CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter presents and discuss the statistical result based on the instruments that are used in conducting the research. The data is presented which are presentation of data, hypothesis testing and measurement of validity and reliability of the test.

A. Presentation of Data

As state on the chapter I. there is two research problems of this research. They are: is there any correlation between students' summary writing and student' reading comprehension? And how significant the effect of student' summary writing and student' reading comprehension?

In this case, the researcher needs to present the data to know the effect of both variables include dependent variable and independent variable. The researcher uses t-test formula to analyse the data.

1. Data Presentation of pre-test

The first activity which is done by the researcher is doing a pre-test. The researcher conducted pre-test to know students' score before being given a treatment. The pre-test was conduct on 28nd october 2021 at 07;30 pm. The researcher here give the text that is consist of 20 questions.

Result of Pre-Test

Table 4.01

No	Name	Pre-test
1	GN	20
2	RY	30
3	DA	40
4	ELM	40
5	MJ	30
6	SA	40
7	RA	10
8	NR	60
9	IR	45
10	AL	15

From the table above, it can be seen that the number of respondents (N) were 10students and total score of pre-test is 330. The highest score of is five and the lowest score is zero.

2. **The Presentation of Treatment**

for the next meeting starting on 6th of November 2021at 07.30 am. The researcher gave a treatment to the respondents. The treatment is given three times but not immediately the treatment is given three times but is given once a week. The steps are as follow:

a. The researcher enters to the class room
b. The researcher explains the way how to write summary
c. The researcher gives the text to be summarized
d. The researcher gives the time to the respondents to write summary. The time is 30 minutes
e. The respondents submit the summary
f. The researcher left the class room

in the first week, the researcher gave a treatment in the form of a story that must be summarized, but the researcher has not given directions on how to summarize. after seeing the results it turns out to be very bad because they can't summarize long stories into short stories.

in the second week the researcher also gave the exact same treatment as the first week, only the researcher said that summarizing is an activity to write a story from a long story to a short story and also understand what the meaning of the story is. after seeing the results. There are some that are quite good but there are some who do not understand properly.

in the third week the researcher also did the exact same treatment as the previous weeks, but the difference was only in the text of the story given. the researcher also re-explained how to summarize, they immediately summarized. after seeing the results have been very good from the previous weeks. it can be concluded that the more you summarize, the better the reading will be, including the reading comprehension.

3. **Data Presentation of Post-test**

After giving treatment by writing summary, in the next meeting, the researcher wanted to know the students' progress on their reading comprehension by giving post-test. The students are asked to do the test as far as they can. The last, the researcher scored test based on the evaluation rubric for reading activity. This is the score of post-test:

Result of Post-Test

Table 4.02

No	Name	Post-Test
1	GN	50
2	RY	40
3	DA	50
4	ELM	45
5	MJ	55
6	SA	45
7	RA	50
8	NR	75
9	IR	65
10	AL	30

From the table above, the total score of post-test (after giving treatment) is 505. From the total score it can be seen that students' post-test score is higher than pre-test score.

4. **Data Analysis**

the researcher must analyze the data before testing hypothesis. The data which is analyzed is the result of pre-test and post-test. To know the result, the researcher uses t-test formula to calculate it. This is the calculation by using t-test formula:

a. Entry the paired of X1 and X2

the Calculation of Paired Sample Test (post-test and pre-test)

Table 4.03

No	Student' Name	Students' Comprehension		D	D^2
		X	Y	X-Y	
1	GN	20	30	-10	100
2	RY	30	40	-10	100
3	DA	40	50	-10	100
4	ELM	40	45	-5	25
5	MJ	30	55	-25	625
6	SA	40	45	-5	25
7	RA	10	50	-40	1.600

8	**NR**	**60**	**75**	**-15**	**225**
9	**IR**	**45**	**65**	**-20**	**400**
10	**AL**	**15**	**30**	**-15**	**225**
	N = 10	**$\sum_X$ 1** **330**	**$\sum_X$ 2** **485**	**$\sum D$** **190**	**$\sum_D$ 2** **3.425**

b. Analyzing the data by statistical analysis

Based on the table 4.03, the researcher gets some points about two variables. Reading comprehension and summary writing.

Skill as follow:

$$M_{D=}\frac{\sum D}{N}$$

$$=\frac{190}{10}$$

= 19

$$SD_D = \sqrt{\frac{\sum D^2}{N} - (\frac{\sum D}{N})^2}$$

$$= \sqrt{\frac{3,425}{10} - (\frac{190}{10})^2}$$

= 0,3425- 19361

= 360.6575

$$SEM^D = \sqrt{\frac{SD_D}{N-1}}$$

$$= \sqrt{\frac{360,6575}{10-1}}$$

$$= \sqrt{\frac{360,6575}{9}}$$

$$=\sqrt{40,073}$$

$$= 6,330$$

$$t_o = \frac{M_D}{SEMD^D}$$

$$t_o = \frac{19}{6,330}$$

t_o= 3,001

Df = N-1

= 10- 1

= 9

$$t_t = 2,26$$

Note:

N = 10

$\sum X^1$ = 330

$\sum X^2$ = 485

$\sum D$ = 190

$\sum D^2$ = 3.425

After that, the researcher will count the effect both of them by using t-test[1]

[1] AnasSdjiono, *PengantarStatistikPendidikan*(Jakarta:RajawaliPers,2014),P.305

Based on the calculation of t-test the researcher finds $t_0 = 3{,}001$.

Therefore to know the hypothesis of the researcher will be rejected or accepted, the researcher needs to perform hypothesis testing.

B. Hypothesis Testing

According to Creswell, hypothesis is statement in quantitative research in which the investigator makes a prediction or a conjecture about the outcomes of a relationship among attributes or characteristics.[2] There are two kinds of hypothesis, null hypothesis and alternative hypothesis. Hypothesis are important thing in quantitative research because hypothesis is as the final result of the research. There are two kinds of hypothesis, null hypothesis (H_0) and alternative hypothesis (H_a), the researcher determines alternative hypothesis (H_a) as the hypothesis of this research.

Based on the analyzing data by statistical analysis, the researcher uses t_{test}. The result of $t_0 = 3{,}001$. After the researcher knows about value then, the last step is comparing t test with r_{table} it means H_a is accepted and H_0 is rejected, but if t_{test} is lowest than r_{table} it means H_0 is accepted and H_a is rejected.

Before determine the hypothesis of this research is accepted or not, the researcher must determine the value of df (degrees of freedom) to determine the value of r_{table} and the formula are as follows:

df = N-nr

df: degrees of Fredom

N: Number of Cases (N = 10)

Nr = Sum of Variavle

df = N – nr

df = 10 – 1

df = 9

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[2] Creswell. *Educational Research Planning, Conducting and Evaluating Quantitative and Qualitative Research.* Page.,111.

The value of df is 22, whereas value of r_{table} can search by using the value of df. The value of r_{table} of 9 specifically at the significance 5% is 2,26.

Table 4.04

Table of Coefficient Value of Correlation "t" table

Significance	**5%**
Df	**9**
t_{table}	**2,26**
T_{test}	**3,001**

From the result of the table above, the value of t_{test} is 3,001 and the value of t_{table} of coefficient value correlation product moment in 5% significant error 2,26, the result shows that t_{test} is higher than r_{table} therefore, the hypothesis of this research (alternative hypothesis) is accepted. Whereas null hypothesis (H_0) of this research is rejected. It means that 9^{th} grade students have better reading comprehension after writing summary treatment.

C. Validity and Reliability of the Instruments

1. Validity of the instruments

a. Validity of the test

Validity is the most important in developing, measuring, and evaluating instruments in using a test. To check the validity of the test, the researcher identifies the test the researcher used. The researcher identifies whether the test is appropriate to the students or not. The researcher match the test the

made by the researcher with the syllabus and also lesson of the school se appendix IX and X.

2. The Reliability of Instruments

a. The reliability of Test (Pre-Test)

After, the test is validity is provable, the researcher determining the reliability. In checking reliability of the instruments of this research, the researcher uses SPSS application for calculating the result of the test with Cronbach Alpha formula because it is suitable to measure the reliability of the performance of students. The researcher presents the reliability testing as below:

1. The reliability of Pre-Test

Table 4.06

Reliability of Pre-Test

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.539	20

From the output the researcher get the reliability of pre-test score = 0,518. To know the reliability of the test, it is reliable or not, the researcher compare the value of t_0 and t_{table} . To know r_0, the researcher look for the degree of freedom by formula as below:

df = N-nr = 10-1= 9

df : degree of freedom

N :Number of cases

nr : total variable which is correlated. nr = 1

According to level significance 5%, the critical value in t_{table} is 2,26. Because coefficient Alpha that 539are significantly higher than t-table (539>2,26.). So, the researcher states the data in pre-test are reliable.

2. The reliability of Post-Test

Table 4.07

Reliability of Post Test

Case Processing Summary

		N	%
Cases	Valid	10	100.0
	Excluded[a]	0	.0
	Total	10	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.351	20

From the output the researcher gets the reliability coefficient of post-test = 351. The numbers use be consulted t table. The number of the sample = 10, it means N= 10, and degree of freedom (N- nr), df =(10-1), df= 9. According to significance 5%, the critical value in t-table is 2,26. Because coefficient Alpha that 351 are significantly lower than r-table in significance 5%. So, (351>2,26) the test is reliable.

D. Discussing and Finding

In this research, there is two research problems that researcher wants to research, as follows:

1. Do the students reading comprehension have better achievement often getting summary writing treatment?

Based on the data above, the result of this research that analyzing by statistical analysis t- test shows that there is effect between reading comprehension and students summary writing. It means that the students write summary the better their reading comprehension. It is proved by comparing the result of t_{test} with $t_{table.}$ The result of r_{test} is 3,001 and the value of t_{table} 2,26. Therefore, the result of r_{test} is highest than t_{table} (3,001>2,26). Based on the hypothesis t4sting the null hypothesis is rejected and the alternative hypothesis is accepted.

The result of this research is there is effect of writing summary to reading comprehension. In order, the 9^{th} grade students have better reading comprehension after writing summary treatment. On of easy way to keep their writing summary is by assigning the students to always write summary before enter the class. Genuinely that habit has big effect to students' reading comprehension.

2. How significant the effect of students' summary writing on students' reading comprehension?

In this research, there is effect of reading comprehension at 3^{rd} grade Junior vHigh School at Raudadtus Saadah. It is proved by the result of wilcoxon test above. The result of analyzing the data presents that Asyim.Sig is 0,000 (or > 0,005). To know how significant this research we have to low the percentage result of this research. Percentage of this research is 3,001, therefore significant of this research is 300,1%.

Therefore, after analyzing the significance of this research by using Wilocoxon test is 300,1%.