

## **CHAPTER IV**

### **RESEARCH FINDING AND DISCUSSION**

This chapter presents three topics related to research finding that are the description of data, hypothesis and discussion.

#### **A. Research Finding**

##### **a. The Description Of Data**

In this research, the purpose of the researcher is to know the effectiveness of using directed activities related to the texts on students' reading comprehension ability for seventh grade students at MTsN 2 Tulungagung. The effectiveness can be seen from the significant different score of students reading comprehension before and after using directed activities related to the texts. The presentation of the data were answer based on the formulated of research problem in chapter I.

Based on research method in chapter III, teaching and learning process was divided into some steps to collect data. The first step was administered pre-test to experimental group to know students' reading comprehension ability before giving treatment. The second step was giving the treatment to experimental group by using DARTs method. And the next step of data collection method was administered post-test to experimental group. It was intended to measure students' reading comprehension ability after treatment.

The pre test and post test was followed by 32 students of experimental group. The researcher allocates 60 minutes for conducting pretest and post test.

The form of pre test and post test is 15 multiple choices and 5 short answer. The pre test was intended to know the basic competence of the students of the students reading comprehension ability before giving the treatment. The post test was intended to know the result or the effect of treatment on students reading comprehension ability after giving the treatment.

#### **a.1 The Students' Achievement Before Being Taught Using Directed Activities Related to The Texts**

**Table 4.1 The Students Score in Pretest**

<b>No.</b>	<b>Students</b>	<b>Score Pretest</b>
1.	A01	80
2.	A02	55
3.	A03	90
4.	A04	75
5.	A05	60
6.	A06	50
7.	A07	55
8.	A08	50
9.	A09	65
10.	A10	60
11.	A11	40
12.	A12	45

13.	A13	85
14.	A14	70
15.	A15	60
16.	A16	55
17.	A17	55
18.	A18	60
19.	A19	65
20.	A20	80
21.	A21	60
22.	A22	55
23.	A23	65
24.	A24	65
25.	A25	50
26.	A26	55
27.	A27	70
28.	A28	60
29.	A29	50
30.	A30	75
31.	A31	70
32.	A32	80

The students' score above then were computed by using SPSS. The result was shown in the Table 4.2 below

**Table 4.2 Descriptive Statistics of Pretest**

**Statistics**

Pretest

N	Valid	32
	Missing	0
Mean		62.81
Median		60.00
Mode		55 <sup>a</sup>
Std. Deviation		12.044
Sum		2010

a. Multiple modes exist. The smallest value is shown

Based on the table 4.2, it can be seen that the students consist of 32 students. It shows that mean score 62.81, indicated that the enough of 32 student's score is 62.81. Which means that the good of 32 students are get score is 62.81. The median score is 60.00. The mode is simply that value which has the highest frequency. It means that the most frequent students' score is 55 indicated that many students got less score. Meanwhile, the standard deviation of pretest 12.044.

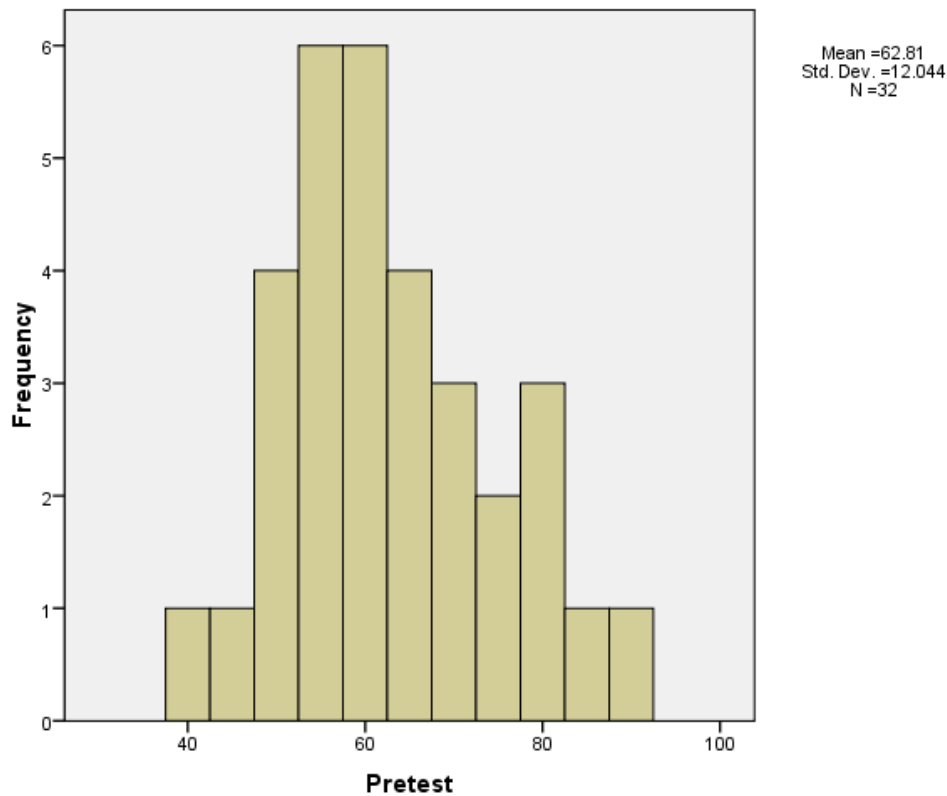
**Table 4.3 Graph of Pre Test Score**

Table 4.3 showed that in range 91-100 there is no student got this score in pre-test. In range 81-90 there are 2 student got this score in pre-test, it means that the students have excellent achievement in reading. In range 71-80 there are 5 students got this score in pre-test, it means that the students have very good achievement in reading. In range 61-70 there are 7 students got this score in pre-test, it means that the students have good achievement in reading. In range 41-60 there are 17 students got this score in pre-test, it means that the students have average achievement in reading. In range 0-40 there are 1 students got very poor score in pre-test. These data descriptions are presented in order to give information about the statistics data after being computed by using SPSS program.

**a.2 The Students' Achievement After Being Taught Using Directed Activities Related to The Texts**

**Table 4.4 The Students Score in Posttest**

<b>No.</b>	<b>Students</b>	<b>Score Posttest</b>
1.	A01	95
2.	A02	65
3.	A03	100
4.	A04	90
5.	A05	80
6.	A06	55
7.	A07	55
8.	A08	60
9.	A09	65
10.	A10	60
11.	A11	50
12.	A12	65
13.	A13	85
14.	A14	80
15.	A15	75
16.	A16	70
17.	A17	80
18.	A18	80

19.	A19	80
20.	A20	90
21.	A21	70
22.	A22	60
23.	A23	75
24.	A24	75
25.	A25	65
26.	A26	70
27.	A27	70
28.	A28	70
29.	A29	55
30.	A30	75
31.	A31	85
32.	A32	85

The students' score above then were computed by using SPSS. The result was shown in the Table 4.5 below

**Table 4.5 Descriptive Statistics of Posttest**

**Statistics**

Posttest

N	Valid	32
	Missing	0
Mean		72.97
Median		72.50
Mode		70 <sup>a</sup>
Std. Deviation		12.434
Sum		2335

a. Multiple modes exist. The smallest value is shown

Based on the table 4.5 can be seen that the students consist of 32 students. It shows that the mean score 72.97, which means that the good of 32 students are get score is 72.97, it can be indicated that the students can mastery reading well. The median score is 72.50. In this case mode score is 70, so, there are many students got enough score. Meanwhile, the standard deviation of posttest 12.434.



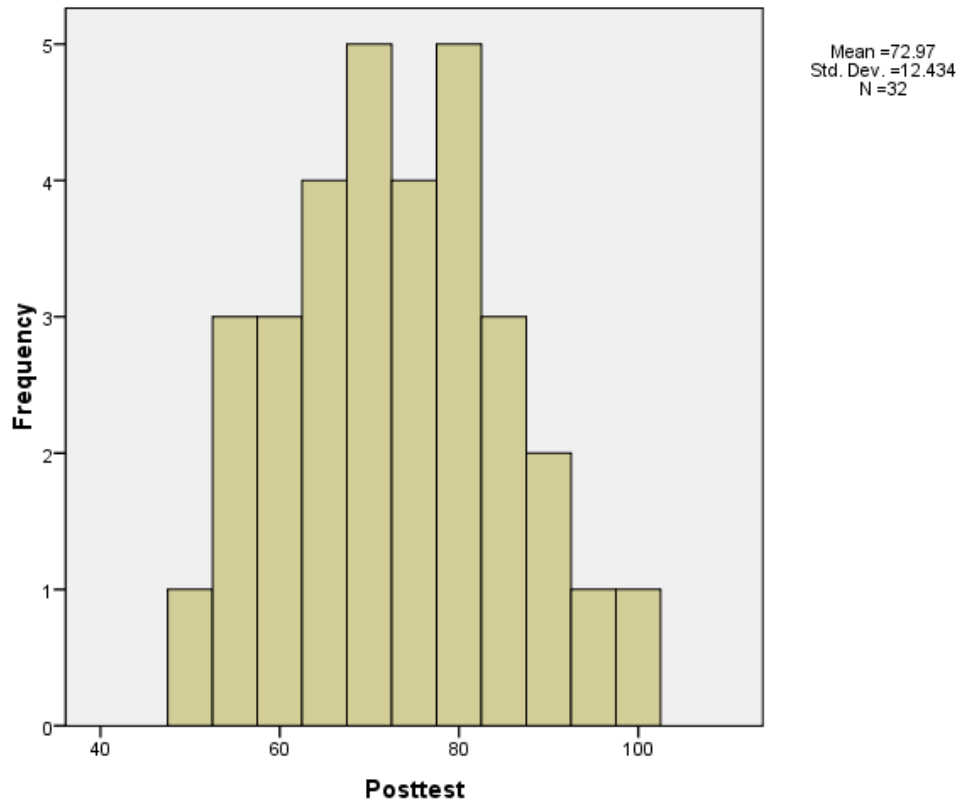
**Table 4.6 Graph of Post Test Score**

Table 4.6 showed that in range 91-100 there are 2 student got this score in post-test, it means that the score is highest and also maximum score, indicated that the achievement of students is excellent in reading comprehension. In range 81-90 there are 5 students got this score in post-test, it means that the students belongs to a very good in reading comprehension. In range 71-80 there are 9 students got this score in post-test, it means that the students' reading comprehension is at good. In range 61-70 there are 9 students got this score in post-test, it means that the students' reading comprehension is at enough. In range 41-60 there are 9 students got this score in post-test, it means that the students' reading comprehension was not clear. In range 0-40 there are 0 student got this score in post-test. These data

descriptions are presented in order to give information about the statistics data after being computed by using SPSS program.

## b. Normality and Homogeneity Testing

### 1. Normality

Normality testing is a tes to measure whether the data has normal distribution or not. The normality of both pretest and posttest data was measured by SPSS 16.0 used the formula of One Sample Kolmogorov-Sminov Test. The result was showed as below :

**Table 4.7 Result of Normality Test**

		One-Sample Kolmogorov-Smirnov Test	
		pretest	posttest
N		32	32
Normal Parameters <sup>a</sup>	Mean	62.81	72.97
	Std. Deviation	12.044	12.434
Most Extreme Differences	Absolute	.155	.094
	Positive	.155	.094
	Negative	-.081	-.089
Kolmogorov-Smirnov Z		.876	.534
Asymp. Sig. (2-tailed)		.427	.938
a. Test distribution is Normal.			

Based on the description of SPSS above, the test distribution is normal.

## 2. Homogeneity

Homogeneity testing is aimed to know whether the samples are homogeneous or not. The researcher was helped by SPSS 16.0 to calculate the homogeneity of the data. The formula which used is Homogeneity of Levene Statistics. The result is presented below :

**Table 4.8 Result of Homogeneity Test**

Test of Homogeneity of Variances			
score			
Levene Statistic	df1	df2	Sig.
.062	1	62	.804

Based on the output data above, it is found that the significance score is 0.804, in the calculation of homogeneity, if the significance score is bigger than 0.05, it means the data are homogenous. In this research, the significance score ( $0.804 > 0.050$ ). So, the sample variance of test is homogeneity or homogenous.

### c. Hypothesis Testing

Stating the null and alternative hypotheses

- a.  $H_0: \mu_1 \leq \mu_2$  or the mean of the students after being given treatment is smaller than or equal to the mean of the students before being given treatment.
- b.  $H_1 : \mu_1 > \mu_2$  or the mean of the students after being given treatment is bigger than the mean of the students before being given treatment.

The researcher is sure that Directed Activities Related to the Texts strategy is effective for improving the students' reading comprehension ability. So, the researcher used one tailed test. Determining the significant level, that is  $\alpha = 5\%$

There are differences data presentations between before being taught by using Directed Activities Related to the Texts as a strategy and after being taught by using Directed Activities Related to the Texts as a strategy. The data present that the score after being taught by using Directed Activities Related to the Texts as a strategy higher than before being taught by using Directed Activities Related to the Texts as a strategy. The researcher uses statistical test using paired sample t-test stated by SPSS 16.00 to to convince of pretest and posttest the effectiveness of using Directed Activities Related to the Texts on students' reading comprehension ability. The result is as follows :

**Table 4.9 Paired Sample Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	62.81	32	12.044	2.129
	Posttest	72.97	32	12.434	2.198

The table above showed that the mean score of pre-test was 62.81 and the post-test-test is 72.97. Meanwhile, the standard deviation for pre-test was 12.044 and post-test was 12.434.

**Table 4.10 Paired Sample Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pretest - Posttest	-10.156	6.778	1.198	-12.600	-7.712	-8.476	31	.000

Based on the table 4.9, the data presented are the performance scores of the one group students who were taught before and after using Directed Activities Related to the Texts in reading comprehension ability. The output of paired sample statistics shows that there are mean scores differences between pretest and posttest. The mean score of pretest 62.81 and the mean score of posttest is 72.97. Then, the mean score of post test is higher than the mean score of pretest. It means that Directed Activities Related to the Texts strategy can increase the score of reading comprehension. The number of students of each sample (N) is 32 students. Standard deviation of pretest is 12.044 and post-test was 12.434. Meanwhile, mean standard error for pretest is 2.129 and mean standard error for posttest is 2.198. It can be concluded that there was a significant difference of the students' score between pretest and posttest.

Given that the present test is one-tailed test, so, the Sig. (2-tailed) or  $p$ value 0.000 is divided by two  $0.000/2 = 0$  and the significance level is 0.05.

The table 4.10 shows that the  $p$  value is 0.000 was less than 0.05. It means that the null hypothesis is rejected. It automatically accept the alternative hypothesis saying that the mean after the treatment is bigger than the one before the treatment. It could be concluded that the used of Directed Activities Related to the Texts is effective to improving the students reading comprehension ability.

## **B. Discussion**

As stated previously, the teaching and learning process was divided into three steps to collect the data. The first step was administering pre-test to know students' reading comprehension skill before being taught by using Directed Activities Related to the Texts. Then, the second step was given treatments to the students. The treatment here is teaching reading by using Directed Activities Related to the Texts. In this treatment, the researcher chosen a text and the students read carefully. And then, the students underline, marking, and circle important information to find and categorize information, write main ideas and the supporting detail, make summarizing from text the researcher given. The student also more aware of how texts are constructed and make students' textbook more interesting. The genre chosen by the researcher in this research is descriptive text. The researcher gave different text in every task that can make students interested to read different topic that can also increase their reading comprehension skill. The last step was administered posttest. In the posttest, the students are given a test to know their reading comprehension after being taught by using Directed Activities Related to the Texts.

After the-post test was administered, the researcher got the data in the form of pre-test and post-test score. Then the data analyzed by using SPSS 16.00. The score of students reading in pre-test is enough/fair. It shows from the mean of total score in pre-test from 32 students is 62.81. Besides, the score of post-test can be said good that showed by the mean of total score 32 students is 72.97. It is proved by when they are taught without Directed Activities Related to the Texts have lower score than using Directed Activities Related to the Texts.

From this data, the mean from pre-test and post-test can be seen that students' reading comprehension skill is improved. It also means that teaching reading comprehension using Directed Activities Related to the Texts is better than teaching reading taught without Directed Activities Related to the Texts. Then, to know the significance different score between pre-test and post-test, the researcher analyzed that data using t-test, the result of t-count is -8.476.

Based on the table 4.10, the Sig. (2-tailed) or the  $p$  value (two-tailed) is 0.000. Given that the present test is one-tailed test, so the Sig. (2-tailed) or the  $p$  value (two-tailed) is (0.000) is divided by two:  $0.000/2 = 0$ , and the significance level ( $\alpha$ ) is 0.05. Since, 0 is smaller than significance level ( $\alpha$ ) 5%. The null hypothesis is rejected. In other word, the hypothesis saying that the mean after the treatment is smaller than or equal to the one before the treatment is rejected. So, automatically accepts the alternative hypothesis saying that the mean after the treatment is bigger than the one before treatment.

Based on the result of data analysis above, it's also strongly with previous study as stating that Directed Activities Related to the Texts is considered as an effective for the students' reading comprehension in reading text. The journal written by Pamelasari and Khusniati (2013) entitled *The Effectiveness of Directed Activities Related to Texts (DARTs) to Improve Reading Comprehension for Science Students*. This research was quasi experimental research where DARTs was compared to direct instruction (DI) strategy. The result of the research is there was any significant difference between students who are taught through DARTs and who are taught through Direct Instruction. It meanr that Directed Activities Related to Texts (DARTs) was effective way to teach reading and mde easier to understand the reading material.

From the explanation above, it can be conclude that using Directed Activities Related to the Texts is effective in this research. And the method above is accepted by the researcher, especially in understanding reading comprehension to the junior high school. It has been verified by the result of the data analysis. The method of Directed Activities Related to the Texts can help the students' reading comprehension ability at the sevent grade of MTsN 2 Tulungagung.