprehension in young children. From the results of research that is conducted Abbondanza. The researcher concluded that was peer-assisted learning strategies effective in teaching and learning reading purposed to teach students' reading comprehension. And this research would be good input for local education official to support developing curriculum and empower the junior high schools' teachers initiative (Nurhayati: 2014). So the teacher could be more creative to use strategy for support the curriculum.

The researcher implemented the use of cooperative learning Peer-Assisted Learning Strategy in teaching on reading descriptive, especially to comprehend the meaning in understanding the text. The students can understand the topic, they feel enjoyable, more active, and confident to

read. Beside all of those implementation, the teachers improved their ideas by displaying their works (Nurhayati, 2014).

Finally, the conclusion of this discussion was the students' of experimental group have better score than control group. So it could be said that the Peer-Assisted Learning Strategy is effective in teaching reading of the seventh grade at SMPN 1 Ngantru Tulungagung.