

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

A. Research Findings

In this chapter, the researcher calculated the students' individual score of pre-test and post-test, students' means score of pre-test and post test, standard deviation of the scores, testing hypotheses, and the effect size of the treatments with the help of statistical package for social science (SPSS) ver. 22.0.

1. Students' individual score of pre-test and post-test

In this part, shows the result of the students' pre-test and post-test scores. The data calculated manually with the formula that can be seen in page 28.

The result of the calculation can be seen in the table below : **See Appendix 1**

Based on the table 4.1 above, researcher conducted an investigation toward the students' individual score of pre-test and post-test using SPSS statistic ver. 22.0. the instruction on how to operate descriptive statistic to find out the mean score, total score, minimum and maximum scores, and standard deviation in SPSS ver.22.0. as follows :

- 1.) The first step is to determine each sample's individual score by calculating it using the individual score formula.
- 2.) After finding the each individual score than sort both pre-test and post-test individual score into their respective column.

- 3.) The next thing to do is to click the “analyze-descriptive statistic-descriptive “ and in the “descriptive” table, move the data from the left side to the right side with click the arrow button. Then, click “options” and remember to check on mean, sum, std. Deviation, minimum, maximum.
- 4.) After that look the “display order “ and choose “variable list”. Click “continue” and then click “ok”
- 5.) Then, the result of the calculating can be seen below :

Table 4.2

Descriptive statistic of the students’ individual score of pre-test and post-test

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pretest	40	44	80	2.336	58.40	8.866
Posttest	40	64	96	3.064	76.60	7.472
Valid N(list wise)	40					

- a) The Individual Score of Pre-test

The total score of the pre-test was 2,336 collected from 40 students. The minimum score collected from the pre-test was 44 and the maximum score was 80. The mean score of pre-test rounded to 58.40 and the standard deviation for the pre-test was 8.866.

- b) The Individual Score of Post-Test

In the post-test, the minimum score was 64 and the maximum score was 96. The total score of post-test was 3,064 from 40 students. The mean

score of post-test was 76.60 and the standard deviation for the post-test was 7.472.

2. Students' Means Score of Pre-Test and Post-Test

From the result above (table 4.2) the mean score of pre-test and post-test was 58.40 and 76.60, which indicate that there was a difference or interval between pre-test and post-test mean score. It can be concluded that the treatments was effective on students' but it is not enough, so the researcher had to continue the calculation.

3. Standard Deviation

In this research, the reseacher used SPSS statistic ver. 22.0 to calculated students' standard deviation. The formula of standard deviation that the research used can be seen in page.

Standard deviation represents the deviation of the values of a set of data from the mean or average. If standard deviation is lower, it means that the values are very close to their average. Mean while, if standard deviation isn higher, it means that the values are scattered far from the average value. The calculation showed that the standard deviation of pre-test was 8.866 and the post-test was 7.472 (see table 4.2). it can be concluded that students' reading score were closer to average after the treatment of Listen-Read-Discuss (L-R-D) applied.

4. Testing hypothesis

The researcher use T-test (paired test sample) to test the hypothesis of the first research question by using SPSS ver.22.0 paired sample T-Test use to find

out whether or not Listen-Read-Disuss (L-R-D) was effective to teach reading comprehension by comparing t-value to t-table.

The criteria of testing hypothesis as followed :

If t-value < t-table, the Ha is rejected

If t-value > t-table, the Ho is rejected

The result of the t-test can be seen in the following table.

Table 4.4

Paired samples test

		Paired Differences					t	Df	Sig.(2-tailed)
		mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of Difference				
						Lower	Upper		
Pair 1	Posttest-Pretest	13.500	16.338	2.520	28.945	39.255	13.525	29	.000

From the table 4.3 above, it can be seen that the t-value (13.529) was higher than t-table (2.045) which means that the null hypothesis (Ho) was rejected and that the alternative hypothesis (Ha) was accepted. In this research could be seen that the use of Listen-Read-Discuss (L-R-D) was suitable in teaching reading comprehension. It can be taken into conclusion that the use of Listen-Read-Discuss (L-R-D) was effective for teaching reading comprehension to the tenth grade students' at SMA Negeri 3 Sanggau in the academic year of 2018/2019.

5. The effect size test

The next part was to find out the answer to second research question related on how significant the effectiveness of the treatment was.

Creswell (2012:188) explain that effect size can be used to find out the strength in population differences or relationship between variable that exist. By the given information in table 4.2, the researcher calculated the effect size manually using the formula below:

$$ES = \frac{x_2 - x_1}{SD}$$

$$ES = \frac{76.60 - 58.40}{\frac{(8.866 + 7.472)}{2}}$$

$$ES = \frac{18.2}{\frac{(16.338)}{2}}$$

$$ES = \frac{18.2}{8.169}$$

$$ES = 2.22$$

Where :

0-0.20	= weak effect
0.21-0.50	= modest effect
0.51-1.00	= moderate effect
> 1.00	= strong effect

(adopted from cohen et al, 2007 : 521)

Before explaining the result of this calculation, the researcher would like to explain that the X score was resulted from the mean score, which X1 for the mean score of pre-test and X2 for the mean

score of post-test. The SD value is the result of both pre-test and post-test standard deviation. The result of the effect size was 2.22, by considering the interpretation by Cohen et al, 2.22 was greater than 1 ($2.22 > 1$). It can be concluded that there was strong effect to the students' reading comprehension after the treatment of Listen-Read-Discuss (L-R-D) strategy was applied to the class.

B. Discussion

In this part, the researcher would discuss the researcher findings based on the data gathered from the researcher.

1. The first research problem was about the effectiveness of Listen-Read-Discuss (L-R-D) strategy for teaching reading comprehension to the tenth graders at SMA Negeri 3 Sanggau. To answer that research problem, the researcher calculated the result of students' individual score and means of pre-test and post-test, standard deviation, and effect size. Based on the results, that the tenth grade students' of SMA Negeri 3 Sanggau had the difference or interval between pre-test and post-test score. It can be said that the treatment given by the researcher was effective on reading comprehension. The finding of this research problem is supported by previous studies done by Maswa (2014) which showed that Listen-Read-Discuss (L-R-D) was an appropriate and useful strategy for teaching reading comprehension.
2. The second research problem was about to find out how strong the effect of Listen-Read-Discuss (L-R-D) strategy for teaching reading comprehension to the tenth grade students' of SMA Negeri 3 Sanggau. To find out the effect size of the treatment, the researcher calculated the data by using parametric effect size formula. After the researcher analyzed the data it is found that there is a comparison between t-value and t-table also the effect size was at strong effect. It can be concluded that L-R-D strategy gave effect on students' reading comprehension. The effect shown at the end of this pre-experimental research surely because L-R-D strategy

helped the students' to be active in reading. Dian pariska (2015) on her research can be concluded that L-R-D strategy has significant impact on the second grade studnets' reading comprehension, because the score of post-test id higher than pre-test.