

## CHAPTER IV

### RESEARCH RESULT AND DISCUSSION

In this chapter, the data of the research result will be presented and analyzed. The data are try-out, pre-test, and post-test result. The writer describes and analyzing the result the data. First, is analyzing the result of the try-out test. The second is analyzing the result of pre-test, treatment activities, post-test, t-test statistical, and discussion of the research findings. The writer also gave pre-test and post-test to know whether it is effective or not use jigsaw as technique in improving reading comprehension. The writer wanted to know whether any significant difference between before and after the students are taught by using jigsaw as technique in teaching.

The writer took two classes, class XI-A1 has 36 students and XI-A2 has 36 students. There were seventy two students of SMA N Nalumsari Jepara, who were given pre-test and post-test.

#### 1.1 Try-out Analysis

This analysis was meant to find out the validity and reliability of the instrument before it was used as the pre-test and post-test. This test was conducted on august 20, 2018. Try-out test was conducted for XI-A3 class. There were thirty six students as respondent.

##### 1.1.1 The Validity of Tryout Test

The item test is valid if  $r_{\text{count}} > r_{\text{table}}$

The ite test is invalid if  $r_{\text{count}} > r_{\text{table}}$

$$R_{\text{table}} = N$$

$$N = 30$$

IN THE TABLE 5% SHOWS THAT  $30 = 0,3494$

**Table 4.1**  
**The validity of the Tryout Test**

Criteria	Number of Item	The Total Number
Valid	1,5,7,8,9,10,11,12,13,16,17,18,21,25,28,30	16
In valid	2,3,4,6,14,15,19,20,22,23,24,26,27,29	14

From the table it can seen that try-out instrument had 16 valid and 14 invalid 14 items. The complete result of try-out analysis can be seen in Appendix.

### 1.1.2 The Reliability of Tryout Test

**Table 4.2**  
**The Reliability Computation Using SPSS Calculation**

Case Processing Summary		
	N	%
Cases		
Valid	30	100.0
Excluded <sup>a</sup>	0	.0
Total	30	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.472	30

The  $r_{table} = 0,3494$

Cronbach's Alpha = 0,472

From the SPSS calculation above, showed that in Cronbach's Alpha column was 0,472. The result if Cronbach's alpha >  $r_{table}$ .

If Cronbach's alpha >  $r_{table}$  = Items not reliable

From the SPSS calculation above, showed that in Cronbach's alpha column was 4,472 and the  $r_{table}$  0,472 from the N. In the table significant 5% showed that number 30 is 0,3494. The reliability can be said reliable if the Cronbach's Alpha  $>$   $r_{table}$ . in this part showed that  $4,472 > 0,3494$ . It means that the instrument of the research was reliable.

## 1.2 Pre-test score

In this part, the data of the pre-test score of experimental class and control class is provided. There are description:

**Table 4.3**  
**Pre-test Score of Experimental Class and Control Class**

Experimental Class			Control Class		
No	Students	Score	No	Students	Score
1	AZ-1	85	1	AZ-1	55
2	AZ-2	75	2	AZ-2	80
3	AZ-3	70	3	AZ-3	80
4	AZ-4	50	4	AZ-4	70
5	AZ-5	80	5	AZ-5	75
6	AZ-6	75	6	AZ-6	80
7	AZ-7	85	7	AZ-7	80
8	AZ-8	60	8	AZ-8	80
9	AZ-9	75	9	AZ-9	75
10	AZ-10	80	10	AZ-10	65
11	AZ-11	85	11	AZ-11	70
12	AZ-12	75	12	AZ-12	85
13	AZ-13	80	13	AZ-13	55
14	AZ-14	70	14	AZ-14	70
15	AZ-15	70	15	AZ-15	80
16	AZ-16	85	16	AZ-16	65

17	AZ-17	80	17	AZ-17	85
18	AZ-18	75	18	AZ-18	75
19	AZ-19	75	19	AZ-19	65
20	AZ-20	55	20	AZ-20	75
21	AZ-21	70	21	AZ-21	65
22	AZ-22	80	22	AZ-22	65
23	AZ-23	85	23	AZ-23	60
24	AZ-24	60	24	AZ-24	45
25	AZ-25	70	25	AZ-25	75
26	AZ-26	75	26	AZ-26	70
27	AZ-27	75	27	AZ-27	90
28	AZ-28	60	28	AZ-28	70
29	AZ-29	65	29	AZ-29	85
30	AZ-30	55	30	AZ-30	75
31	AZ-31	85	31	AZ-31	80
32	AZ-32	80	32	AZ-32	80
33	AZ-33	70	33	AZ-33	60
34	AZ-34	85	34	AZ-34	75
35	AZ-35	80	35	AZ-35	75
36	AZ-36	80	36	AZ-36	50
37	AZ-37	85	37	AZ-37	70
38	AZ-38	75	38	AZ-38	75
39	AZ-39	80	39	AZ-39	70
$\Sigma$		2900	$\Sigma$		2800
Mean		74.35897	Mean		71,79487

Based on the table 4.1 we can see that in experimental class, the highest pre-test score is 85 while the lowest pre-test score is 55. On the other hand, in the control class, the highest score is 90 while the lowest pre-test score is 55. Moreover, in the experimental class, the average

score or means is 74.35897. On the other hand, in the control class, the average score or mean is 71.7948.

	control	N	Mean	Std. Deviation	Std. Error Mean
experimental	1.00	39	74.3590	9.40181	1.50549
control		39	71.7949	9.96620	1.59587

From the students' pre-test score mean it can be assumed that students from the experimental class performed better than students from the control class in the pre-test. This assumption was tested using t-test in the next section.

### The T-test of Pre-test Score in the Experimental Group and control Table 4.4

#### 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	
experimental	.164	.687	1.169	76	.246	2.56410	2.19393	-1.80548	6.93369	
			1.169	75.743	.246	2.56410	2.19393	-1.80572	6.93393	

In this calculation pre test score using SPSS above, the  $t_{count}$  was 0.1.169 and it indicated there was no significance between experimental group and control group. In conclusion both experimental in control group had the same initial level of achievement..

The  $t_{table}$  37 in the table t test showed that 2.021. It means that the result from this calculation  $0.1.169 < 0.2021$ , it means that there is no significant difference between experimental group and control group. Both of them has a same quality and it is good result. The average score of them almost same, so both of them and 74 and 71, it is good score to compare them because both of them has a same quality.

### 1.3 Post-test

In this part, the data of the post-test score of experimental class and control class is provided. These are the description.

**Table 4.5**  
**Post-test Score of Experimental Class and Control Class**

Experimental Class			Control Class		
No	Students	Score	No	Students	Score
1	AZ-1	80	1	AZ-1	55
2	AZ-2	80	2	AZ-2	85
3	AZ-3	80	3	AZ-3	80
4	AZ-4	80	4	AZ-4	80
5	AZ-5	80	5	AZ-5	75
6	AZ-6	75	6	AZ-6	45
7	AZ-7	85	7	AZ-7	70
8	AZ-8	70	8	AZ-8	80
9	AZ-9	80	9	AZ-9	70

10	AZ-10	75	10	AZ-10	80
11	AZ-11	85	11	AZ-11	60
12	AZ-12	85	12	AZ-12	75
13	AZ-13	90	13	AZ-13	75
14	AZ-14	65	14	AZ-14	85
15	AZ-15	90	15	AZ-15	70
16	AZ-16	85	16	AZ-16	75
17	AZ-17	75	17	AZ-17	65
18	AZ-18	75	18	AZ-18	80
19	AZ-19	55	19	AZ-19	80
20	AZ-20	75	20	AZ-20	70
21	AZ-21	75	21	AZ-21	75
22	AZ-22	75	22	AZ-22	70
23	AZ-23	75	23	AZ-23	70
24	AZ-24	80	24	AZ-24	85
25	AZ-25	85	25	AZ-25	80
26	AZ-26	90	26	AZ-26	85
27	AZ-27	80	27	AZ-27	95
28	AZ-28	70	28	AZ-28	70
29	AZ-29	80	29	AZ-29	80
30	AZ-30	90	30	AZ-30	75
31	AZ-31	80	31	AZ-31	85
32	AZ-32	85	32	AZ-32	85
33	AZ-33	75	33	AZ-33	60
34	AZ-34	85	34	AZ-34	75
35	AZ-35	75	35	AZ-35	70
36	AZ-36	80	36	AZ-36	65
37	AZ-37	85	37	AZ-37	65
38	AZ-38	75	38	AZ-38	60
39	AZ-39	80	39	AZ-39	75

$\Sigma$	3085	$\Sigma$	2880
Mean	79.10256	Mean	73.84615

According to table 4.2, in the experimental class, the highest pre-test score was 90 while the lowest pre-test score was 55. On the control class, the highest pre-test score was 85 while the lowest pre-test score was 55. Moreover, in the experimental class, the average score or mean was 79.10256. On the other hand, in the control class, the average score or mean 73.84615

From the students' post-test score mean, and median, it can be concluded that students from the experimental class.

#### **The T-test of Post-test Score in the Experimental Group and control Table 4.6**

<b>Group Statistics</b>					
	VAR00003	N	Mean	Std. Deviation	Std. Error Mean
VAR0	1.00	39	79.1026	7.05913	1.13037
0002	2.00	39	73.8462	9.76443	1.56356

### 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
VAR00002	.497	.065	Equal variances assumed	76	.008	5.25641	1.92936	1.41375	9.09907
Equal variances not assumed			69.199	.008	5.25641	1.92936	1.40763	9.10519	

From the calculation using SPSS above, the  $T_{count}$  showed 0.2116. The df was 76, in the table statistic 76 was 0.2021. To know this calculation significant or not it is from this formula, if  $t_{count} > t_{table}$  the result is that there is significant difference between experimental group and control group in post test score. But if the  $t_{count} < t_{table}$  the result is there is no significant difference between experimental group and control group in the post test score. From this calculation showed that  $0.2116 > 0.2021$ , it means that there is significant difference between experimental group and control group in post test score. From this, that there is significance between students reading comprehension of narrative text taught using jigsaw method and without jigsaw method.

#### 1.4 Testing of the Hypotheses

The research was held to answer the question whether Jigsaw technique has any effect on students' ability in reading narrative text on eleventh grade students of SMA N Nalumsari Jepara. In order to provide for the question above, the Alternative Hypothesis ( $H_a$ ) and Null Hypothesis ( $H_0$ ) were proposed as follows:

- a.  $H_0$  (Null Hypothesis): Jigsaw Technique has no significant effectiveness in learning reading of narrative text.
- b.  $H_a$  (Alternative Hypothesis): Jigsaw technique has significance effectiveness in learning reading of narrative text.

To prove the hypothesis above, the obtained data from experimental class and control class were calculated by using  $t$ -test formula with assumption as follows:

- a. If  $T_o < t$  and  $t_{table}$ , the hypothesis ( $H_0$ ) was rejected and alternative hypothesis ( $H_a$ ) was accepted. It was proven that there was significant difference between students reading comprehension achievement taught using Jigsaw method and those who are not.
- b. If  $T_o > t_{table}$  the hypothesis ( $H_0$ ) was accepted and alternative hypothesis ( $H_a$ ) was rejected. It was proven there was no significant difference between students reading comprehension achievement taught using Jigsaw group method and those who are not.

According to the result above, there was significance between the post test score in the experimental group and control group. The result showed that the experimental group got higher post test score than the control group. Thus, there was significance measurement score in the experimental group and control group.

The result reports that the use of Jigsaw group method in teaching reading comprehension at the eleventh grade and teaching without Jigsaw group method there was significance in SMA N Nalumsari Jepara.

## 1.5 Discussion

Based on the finding of this study, this part discusses about the different the effectiveness of using jigsaw technique on the students' reading comprehension narrative text.

Before the students of the experimental group and control group got treatment, the researcher were gave pre test to assess their reading

comprehension skill. The result in pre test the mean is 74,358 in experimental group, and 79.10 in control group.

The use of jigsaw technique could help students to understand the material well due to an active participation with their friends in groups. Students could also be involved in the teaching learning process by discussion and delivering ideas towards the material learned. It could be seen that after the treatment was implied in both experimental class and controlled class.

Based on the hypothesis testing, the alternative hypothesis ( $H_a$ ) is accepted and null hypothesis is rejected. Thus, the finding indicate that the is significance difference between students reading comprehension taught using use jigsaw group method and without use jigsaw group method.

Compared to their result in pre test, both of experimental and control group score also got better in their post test. Experimental group average score has increased from 74.35 in pre test 71,794. Control group average score 79.10 in pre test to 73.84 in the post test. Reading the use of jigsaw group method, post test score have revealed that the reading comprehension of the students learning under jigsaw group method and without use the jigsaw method has difference result. It can be concluded that jigsaw group method improving the students reading comprehension better.

According from the result above was related to previous related study by Anisa Ulya with the title “the effectiveness of using jigsaw technique to develop students reading comprehension on narrative text (a Quasi experimental study at the eleventh grade students of SMA N 63 Jakarta). The study narrative can improve the student reading comprehension, build attitude in teaching learning and process.

It could be concluded, from the description above, mean score of post test in experimental which given treatment jigsaw had higher score compared with controlled class was using traditional method would reading comprehension process. So, there was a significant effect of student reading comprehension in narrative text.