

## CHAPTER IV

### RESEARCH FINDINGS AND DISCUSSION

#### A. Data Description

In this chapter, the researcher would like to present the description of the data obtained. The data used for the research is in the form of score which are obtained from the result of the students reading comprehension in short story. As the writer mentioned at the previous chapter that population of the study was the second graduate of high school at MA Fadlillah Sidoarjo. As stated in this paper. The writer took 62 students as the sample, two classes were chosen as control class and experimental class.

The instrument of this research was test. Pre-test consisted 30 multiple choice items and post-test consisted of 30 multiple choice items with four options. Pre-test was conducted previously on March 4th, 2019 for class XI A as a control class and the pre-test in experimental class was conducted on March 5th, 2019 for class XI B as the experimental class. To get data about influence students reading comprehension in short story, the researcher gives out pre-test before giving the treatment and post-test after giving treatment.

After doing research, the researcher got the result of the pre-test and post-test. The test was conducted in two classes, the first was control class and the second was experimental class. The pre-test was held on March 4th 2019 and post-test on March 11th, 2019. To know the result of the test, the writer makes the table of the students score pre-test and post-test, the result of the test are tabulated and calculated in table for the detail descriptions of the students score both experiment class and control as follow :

#### 1. The Students Score of Pre-Test and Post-Test of Control Class

The students pre-test and post-test score of control class could be shown on the table 1 as follow :

**Table 4.1 Students score of pre-test and post-test of control class**

NO	NAMES	PRE-TEST	POS-TEST
1	ACHMAD AZHAR F	80	82
2	ACHMAD SHODIQ	64	70
3	AGUNG HAMDANI	50	67
4	AMIR IVANTO	91	82
5	ANANG SAPUTRA	56	60
6	AQMAR ARSYAD HAIDAR	76	64
7	IBNU NUR ISKHARUDIN	80	82
8	ILMAN FATJERI MAULANA	40	40
9	M. ABDILLAH RAFSANJANI	91	82
10	M. SYARONI	28	32
11	MUHAMMAD ALIYULHAQ AL MUSTOFA	76	82
12	MUHAMMAD IDHAM KHOLID	80	82
13	MUHAMMAD MAULANA	70	73
14	MUHAMMAD NUR FAISAL	55	60
15	RAMADHANI	50	54

16	UMAR ROHMAN YUDA TAMA	61	61
17	ANA SILVIA	79	67
18	DIANA ILMIATUL AZZIZAH	91	76
19	HIMATUL AWALIATUS SHOLICHA	70	64
20	INDANA AMINATUZ ZULFA	91	82
21	ISMA NURLAILIA	61	73
22	IVANA PUTRI AROFAH	79	76
23	MAICHA WULAN ANGGRAINI	82	79
24	NAILA FARADISAL KAUNAINI	91	91
25	NANDA HAMIDAH	82	69
26	OLIVIA ALDINA	91	85
27	PUTRI MAULIDATUL HIDAYAH	94	91

28	RAHMANIA JIHAN SADIDAH	76	76
29	SETYA AYU MUSTIKA	88	78
30	UMMUL ARIFAH CHAFSOH	67	61
31	UMROTUS SHOLIKAH	65	82
TOTAL		2255	2223
LOWEST		28	32
HIGHEST		94	91
AVARAGE		72,74	71,70

Table 4.2 describes students pre-test and pos-test of control class XI A based on criteria in reading skill. The data shows that lowest score of pre-test is 28 and the highest is 94. Average score of the pre-test is 72,74. Meanwhile, the lowest score of post-test is 32 and the highest score is 91. The average score of post-test is 71,70.

## 2. The students score of pre-test and post-test of Experimental Class

The students pre-test and post-test score of experimental class could be shown on the table 2 as follow :

**Table 4.2 Students score of pre-test and post-test of Experimental Class**

NO	NAMES	PRE-TEST	POS-TEST
1	ADELIA NUR ROHMA	64	76
2	ADINDA	58	73

	MUHASONA		
3	AMALIA SALSABILLA	67	76
4	ANIK JAZIROTUL ILMIAH	76	80
5	ARFIRDA DWI SABILA	46	60
6	ASMAUL KHUSNAH	52	64
7	DEWI A'ISSYATUR ROHMAH	76	82
8	DEWI NUR KHARISMA	70	79
9	DEWI QUROTA 'AYUN	67	74
10	FATIMAH AQMARINA AZIZ	81	88
11	FIRDA AISA	67	70
12	FITRIYATUS SHOLIKHAH	67	69
13	KHOIRROTUN NISA	60	79
14	LU'LUUL MAKNUNAH	46	61
15	MARIA WIDYA WANTI	70	76
16	NAILA ALFI FADHILAH	73	85
17	NAILA	67	70

	SALSABILA		
18	NURIL FAHMI IMAMIAH	64	79
19	NURUL KAMILAH	75	82
20	NURUSSHOF A	49	79
21	NUZULATUL WALIAH RAHMAWATI	61	73
22	PUTRI SABINA NUR AVITALIA	70	76
23	RISA FEBRIYANTI	67	74
24	RIZA DINI MEILIA	73	80
25	SILVIA AINA SALSABILA	76	81
26	SITA RAHMASARI	73	79
27	SITI KHUSNIAH	73	85
28	VIDY AISYAH	76	86
29	VIVI APRILLIA MANSYUR	34	50
30	WARDA AWALIAH	85	90
31	YULIS NUR LAILIAH	73	82
	TOTAL	2056	2358

LOWER	46	50
HIGHER	85	90
AVERAGE	66,32	76,06

Table 4.1 above is students' pre-test and post-test of experimental class XI B based on criteria in reading skill. The data shows that the lowest score of pre-test is 46 and the highest is 85. Average score of the pre-test is 66,32. Meanwhile, the lowest score of post-test is 50 and the highest score is 90. The average score of post-test is 76,06. To understand more detail relates to table above and the finding of this research, researcher will be explained in the analysis of data that calculated the data into IBM SPSS Statistic 24 version.

## **B. Data Analysis**

After collecting the data, the researcher analyzed the data by using IBM SPSS Statistics 2.4 version. The researcher analyzed pre-test and post-test scores by using the test of normality distribution, normality test is a trial conducted with the aim of assessing data based on data, whether the data distribution is normally distributed or not. The test of homogeneity, homogeneity test is used to test the differences between the two groups or groups of different subjects or data sources. Therefore, homogeneity test is needed as an assumption of the independent t test. T-test calculation that counted the scores based on tables of the data description above.

### **1. The result of Test of Normal Distribution**

In this matter, to ensure the English teacher's statement of MA Fadlillah Tambak Sumur Waru Sidoarjo and to know that students of experimental class and control class have normal distribution, the researcher did test of normal distribution. To analyze the data, the researcher used IBM SPSS 2.4 version and to test the normality of distribution, the researcher used one-sample Kolmogorov Smirnov.

Basic decision making, if the value is significant  $>0,05$  then, the residual value is normally distributed. If the value is significant  $< 0,05$  then, the residual value is not normally distributed.

**Table 4.3 The Result of Normal Distribution of Experimental and Control Class in Pre-Test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized residual
N		31
Normal parameters	Mean	,0000000
	Std. deviation	16,58057284
Most extreme differences	Absolute	,133
	Positive	,093
	Negative	-,133
Test statistics		,133
Asymp sign. (2-tailed)		,177 <sup>c</sup>

- a. Test distribution is Normal
- b. Calculated from data

Table 4.3 describes the result test of normal distribution of experimental and control class in pre-test. From the description of pre-test on the table above shows that significant of experimental class and control class are  $0,177 > 0,05$ . It indicates that can be decided the residual value is normally distributed.

After testing the normality of pre-test in experimental and control class, the researcher continued to test the normality result of both class in post-test in table 4.4 as follows.



**Table 4.4 The Result of Normal Distribution of Experimental and Control Class in Post-Test**

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized residual
N		31
Normal parameters	Mean	,0000000
	Std. deviation	13,51313231
Most extreme differences	Absolute	,139
	Positive	,116
	Negative	-,139
Test statistics		,139
Asymp sign. (2-tailed)		,134 <sup>c</sup>

- a. Test distribution is Normal
- b. Calculated from data

Table 4.4 describes the result test of normal distribution of experimental and control class in post-test. From the description of pre-test on the table above shows that significant of experimental class and control class are  $0,134 > 0,05$ . It indicates that can be decided the residual value is normally distributed.

## **2. The Result of Test of Homogeneity of Variance**

The purpose of applying the test of homogeneity of variance was to support and prove English teacher's statements of MA Fadlillah Tambak Sumur WaruSidoarjo. The students of experimental and control class have equal ability, it also was purposely tested to know the homogeneity whether the sample of research had the same characteristics and skills in reading. The test homogeneity of variance was done after researcher examined the normal distribution. The researcher examined the

homogeneity test by using IDM SPSS software 2.4 version. The data of homogeneity test was obtained from experimental and control class in pre-test scores. Table of homogeneity test as follows:

**Table 4.5 The Result of Homogeneity of Variances of Experimental Class and Control Class in Pre-Test**

<b>Test of Homogeneity of Variances</b>			
Reading test			
Levene Statistic	df1	df2	Sig.
5,651	1	60	,021

Based on table 4.5 show that significant value of homogeneity test is  $.021 > \alpha (0,05)$  it can be said that  $H_0$  is accepted between control class and experimental class have the same abilities and characteristics. If the result for homogeneity test is lower than ( $<$ )  $\alpha 0,05$  both classes are not homogeneous and the sample cannot be used as sample of research. Yet, the test above proves that the level of significant is higher than ( $>$ )  $\alpha 0,05$ , so it can be used as sample of research.

The researcher describes the scores that were gained from pre and post-test that were presented by using descriptive statistic. Ravid (2011:29) in a descriptive statistic involving a certain group to classify, coordinate and summarize it in numerical data. In addition, in the research particularly report of descriptive statistics that the result of pre-test and post-test were organized in the table which facilitates the researcher to decide the significant difference of results between pre-test and post-test of experimental and control class.

**Table 4.6 Descriptive Statistics of Pre and Post-Test Score in Experimental Class**

<b>Descriptive Statistics</b>					
N	Minimum	Maximum	Sum	Mean	Std. Deviation
	m	m			

score of pre-test	31	34	85	2056	66,32	11,262
score of post-test	31	50	90	2358	76,06	8,679
Valid N (listwise)	31					

Table 4.6 indicates that the descriptive statistics of pre-test and post-test of experimental class which consist of 31 students obtained the minimum score of pre-test is 34, the maximum score of pre-test is 85, the sum of pre-test score is 2056, the mean of pre-test score is 66,32 and the std. deviation of pre-test is 11,262. While the descriptive statistics of post-test in experimental class reached the minimum score of post-test is 50, the maximum score of post-test is 90, the sum score of post-test is 2358, the mean score of post-test is 76,06 and the std. deviation of post-test is 8,679.

**Table 4.7 Descriptive Statistics of Pre and Post-Test Score in Control Class**

Descriptive Statistics						
	N	Minimum	Maximum	Sum	Mean	Std. Deviation
score of pre-test	31	28	94	2255	72,74	16,621
score of post-test	31	32	91	2223	71,71	13,531
Valid N (listwise)	31					

Table 4.7 based on the descriptive statistics of pre-test and post-test in control class which consist of 31 students reached the minimum score of pre-test is 28, the maximum score 94, the sum score of pre-test is 2255, the mean score of pre-test is 72,74 and the std. deviation of pre-test is 16,621. While, in the post-test that also consist of 31 students obtained the minimum score of post-test is

32, the maximum score of post-test is 91, the sum score of post – test is 2223, the mean score of post-test is 71,71 and the std. deviation of post-test is 13,531.

### **3. T-Test Calculation**

The following of normality and homogeneity test of experimental class and control class were calculate, the result of pre-test and post-test in experimental class and control class using IBM SPSS 2.4 version. It meant to find out the mean scores of both classes and to know whether Listen-Read-Discuss ( LRD ) Strategy was effective for teaching reading skill. As Ravid (2011: 144) the result of t-test is a statistical way of using the comparison of two groups for produce average. In addition, t –test was presented to find and compare the mean score between experimental class and control class. In t-test calculation, the researcher calculated the result of two test scores namely pre and post-test.

### **4. The Result of T-Test Calculation in Pre-Test**

To get the mean score between experimental class and control class on pre-test, the researcher analyzed the outcome of pre-test scores that were reached by researcher from both classes. In analyzing the data of pre-test, the researcher used independent sample test.

#### **a. Independent Sample T-Test**

The researcher used independent sample test which was purposely to find the means score of experimental and control class. Ravid (2011:146) explains the comparison of the average results of two groups used in the experimental design. As the basic

of interpretation decision, the researcher made and decided as follow:

1.  $H_a$  = The experimental and control have the same mean scores
2.  $H_o$  = The experimental and control class have different mean scores
3. If the result of sig. (2-tailed) is  $< 0.05$  it shows that experimental and control class have significant difference. So, the  $H_a$  is accepted and the  $H_o$  is rejected.
4. If the result of sig. (2-tailed) is  $> 0.05$  it shows that both of classes has not the significant difference. So, the  $H_a$  is refused and  $H_o$  is accepted.

**Table 4.8 Descriptive Statistics of Mean Score in Pre-test**

<b>Group Statistics</b>					
	Class	N	Mean	Std. Deviation	Std. Error Mean
score of pre-test	class A	31	72,74	16,621	2,985
	class B	31	66,32	11,262	2,023

From table 4.8, it can be known that the mean score of A class in pre-test is 72.74, standard deviation is 16.621 and standard error mean is 2.985. While B class gains mean score is 66.32, standard deviation is 11.262 and standard error mean 2,023. From the mean score of both classes which shows the different mean, it indicates that both classes have different mean scores.

**Table 4.9 Result of Independent Sample T-Test of Pre-Test**

<b>Independent Samples Test</b>		
	Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	t	df	Sig. (2-tailed)	Mean Diffe rence	Std. Error Diffe rence	95% Confidence Interval of the Difference	
									Lower	Upper
score of pre- test	Equal variances assumed	5,651	,021	1,7 80	60	,080	6,419	3,606	-,794	13,63 2
	Equal variances not assumed			1,7 80	52, 750	,081	6,419	3,606	-,814	13,65 3

Table 4.10 shows that the result of counting the significance of levene's t-test for equality of variances is  $.021 > \alpha (0,05)$  meaning that the significant level is higher than 0,05. In finding the result of t-test for equality of means, the researcher chose table sig. (2-tailed) in the first line which refers to equal variances assumed as basic of decision in determining whether experimental and control class have the same significant or not in the pre-test. The sig. (2 tailed) of t-test for equality means is  $.080 > \alpha(0,05)$  which indicates level of significant is higher than 0,05.

Based on the criteria of interpretation that researcher made, if the result of sig. (2-tailed) is lower than 0,05 it shows that both classes have different significant, the  $H_0$  is accepted and the  $H_a$  is rejected. But, if the result of sig. ( 2-tailed) is higher than 0,05 it indicates that both classes has not different significant, the  $H_a$  is accepted and the  $H_0$  is rejected. The result of independent sample test in t-test for equality of means reports that the sig. (2-tailed) which refers to Equal variances assumed is  $.021$  it means that the sig (2-tailed) is higher than 0,05. From the result of analysis in

pre-test above proves that both classes have not same ability. So, both of classes has different significant.

## 5. The Result of T-Test Calculation in Post-Test

To know the mean score of post-test in experimental and control class, the researcher analyzed the result of post-test scores that were gained by researcher from both classes after participants got post-test. The researcher also used independent sample test and paired sample test. The main aim of finding the mean score of both classes was to know whether experimental and control class have equal or unequal mean scores and to find whether Listening-Reading-Discuss Strategy was effective in teaching reading skill.

### a. Independent Simple T-Test

To get the mean score of experimental and control class in post-test, the researcher also used independent sample test which was counted by IBM SPSS 2.4 version. The criteria and hypotheses that researcher made and decided as the basic of interpretation decision was the same as criteria and hypothesis in pre-test as follows :

1.  $H_a$  = The experimental and control class have the same mean scores
2.  $H_o$  = The experimental and control class have different mean scores class have significant difference. So, the  $H_a$  is accepted and the  $H_o$  is rejected
3. If the result of sig. (2-tailed) is  $> 0,05$  it shows that both of classes has not the significant difference. So, the  $H_a$  is refused and  $H_o$  is accepted

**Table 4.10 Descriptive Statistics of mean Score in Post-test**

Group Statistics					
	Class	N	Mean	Std. Deviation	Std. Error Mean
Score of post-test	class A	31	71,71	13,531	2,430
	class B	31	76,06	8,679	1,559

Based on table 4.10 above, the mean score of A class and B class in the post-test have different mean. In the group statistics, the mean scores of A class and B class are different which is the mean score of A class is 71.71, standard deviation is 13.531 and standard error mean is 2,430. While, the mean score of B class is 76.06, standard deviation is 8.679 and standard error mean is 1,559. It proves that the mean score of B class is higher than the mean score of A class.

**Table 4.11 Result of Independent Sample T-Test of Post-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
Score of post-test	Equal variances assumed	5,239	,026	1,508	60	,137	-4,355	2,887	-10,130	1,420
	Equal variances not assumed			1,508	51,3	,138	-4,355	2,887	-10,151	1,441

Based on table 4.11 the result of analyzing the significance of levene's t-test for equality of variances is .026 > a (0.05). it mean that the significant level is higher than 0,05. In getting the result of t-test for equality of means, the researcher chosed table sig. (2-tailed) in the first line which refers to equal variances assumed as basic of decision in



determining whether experimental and control class have the same significant or not in the post-test. The sig. (2-tailed) of t-test for equality means is  $.137 > \alpha (0,05)$  which interprets the level of significant is higher than 0,05.

From the criteria of interpretation that researcher made if the result of sig. (2-tailed) is lower than 0.05 it shows that both classes have different significant, the  $H_0$  is accepted and the  $H_a$  is rejected. But, if the result of sig. (2-tailed) is higher than 0.05 it indicates that both classes have not different significant, the  $H_a$  is accepted and the  $H_0$  is rejected. The result of independent sample t-test for equality it means report that the sig. (2-tailed) which refers to equal variances assumed is  $.137$ . It means that the sig. (2-tailed) is higher than 0,05. So, from the result of analysis in post-test proves the experimental class and control class have different significance.

#### **b. Paired Sample T-Test**

Researcher also used the paired sample t-test. It was used to analyze whether the mean score result of pre-test and post-test are different or not. Ravid (2011:151) says to compare the two mean scores from two sets of one group should using paired sample t-test for a test. In addition, to know whether independent variable influence dependent variable, it can be measured from the result of pre and post-test mean scores. If the mean score result of post-test is higher than mean score pre-test, it shows that independent variable effected than dependent variable.

To facilitate the researcher in deciding and interpreting the result of calculating test that were counted by IBM SPSS 2.4 version, the researcher used the criteria and hypotheses that elaborated as follows:

1.  $H_a$  = LRD Strategy is effective in teaching reading skills.
2.  $H_0$  = LRD Strategy is not effective in teaching reading skills.
3. If the result of sig. (2-tailed) is  $< 0,05$  it can be stated that LRD Strategy if effective in teaching reading skills. So, the  $H_a$  is accepted and the  $H_0$  is rejected.

4. If the result of sig. (2-tailed) is  $>$  it shows that LRD Strategy is not effective in teaching reading skills. So, the  $H_a$  is rejected and the  $H_o$  is accepted.

The result of pre and post-test mean score of experimental class will be listed as follows :

**Table 4.12 Paired Samples of Statistics in Experimental Class**

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	66,32	31	11,262	2,023
	POST TEST	76,06	31	8,679	1,559

The mean score of pre-test and post-test in experimental class are not same and each of test has 31 participants. The mean score of pre-test is 66.32, standard deviation is 11.262 and standard error mean is 2.023, while the mean score of post-test is 76.06, standard deviation is 8.679 and standard error mean is 1,559. From outcome of analyzing the mean score of pre-test and post-test above, it can be said that experimental class has significant development after receiving the treatment. The detailer description of mean score differences of pre-test and post-test can be seen in the table 4.13 as follows.

**Table 4.13 Result of paired Samples T-Test of Experimental Class**

Paired Sample T-Test									
Pair 1	Pre and post test	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of Difference		T	Df	Sig. (2-tailed)
					Lower	Upper			
		-9,742	5,733	1,030	-11,845	-7,639	-9,462	30	,000

Based on table 4.13 the result of calculation test on paired samples t-test shows that t count is  $-9.462$ , degree of freedom is 30, the mean is  $-9.742$  and significance (two-tailed) is ,000. Referring to the decisions of criteria that were chosen as written in chapter III, if the significance value (two-tailed)  $< 0.05$ , it means that  $H_A$  is accepted and  $H_0$  is rejected. But, if the level of significance (two-tailed)  $> 0.05$ , it indicates that  $H_A$  is refused and  $H_0$  is accepted. The significance value (two-tailed) on the paired samples t-test is ,000. It proves that ,000 is smaller than 0,05. So, the  $H_A$  is accepted and  $H_0$  is rejected.

### **C. DISCUSSION**

The purpose of this research is to get out the influence of LRD (Listen Read Discuss) strategy in improving students' reading comprehension at the second graduate of high school at MA Fadlillah WaruSidoarjo.

Based on findings, it was sure that listen-read-discuss strategy can improve student reading comprehension. Students can organize their ideas about the text and also can comprehend the text more easily. LRD strategy an alternative technique for this learning, because it more effective and more applied to improving students' reading comprehension. According to Manzo Listen-Read-Discuss (LRD) is a comprehension strategy that helps students comprehends the text.

For without using LRD strategy, the result showed that the mean score of pre-test between control class and experimental were rather different. The mean score of pre-test in control class was 72,74 and the mean score of pre-test in experimental was 66,32.

Afterward, the students were taught by using LRD in experimental class and without LRD strategy in control class. The material was six topics of short story for two treatments. Before studying, the researcher greeted to the students asked condition class. After that, the researcher asked to the students to pray together and then checked the students' attendant list. For the first meeting, the researcher introduced himself to the students. In the beginning of

treatment the researcher asked the students about narrative text and explained it to the students.

At the end of the research, post-test was given to measure the improvement of students' short story reading comprehension in both classes after the treatments done. The mean score of post-test in experimental class was 76,06 and the mean score of post-test in control class was 71,71.

From the result, we can see that the result of students' post-test is higher than pre-test. Besides that, Listen-Read-Discuss can improve each aspect of students reading comprehension including main idea (topic), phrase in content/expression, grammatical feature, supporting idea, inference (implied detail) and vocabulary in content. The result of pre-test and post-test also showed that the students who taught by using LRD got better result that taught by using Question Strategy.

Based on the analysis of the data and the testing of hypothesis, the result of T-test null hypothesis ( $H_0$ ) is refused and alternative hypothesis ( $H_a$ ) is accepted. It means that the treatments had influence of using Listen-Read-Discuss towards students reading comprehension of short story with narrative text at the second graduate of high school of MA Fadlillah Tambak Sumur Waru Sidoarjo, so alternative hypothesis is accepted. It had been supported by the previous research conducted was done by Sri Irma Purwanti (2011) entitle "The Use Listen-Read-Discuss Strategy to Improve Reading Comprehension". She said the application of this strategy gives a good effect to the students' reading comprehension. They are more enjoyable in learning reading and comprehend the text easily.