

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This chapter present the statisitcal result based on the instrument that is used conducting in the research hypothesis and finding .

A. Research finding

In this research, the researcher can present some data based on the research instruments that were used to collect the data. The researcher used two kind of research instrument, they are test, and documentation.

1. The result of the data test

As stated in previous chapter, test is the main instrument in this research. It is mean that the data which are obtained from the test instrument will be analyzed by using statistical method.

The resaercher used two kind of test, they are, pre-test and post-test. the test were oral test because it was to measure the speaking skill achievement. The test consist of five question that used in pre-test and post-test by given intruction to the student to speak up in front of the class with text that was given by the teacher. In scoring the pre-test answer, the teacher gave 20 score for item number 1, 20 score for item number 2, 20 score for item number 3, 20 score for item number 4, and 20 score for item number 5.

Beside that, the score will be gave to the students whou could speak fluently, accuracy and gramatically, but the students will get under the

score above if the students would not speak based on five category on speaking like fluency, comprehension, pronunciation, vocabulary, and gramatically, So, the students will got 100 score if they could answer the fifth question perfectly.

a) The result of pre-test on experimental and control group

The pre-test was used to measure the student ability on speaking skill before giving the treatment. Based on sample of the researcher had choosen. After that, the researcher can determine wheter can be an experimental group that it got a treatment and control group that it did not.

The researcher gave a pre-test on experimental group at 23 march 2020 on monday at 08: 15 a.m. pre-test gave to the A class. There are 19 student conducting the pre-test. While the researcher gave pre-test to control group on 26 March 2020 on Thursday at 09: 15 a.m. pre-test gave to the B class, there are 22 students conducting the pre-test From both the result of pre-test there are 41 students.

Table 4.1

The score of pre-test and post-test at experimental

No.	Pre-Test	No.	Post-test
1	60	1	70
2	40	2	60
3	60	3	70
4	60	4	70
5	60	5	70

6	40	6	50
7	70	7	80
8	60	8	70
9	50	9	60
10	50	10	60
11	70	11	80
12	70	12	80
13	55	13	70
14	70	14	80
15	60	15	80
16	50	16	70
17	55	17	60
18	50	18	60
19	65	19	70
ΣX	1095	ΣY	1310

Based on the table 2, the total score of experimental group is 1095 to calculate mean of pre-test on experimental group the researcher uses the following formula:

$$\begin{aligned}
 X &= \frac{\Sigma x}{N} \\
 &= \frac{1095}{19} \\
 &= 57,63
 \end{aligned}$$

Means of experimental class : 57,63

While the total score of control group is 1310 to calculate mean of pre-test on control group the researcher uses the following formula:

$$\begin{aligned} Y &= \frac{\sum Y}{N} \\ &= \frac{1310}{22} \\ &= 68,94 \end{aligned}$$

Mean of control class: 68,94

Table 4.2

The mean of experimental and control group in pre-test achievement

Group	Number of students (N)	Score	Mean
Experimental	19	1095	57,63
Control	22	1310	68,94

Based on the result above, the researcher determines A class is as experimental group that gave a treatment, and B class is as control group because mean value of A and B class is higher than with A class. The difference both are 11,31 points.

b) The result of post-test on experimental and control class

the researcher gave a pos-test on experimental group of 30 march 2020 on Monday at 08: 00. Post-test gave to the A class. There are 19 students conducting the post-test. While the researcher gave a post-test on control group 01 march on Wednesday at 07:15 a.m. post-test gave to the B class. There are 22 students conducting the test. The post test score is higher than the pre-test score. From both of the result of the pos-test.

Table 4.3

The score of pre-test and post-test at control class

No.	Pre-Test	No.	Post-test
1	50	1	60
2	40	2	50
3	50	3	60
4	50	4	60
5	60	5	60
6	60	6	70
7	40	7	60
8	50	8	60
9	60	9	65
10	60	10	70
11	40	11	50
12	60	12	70
13	50	13	60
14	60	14	70
15	60	15	65
16	50	16	60
17	40	17	50
18	60	18	60
19	60	19	70
20	50	20	60

21	40	21	50
22	60	22	60
ΣX	1150	ΣY	1340

Based on the table 3, total score of experimental group is 1150, to calculate mean of post-test on experimental group the researcher uses the following formula:

$$\begin{aligned} X &= \frac{\Sigma Y}{N} \\ &= \frac{1150}{19} \\ &= 52,27 \end{aligned}$$

Mean of experimental class : 52,27

While total score of control group is 1340, to calculate mean of post-test on control group the researcher uses the following formula:

$$\begin{aligned} Y &= \frac{\Sigma Y}{N} \\ &= \frac{1340}{22} \\ &= 60,90 \end{aligned}$$

Mean of control class : 60,90

Table 4.4

The result of experimental and control group in the post-test achievement

Group	Number of the students (N)	Score	Mean
Experimental	19	1150	52,27
Control	22	1340	60,90

Based on the comparison value between experimental and control group is known that mean of experimental group is 57,63, and the mean control group is 68,94 the differences both are 11,31 points. It can be conclude that the students who are taught by using handpuppet media on storytelling in speaking skill have lower achievement than the students who are not taught by using media in storytelling.

2. The result of the documentation data

The data that are obtained from documentations are as follow:

- a) Students' name list
- b) Students' score of speaking skill of SMP Ma'arif 2 Pamekasan especially A class that use handpuppet media on speaking skill and B class that did not use handpuppet media on students speaking skill.
- c) The pre-test and post-test text.
- d) Lesson Plan.

B. Data analysis

1. Data analysis of testing finding

a) Validity of the test instrument

The researcher used content validity in this research. The validity of the test always depends on situation and purpose of the test used. A test that is valid for one situation may not be valid for another situation.

The test is also a factor showing validity. In this research, the researcher showed the students' test to the English teacher and to be appropriate with the content of the subject. So, called content validity.

b) Reliability of the test instrument

A good test must be valid and reliable. Besides the index of validity, and to know the reliability of the test instrument. In this study, the researcher used to know whether the instrument is reliable or not, and then the researcher calculated the score of the try-out test by using Cronbach Alpha formula by using SPSS v.20:

Case Processing Summary

	N	%
Valid	19	100,0
Cases Excluded ^a	0	,0
Total	19	100,0

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

Reliability Statistics

Cronbach's Alpha ^a	Cronbach's Alpha Based on Standardized Items ^a	N of Items
-1,913	-1,435	5

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

Inter-Item Correlation Matrix

	x1	x2	x3	x4	x5
x1	1,000	-,151	-,200	-,326	-,233
x2	-,151	1,000	-,619	-,109	,306
x3	-,200	-,619	1,000	,178	,038
x4	-,326	-,109	,178	1,000	-,220
x5	-,233	,306	,038	-,220	1,000

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
x1	47,63	59,357	-,526	,277	-,545 ^a
x2	45,00	55,556	-,478	,537	-,793 ^a
x3	45,00	52,778	-,452	,510	-,905 ^a
x4	47,37	42,690	-,326	,212	-1,525 ^a
x5	51,84	39,474	-,095	,260	-2,212 ^a

a. The value is negative due to a negative average covariance among items. This violates reliability model assumptions. You may want to check item codings.

$$Df = 41 - 1$$

$$= 40$$

Table 4.5

Table of coefficient value of correlation "r" product moment

Df	Significant level	r-table	r-value
40	5%	0,304	-1,435
	1%	0,393	-1,435

From computation above, it is find out that r_{11} (the total of reliability test) is -1,435 whereas the number of item test 5. To know

whether or not the test instrument reliable, we have to consult the value of r_{11} to r-table. If the value of r_{11} is higher than the value of r-table, so the test instrument (pre-test) is reliable. The value result from the computation is higher the critical value (r_{11}) table, it can be conclude that realibility of instrument is used is reliable.

Before hypothesis testing, the researcher is analyzed data by using t-test of the result of pre-test of experimental and control group.

Table 4.6

The value of pre-test and post-test in experimental and control class

No	Experimental				No	Control			
	Pre-Test	Post-test	Gain (N)	X ²		Pre-test	Post-test	Gain (N)	Y ²
1	60	70	10	100	1	50	60	10	100
2	40	60	20	400	2	40	50	10	100
3	60	70	10	100	3	50	60	10	100
4	60	70	10	100	4	50	60	10	100
5	60	70	10	100	5	60	60	0	0
6	40	50	10	100	6	60	70	10	100
7	70	80	10	100	7	40	60	20	400
8	60	70	10	100	8	50	60	10	100
9	50	60	10	100	9	60	65	5	25
10	50	60	10	100	10	60	70	10	100
11	70	80	10	100	11	40	50	10	100
12	70	80	10	100	12	60	70	10	100

13	55	70	15	225	13	50	60	10	100
14	70	80	10	100	14	60	70	10	100
15	60	80	20	400	15	60	65	5	25
16	50	70	20	400	16	50	60	10	100
17	55	60	5	25	17	40	50	10	100
18	50	60	10	100	18	60	60	0	0
19	65	70	5	25	19	60	70	10	100
				2775	20	50	60	10	100
					21	40	50	10	100
					22	60	60	0	0
ΣX	1095	1310	215		ΣY	1150	1340	200	2050

Before applied to the t-test formula, the researcher had to determine the value of M_x , M_y , Σx^2 , Σy^2 . The calculation of mean and deviation square in experimental and control group as follows:

$$\begin{aligned} \text{a. } M_x &= \frac{\Sigma x}{N} \\ &= \frac{1095}{19} \\ &= 57,63 \end{aligned}$$

$$\begin{aligned} \text{b. } M_y &= \frac{\Sigma Y}{N} \\ &= \frac{1310}{22} \\ &= 68,94 \end{aligned}$$

$$\text{c. } SD_x \text{ atau } SD_1 = \sqrt{\frac{\Sigma x^2}{N_1}}$$

$$= \sqrt{\frac{1095}{19}}$$

$$= \sqrt{\frac{1199025}{19}}$$

$$= \frac{1095}{19}$$

$$= 57,63$$

$$\text{d. } SD_y = \sqrt{\frac{\sum y^2}{N_2}}$$

$$= \sqrt{\frac{1310}{19}}$$

$$= \frac{1310}{19}$$

$$= 68,94$$

$$\text{e. } SD_{MX} = \frac{SD_1}{\sqrt{N_1-1}}$$

$$= \frac{57,63}{\sqrt{19-1}}$$

$$= \frac{57,63}{\sqrt{18}}$$

$$= \frac{57,63}{4,24}$$

$$= 13,59$$

$$\text{f. } SD_{My} \text{ atau } SE_{M_2} = \frac{SD_2}{\sqrt{N_2-1}}$$

$$= \frac{68,94}{\sqrt{22-1}}$$

$$= \frac{68,94}{4,58}$$

$$= 15,05$$

$$\text{g. } SE_{M_1} - M_2 = \sqrt{SE_{Mx^2} + SE_{My^2}}$$

$$= \sqrt{184,68 + 226,50}$$

$$= \sqrt{411,18}$$

$$= 20,27$$

Then the researcher calculate of t test formula as follow:

$$t_0 = \frac{M_1 - M_2}{SE_{M_1 - M_2}}$$

$$= \frac{56,63 - 68,94}{13,59 - 15,05}$$

$$= \frac{-12,31}{-1,46}$$

$$= 8,43$$

$$Df = (N_1 + N_2) - 2$$

$$= (19 + 22) - 2$$

$$= 41 - 1$$

$$= 40$$

C. Hypothesis Testing

Hypothesis testing is very important step in conducting a research, because step proves which hypothesis is accepted or rejected. In this step the researcher will know the result of this research.

To know whether the alternative hypothesis (H_a) is accepted or rejected, the researcher has to consult the value of the obtained t (t_0) to t table (t_t) if the value of (t_0) is higher or at least have the same with (t_t) so, the alternative hypothesis is accepted, the value of t table can be seen in the following table :

Table 4.7

Table coefficient value of "t test" comparison

Df	Significant level	t- table	t- value
40	5%	2,02	8,43

	1%	2,71	8,43
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Based on the data above, the researcher get df t-value is higher then t-table either in 5% or 1 %. ($5\% = 2,02 < 8,43$) or ($1\% = 2,71 < 8,43$). From the result above it can be conclude that H_a (alternative hypothesis) is **accepted**, and the H_o (null hypothesis) is **rejected**. it means that student that using handpuppet media have better achievement in storytelling than those who does not use handpuppet media, and the using of handpuppet media in storytelling have significant influence on speaking skill based on the result above.

D. Discussion of finding

in this research the researcher has two research problem in this study. First, Do the student who taught by Handpuppet as teaching media in storytelling have better achievement than those who does not use handpuppet media, and the second is How significant the influence of using Handpuppet as media in story telling on students speaking skill at Eighth Grade of SMP Ma'arif 2 Pamekasan.

Based on the finding in this research, the student who taught by handpuppet media have better achievment on speaking skill at the Eighth grade and there is a significant influence of using handpuppet media to increase students speaking skill at SMP Ma'arif 2 Pamekasan. The statistical analysis on previous chapter presented that t-value is higher than t-table either in 5% or 1 %. ($5\% = 2,02 < 8,43$) or ($1\% = 2,71 < 8,43$). From the result above , it can be conclude that student that using handpuppet media have better achievement and sifnificant influence of the using handpuppet media in

storytelling on speaking skill than those who taught using handpuppet media at SMP Ma'arif 2 Pamekasan.

Talk about handpuppet media, student either the teacher can use it in teaching learning process to make the matterial is fun, not bored and can interest them to follow learning process especially in speaking.