

## CHAPTER IV

### RESEARCH FINDING AND DISSCUSSION

#### A. The Data from Test

##### 1. Description of The Data Test

The purpose of this research is to give the report the data description and to analyze score of pre-test and post-test of experiment and control class. The researcher compares the achievement of pre-test and post-test, to know whether tongue twister technique is effective in teaching student's pronunciation skills

The researcher held this research in second grade of MTs. Al-Fath Cilegon. The researcher took 48 students for sample, 24 students from class VIIIB as an experimental group, and 24 students from class VIIC as a control group.

In this research, the researcher gave test to the students for twice, first test is called pre-test, and the second test called post-test. Both of the pre-test and post-test which the writer gave to the students has scoring system for each number of test, that every number of test gave score began 1 (*bad*) for students who pronounce the word with difference in sound of initial consonant, final consonant, simple vowel, and diphthongs with lead to appropriate the intended meaning. 2 (*poor*)

for students who pronounce the word with Several mistakes in sound of initial consonant, final consonant, simple vowel, and diphthongs with lead to appropriate the intended meaning. 3 (*average*) for students who pronounce the word with Few mistakes in sound of initial consonant, final consonant, simple vowel, and diphthongs with lead to appropriate the intended meaning. 4 (*good*) for students who pronounce the word with Very few mistakes in sound of initial consonant, final consonant, simple vowel, and diphthongs with lead to appropriate the intended meaning. 5 (*excellent*) for students who pronounce the word with correct in sound of initial consonant, final consonant, simple vowel, and diphthongs with lead to appropriate the intended meaning. The researcher got the score as follow:

## 2. Analyzing of Data Research

**Table 1**

**The Student's Score Testing Using Tongue Twister As Experiment Class**

No	Name	Pre-Test	Post-Test
1	AW	24	88
2	ANA	50	85
3	DA	50	90
4	DF	24	96

5	ESK	25	86
6	FJ	41	94
7	IY	49	86
8	IS	25	85
9	KR	50	90
10	LS	40	96
11	LIF	43	86
12	MNP	50	94
13	MNM	20	93
14	MM	46	86
15	MJ	36	92
16	MJP	40	85
17	NA	24	90
18	NH	50	96
19	RA	41	86
20	RS	41	94
21	SQ	24	86
22	SH	50	91
23	SA	50	85
24	TSR	24	90

Determine frequency distribution

20    24    24    24    24    24    25    25    36    40  
40    41    41    41    43    46    49    50    50    50  
50    50    50    50

**Table 2**  
**Frequency Distribution of Score of Pronunciation Pre-Test The**  
**Experiment Class Taught Using Tongue Twister**

Score	f	Fx	X <sup>2</sup>	f(x <sup>2</sup> )
20	1	20	400	400
24	5	120	576	2880
25	2	50	625	1250
36	1	36	1296	1296
40	2	80	1600	3200
41	3	123	1681	5043
43	1	43	1849	1849
46	1	46	2116	2116
49	1	49	2401	2401
50	7	350	2500	17500
	N=24	∑fx=917	∑X <sup>2</sup> =15044	∑f(x <sup>2</sup> )=37935

Determine mean of variable X<sub>1</sub> (Pre-Test)

1. Determine mean variable X by Formula

$$\begin{aligned}
 MX_1 &= \frac{\sum fX_1}{N_1} \\
 &= \frac{917}{24} \\
 &= 38,2
 \end{aligned}$$

The average score of experiment class students from pre-test is

38,2

2. Determine standard deviation

$$\begin{aligned}
 \text{SD} &= \frac{\sqrt{\sum fx^2}}{fx} \\
 &= \frac{\sqrt{37935}}{24} \\
 &= \sqrt{1580} \\
 &= 39,7
 \end{aligned}$$

The standard deviation score of experiment class students from pre-test is 39,7

Determine frequency distribution of score post-test ( $X_2$ )

Determine frequency distribution

85    85    85    85    86    86    86    86    86    86  
 88    90    90    90    90    91    92    93    94    94  
 94    96    96    96

**Table 3**

**Frequency Distribution of Score of Pronunciation Post-Test The Experiment Class Though Using Tongue Twister**

Score	F	Fx	$X^2$	$f(x^2)$
85	4	340	7225	28900
86	6	516	7396	44376
88	1	88	7744	7744
90	4	360	8100	32400
91	1	91	8281	8281
92	1	92	8464	8464
93	1	93	8649	8649
94	3	282	8836	26508

96	3	288	9216	27648
	N=24	$\sum fx=2150$	$\sum X^2=73911$	$\sum f(x^2)=$ 192970

Determine mean of variable  $X_2$  (Post-Test)

1. Determine mean variable X by Formula

$$\begin{aligned} MX_2 &= \frac{\sum fX_1}{N_1} \\ &= \frac{2150}{24} \\ &= 89,5 \end{aligned}$$

The average score of experiment class students from post-test is 89,5

2. Determine standard deviation

$$\begin{aligned} SD &= \frac{\sqrt{\frac{\sum fx^2}{fx}}}{24} \\ &= \frac{\sqrt{8040,4}}{24} \\ &= 89,6 \end{aligned}$$

The standard deviation score of experiment class students from post-test is 89,6

Determine different score of experiment class from post-test, by formula:

$$MX = MX_2 - MX_1$$

$$= 89,5 - 38,2$$

$$= 51,3$$

The average score of experiment class students from pre-test to post-test got increasing in amount of 51,3 points.

**Table 4**

**The Score of Pronunciation for Students Not Using Tongue Twister  
of 24 Students from Control Class**

No	Name	Pre-Test	Post-Test
1	AP	32	47
2	AAA	50	53
3	AN	50	58
4	BW	24	60
5	DUZ	25	61
6	FR	48	54
7	H	49	58
8	HM	31	52
9	HH	50	57
10	H	40	54
11	IK	43	57
12	IV	50	59
13	MP	20	43
14	MH	46	62
15	NHH	36	60
16	NS	40	59
17	NN	24	65
18	RS	50	62

19	RM	50	59
20	RA	41	43
21	SF	24	62
22	SHF	50	60
23	SA	50	59
24	TAL	30	65

Determining frequency distribution score of pre-test control class

(variable  $Y_1$ )

20	24	24	24	25	30	31	32	36	40
40	41	43	46	48	49	50	50	50	50
50	50	50	50						

**Table 5**

**Frequency Distribution of Score of Pronunciation Pre-Test The  
Control Class**

**Student Not Using Tongue Twister**

<b>Score</b>	<b>f</b>	<b>F<sub>x</sub></b>	<b>X<sup>2</sup></b>	<b>f(x<sup>2</sup>)</b>
20	1	20	400	400
24	3	72	576	1728
25	1	25	625	625
30	1	30	900	900
31	1	31	961	961
32	1	32	1024	1024



36	1	36	1296	1296
40	2	80	1600	3200
41	1	41	1681	1681
43	1	43	1849	1849
46	1	46	2116	2116
48	1	48	2304	2304
49	1	49	2401	2401
50	8	400	2500	20000
	N=30	$\sum fx=953$	$\sum X^2=20233$	$\sum f(x^2)=40485$

Determine mean of variable Y (Pre-Test)

1. Determine mean variable Y by Formula

$$\begin{aligned}
 MY_1 &= \frac{\sum fy_1}{N_1} \\
 &= \frac{953}{24} \\
 &= 39,7
 \end{aligned}$$

The average score of experiment class students from post-test is 39,7

2. Determine standard deviation

$$\begin{aligned}
 SD &= \frac{\sqrt{\sum fx^2}}{fx} \\
 &= \frac{\sqrt{40485}}{24} \\
 &= \sqrt{1686,8}
 \end{aligned}$$

= 41

The standard deviation score of control class students from pre-test is

41

Determine frequency distribution of score post-test (Variable  $Y_2$ )

Determine frequency distribution

43 43 47 52 53 54 54 57 57 58  
 58 59 59 59 59 60 60 60 61 62  
 62 62 65 65

**Table 6**  
**Frequency Distribution of Score of Pronunciation Post-Test The**  
**Control Class Taught Using Tongue Twister**

Score	f	Fx	$X^2$	$f(x^2)$
43	2	86	1849	3698
47	1	47	2209	2209
52	1	52	2704	2704
53	1	53	2809	2809
54	2	108	2916	5832
57	2	114	3249	6498
58	2	116	3364	6728
59	4	236	3481	13924
60	3	180	3600	10800
61	1	61	3721	3721
62	3	186	3844	11532
65	2	130	4225	8450
	N=24	$\sum fx=1369$	$\sum X^2=37971$	$\sum f(x^2)=78905$

Determine mean of variable Y (Post-Test)

1. Determine mean variable Y by Formula

$$\begin{aligned} MY_2 &= \frac{\sum fy_1}{N_1} \\ &= \frac{1369}{24} \\ &= 57 \end{aligned}$$

The average score of control class students from post-test is 57

2. Determine standard deviation

$$\begin{aligned} SD &= \frac{\sqrt{\sum fx^2}}{fx} \\ &= \frac{\sqrt{78905}}{24} \\ &= \sqrt{3287,7} \\ &= 57,3 \end{aligned}$$

The standard deviation score of experiment class students from post-test is 57,3

Determine different score of experiment class from post-test, by formula :

$$\begin{aligned} MY &= MY_2 - MY_1 \\ &= 57 - 39,7 \\ &= 17,3 \end{aligned}$$

The average score of experiment class students from pre-test to post-test got increasing in amount of 17,3 points.

**Table 7**  
**Standard Deviation**

No	X1 (Post-Tes X)	X2 (Post-Tes Y)	X1 (X - X1)	X2 (X - X2)	X1 <sup>2</sup>	X2 <sup>2</sup>
1	88	47	-1.5	-10	2.25	100
2	85	53	-4.5	-4	20.25	16
3	90	58	0.5	1	0.25	1
4	96	60	6.5	3	42.25	9
5	86	61	-3.5	4	12.25	16
6	94	54	4.5	-3	20.25	9
7	86	58	-3.5	1	12.25	1
8	85	52	-4.5	-5	20.25	25
9	90	57	0.5	0	0.25	0
10	96	54	6.5	-3	42.25	9
11	86	57	-3.5	0	12.25	0
12	94	59	4.5	2	20.25	4
13	93	43	3.5	-14	12.25	196
14	86	62	-3.5	5	12.25	25
15	92	60	2.5	3	6.25	9
16	85	59	-4.5	2	20.25	4
17	90	65	0.5	8	0.25	64
18	96	62	6.5	5	42.25	25
19	86	59	-3.5	2	12.25	4
20	94	43	4.5	-14	20.25	196
21	86	62	-3.5	5	12.25	25
22	91	60	1.5	3	2.25	9

23	85	59	-4.5	2	20.25	4
24	90	65	0.5	8	0.25	64
	$\Sigma=2150$	$\Sigma=1369$	$\Sigma=-2$	$\Sigma=-1$	$\Sigma=366$	$\Sigma=815$

$$N = 24 \qquad X1^2 = 366$$

$$X1 = 89,5 \qquad X2^2 = 815$$

$$X2 = 57 \qquad X1 = -1$$

$$X1 = 2150 \qquad X2 = -2$$

$$X2 = 1369$$

Determining of standard error of different mean variable X and Y

$$\begin{aligned} SE_{M1} &= \frac{SD_1}{N-1} \\ &= \frac{89,6}{24-1} \\ &= \frac{89,6}{23} \\ &= \frac{89,6}{4,7} \\ &= 19,06 \end{aligned}$$

Standard error of different mean variable X is 19,06

$$\begin{aligned} SE_{M2} &= \frac{SD_2}{N-1} \\ &= \frac{57,3}{24-1} \\ &= \frac{57,3}{23} \\ &= \frac{57,3}{4,7} \\ &= 12,1 \end{aligned}$$

Standard error of different mean variable Y is 12,1

$$\begin{aligned}
 SE_{M1.M2} &= \sqrt{SE_{M1}^2 + SE_{M2}^2} \\
 &= \sqrt{(19,06)^2 + (12,1)^2} \\
 &= \sqrt{363,2 + 146,4} \\
 &= \sqrt{509,6} \\
 &= 22,57
 \end{aligned}$$

Standard error of different mean variable X and Y is 22,57

Determining how big percentage of the average score increase variable X and Y by formula.

Determine percentage variable X

$$\begin{aligned}
 \% &= \frac{Mx}{Mx+My} \times 100\% \\
 &= \frac{89,6}{89,6+57,3} \times 100\% \\
 &= \frac{89,6}{146,9} \times 100\% \\
 &= 60,9 \%
 \end{aligned}$$

Determine percentage variable Y

$$\begin{aligned}
 \% &= \frac{My}{My+Mx} \times 100\% \\
 &= \frac{57,3}{57,3+89,6} \times 100\% \\
 &= \frac{57,3}{146,9} \times 100\% \\
 &= 39 \%
 \end{aligned}$$

According to the data above, we know that between variable X and Y has different significant in the percentage. Score of variable X is 60,9% and variable Y is 39%, it increases from variable X and Y, it's value is 21,9%.

The last analysis is determining t-test by formula

$$\begin{aligned}
 t_o &= \frac{Mx - My}{\frac{(\frac{X_1^2 + Y_2^2}{N_1 + N_2 - 2})}{N_1 \cdot N_2}} \\
 &= \frac{89,6 - 57,3}{\frac{(366 + 815)}{24 + 24 - 2} \cdot \frac{24 + 24}{24 \cdot 24}} \\
 &= \frac{32,3}{\frac{1181}{46} \cdot \frac{48}{576}} \\
 &= \frac{32,3}{383,7 \cdot 0,08} \\
 &= \frac{32,3}{31,97} \\
 &= \frac{32,3}{5,65} \\
 &= 5,71
 \end{aligned}$$

Determining  $t_{\text{table}}$  with significant 5%

$$\begin{aligned}
 df &= N1 + N2 - 2 \\
 &= 24 + 24 - 2 = 46 \\
 &= 2,01
 \end{aligned}$$

Determining  $t_{table}$  with significant 1%

$$\begin{aligned} df &= N1 + N2 - 2 \\ &= 24 + 24 - 2 = 46 \\ &= 2,68 \end{aligned}$$

After getting the data, writer analysis based on the statistic calculation of the data t-test and the result of t-test formula, it can be seen that in the general score of experiment class is better than control class. It can be seen from the total amount of the score of class B (experiment class) is 89,5 and B (control class) is 57,3 it means score of the experiment class is bigger than control class.

According to the result of statistic calculation, it can be obtained that the score of  $t_o$  is = 5,71 degree that the score is the value 46 is mentioned in the table about 2,01 (as degree of significance)

### **3. Hypothesis**

To prove the hypothesis, the Data obtained from the experiment class and control classes are calculated by using t-test formula with assumption as follow: if  $T_{observation} > T_{table}$  the alternative hypothesis is accepted. it means there is significant different between teaching using “Tongue twister method” for students pronunciation skill.



If  $T_{\text{observation}} < T_{\text{table}}$  the alternative hypothesis is rejected, it means there is significant testing between using “Tongue twister method” and not using the tongue twister for students pronunciation skill.

#### **4. Interpretation of The Data and Discussion**

From the result of the calculation above, it is obtained that the value of  $t_o$  is in the degree of 5,71. The degree of freedom (df) is 46. In this thesis, the writer used the degree of significance of 5% are 2.01, hence  $T_{\text{observation}}: T_{\text{table}} 5,71 > 2.01$ . It means that  $H_a$  (the alternative Hypothesis of the research is accepted, and  $H_o$  (the null hypothesis) is rejected.

It means that tongue twister technique has shown the significance influence for students’ pronunciation and this strategy can be used as a good strategy to improve student’s pronunciation skill.

#### **B. Data from Interview**

From the result of students’ interview, the writer could describe and identify the perception of students on using of tongue twister in learning pronunciation. The writer conducted an interview after getting the score of test. The writer interviewed 3 students. The writer conducted the interview by using an Indonesian language. The detailed transcribed of interview can be seen in appendix. Hence, the writer would describe bellow:

In the students' interview, the writer submitted 5 questions. The student's interview got as a representative of students who interviewed. The following questions' interview that submitted by the writer:

1. What is your feeling after studying use tongue twister?

From the result of interview, the response from students is satisfied. The following of interview's transcribed that obtained from conducted interview:

- a. The interview answer from student with initial "MMA"

*"Menyenangkan, agak sulit lidahnya seperti terbelit-belit mengucapkannya, tetapi melatih lidah untuk lebih mudah belajar B.Ingggris "*

(It is fun, little bit difficult for tongue, it is like twisted to say it, but it is trained tongue to be easier in learning English, March 31, 2017).

- b. The interview answer from student with initial "SHP"

*"bisa membantu pelafalannya, dan juga bisa melatih agar bisa/lancar"*

(it can help us in pronunciation, and can train us to be fluent, March 31, 2017).

- c. The interview answer from student with initial "KR"

*"Sangat membantu karena membantu palafalan Bahasa Inggris"*

(It really helps us because it helps in English pronunciation, March 31, 2017).

2. Did you feel satisfied with studying use tongue twister?

From the result of interview, the response from students is satisfied. The following of interview's transcribed that obtained from conducted interview:

- a. The interview answer from student with initial "MMA"

*"ya, merasa puas "*

(Yes, I am satisfied, March 31, 2017).

- b. The interview answer from student with initial "SHP"

*"Saya merasa sangat puas, karena bisa belajar bareng bersama kakak-kakak dan saya pun terlatih dengan lancar"*

(I feel so satisfied, because I can study with my senior and I am trained fluently, March 31, 2017).

- c. The interview answer from student with initial "KR"

*"Puas sekali, soalnya saya tidak bisa huruf r"*

(Really satisfied, because I can pronounce R, March 31, 2017).

3. According to your opinion, how important do we pronounce the word correctly?

From the result of interview, the students answer that correct pronunciation is important. The following of interview's transcribed that obtained from conducted interview:

- a. The interview answer from student with initial "MMA"

*"Sangat penting sekali karena untuk memudahkan dalam pelajaran membaca B.Inggris"*

(It is very important, because to make easiness in learning reading English. March 31, 2017)

b. The interview answer from student with initial “SHP”

*“Penting agar kita bisa melafalkannya”*

(It is important, so that we can pronounce it, March 31, 2017).

c. The interview answer from student with initial “KR”

*“Penting karena salah pelafalan berarti beda arti”*

(it is important, because wrong in pronunciation means different meaning, March 31, 2017).

4. According to your opinion, how difficult do you pronounce word?

The following of interview’s transcribed that obtained from conducted interview:

a. The interview answer from student with initial “MMA”

*“Tidak begitu sulit jika kita nya terus berusaha dengan benar ”*

(it is not too difficult, if we want to try well March 31, 2017).

b. The interview answer from student with initial “SHP”

*“Tidak ada kata sulit”*

(There is no word difficult, March 31, 2017).

c. The interview answer from student with initial “KR”

*“Sulit karena tidak terbiasa berbicara Bahasa Inggris”*

(It is difficult, because we are not accustomed in English speaking, March 31, 2017).

5. Did the way of learning using tongue twister give you easiness in learning pronunciation?

The following of interview's transcribed that obtained from conducted interview:

- a. The interview answer from student with initial "MMA"

*"Ya, lebih mudah belajar Bahasa Inggris, inti nya good job! I like tongue twister"*

(Yes, it makes easy us in learning English, the essential is good job, I like tongues twister, March 31, 2017).

- b. The interview answer from student with initial "SHP"

*"Ya, sangat memudahkan sekali, karena kita juga sedang belajar pasti akan mudah, tidak ada kata sulit"*

(Yes, it really makes us easy, because we are learning while it must be easy, there is now term difficult, March 31, 2017).

- c. The interview answer from student with initial "KR"

*"lumayan hehe"* (Reasonable, hehe, March 31, 2017)

## **CHAPTER V**

### **CONCLUSION**

#### **A. Conclusions**

Based on the research entitled about The Effectiveness of Tongue Twisters Technique toward Student Pronunciation Skills, and concerning to the result and discussion, the researcher concludes that:

1. The students' pronunciation ability at the second grade of MTs Al-fath Cilegon was good. The result can be seen in the description of chapter IV that the highest score is 96 for experiment class and it is bigger than control class while the biggest score for control class is 65.
2. Pronunciation is one of skill that must be mastered in English language. In the pronunciation, the researcher could recognize generally about student's problem in pronunciation, they are initial consonant, final consonant, simple vowel, and diphthongs. Those four aspects are considered hard to be pronounced by the students.
3. Based on the result that is described on previous chapter proved that tongue twisters is effective in increase students' pronunciation skill. The evidence is when students practice their pronunciation by using tongue twisters technique. It shows that tongue twisters technique

can help the students to increase their pronunciation skill. Through tongue twisters technique students can enjoy the teaching and learning process.

## **B. SUGGESTION**

Hence, in the final of this paper, the researcher would like to give some suggestions:

1. The teacher should recognize all the student's difficulties in English pronunciation in order to correct all of their mistakes when they produce/pronounce the word.
2. Teacher of English should be master the technique of introducing intonation, in order to get more interesting atmosphere of learning and teaching process.
3. Choosing a technique or strategy in teaching pronunciation is very important because some students consider that English pronunciation is very difficult. Therefore, the teacher must have appropriate strategy, make situation enjoyable to teaching English and give more understanding to the students about the important of the pronunciation.

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