

CHAPTER IV

RESEARCH FINDINGS

This chapter presents the result of the research. The item will be presented are presentation data, hypothesis testing and discussion finding.

A. Presentation of Data

In this research, the researcher present some results of data based on the research instrument to collect the data, that is using test.

1. Result of the Data

In previous chapter, the researcher state that the instrument in this study is the test, because the research is quantitative research. So that the data which were obtained from the test analyzed by using statistical method.

a. The result of pre-test

The test are presented in pre-test and post-test form. In every test, researcher asked the students to choose the correct answer.

In this case, the researcher give a pre-test to the students of 12th grade of MA Miftahul Ulum Bettet on Tuesday 21 May 2024. The aim is to measure students listening comprehension achievement and to know students learning outcome before given treatment. There are 28 students conducting the pre-test. The result of pre-test is the following table.

Table 4.1
The Score of Pre-Test

No	Name	Score
1	Agustin	30
2	Aldina Qirani	50
3	Anni Khoirun Nisak	40
4	Anti Mutia	20
5	Nury Alfiatul Hikmah	60
6	Imroatus Solehah	40
7	Syahda Amelia	100
8	Maryamah	50
9	Norin Napisah	30
10	Sabrina Ramadhani	50
11	Siti Aulia	40
12	Citra Kurnia Firyadi	60
13	Rika	70
14	Fauzun	40
15	Dewiana Rahmawati	40
16	Norhalimah	20
17	Ulfatul Laili	30
18	Jenira Humaira	50
19	Nuzulurrohmah	50
20	Fadilatur Rohmah	70
21	Lailatul Amania	40
22	Nailatur Rohmah	60
23	Putri Nurul Aini	40
24	Mery Puji Rahayu	30
25	St. Robiatul Adawiyah	50
26	Fara Disa Aulia	20

27	Rara Indriani	50
28	Niela Devana Amalia	40
Total Score		1.270

From the table above, there were just one students get the highest score, the highest score is 100, and three students get lowest score, the lowest score is 20. Total score of the pre-test is 1.270, to calculate mean of the pre-test, the researcher used the following formula.⁴⁸

$$Mx = \frac{\sum x}{N}$$

With description :

Mx : Mean

$\sum x$: Total Score

N : Number of case

$$Mx = \frac{\sum x}{N}$$

$$= \frac{1270}{28}$$

$$= 45,3$$

⁴⁸ Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta:Rajawali Pers,2014), 81.

Table 4.2
The Mean Score of Students Pre-Test

	N	Total Score	Mean
Pre-Test	28	1270	45,3

b. The result of Post-test

Then, researcher gave post-test on Wednesday, 22 May 2024. The researcher gave them post-test that consist of 10 question with multiple choice. This post-test have same level of difficulty as pre-test, as well as the way of assesment. If the answer is correct this score is 10 and if the answer is wrong the score is 0, and if the students can answer perfectly, they will get 100 point. The result of post-test on the list of table.

Table 4.3
The Score of Post-Test

No	Name	Score
1	Agustin	50
2	Aldina Qirani	70
3	Anni Khoirun Nisak	50
4	Anti Mutia	40
5	Nury Alfiatul Hikmah	60
6	Imroatus Solehah	50
7	Syahda Amelia	100
8	Maryamah	80

9	Norin Napisah	40
10	Sabrina Ramadhani	50
11	Siti Aulia	70
12	Citra Kurnia Firyadi	60
13	Rika	90
14	Fauzun	70
15	Dewiana Rahmawati	80
16	Norhalimah	40
17	Ulfatul Laili	40
18	Jenira Humaira	80
19	Nuzulurrohmah	70
20	Fadilatur Rohmah	70
21	Lailatul Amania	40
22	Nailatur Rohmah	90
23	Putri Nurul Aini	70
24	Mery Puji Rahayu	60
25	St. Robiatul Adawiyah	50
26	Fara Disa Aulia	50
27	Rara Indriani	100
28	Niela Devana Amalia	100
Total Score		1.820

From the table above , there were three students get 100 (the highest score) and just five students get 40 (the lowest score), the

total score is 1820, to calculate the mean of post-test, the researcher use the same formula as pre-test, as⁴⁹ :

$$\begin{aligned} Mx &= \frac{\sum x}{N} \\ &= \frac{1820}{28} \\ &= 65 \end{aligned}$$

Table 4.4

The Mean Score of Students Post-Test

	N	Total Score	Mean
Post-Test	28	1820	65

Based on the result of pre-test and post-test score is known the mean of post-test is higher than pre-test. The mean of pre-test is 67,5 and the mean of post-test is 84,2 and the different both of test is 16,7 points. In the pre-test there were 2 students who got the highest score and 3 students who got the lowest score. While in the post-test there were 5 students who got the highest score and only 2 students who got the lowest score. That is, after students are given treatment, the number of students who got the highest score increases, which initially there were 2 students to 5 students, while the number of students who got the

⁴⁹ Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta:Rajawali Pers,2014), 81.

lowest score decreased, from 3 students to 2 students. It can be concluded that students taught using religious moderation-based video storytelling can be an effective tool in improving students' listening comprehension ability, making the learning process more enjoyable, and enriching their learning experience.

3. Data analysis of Test Finding

a. Validity of The Instrument

A test should be valid in the sense that it measures what it intends to be measured.⁵⁰ The validity of the test always depends on situation and purpose of the test used. A test that is valid for any situation, and the purpose is using test is also factor in showing validity.

In this research, the researcher used content validity, to show the validity of the instrument. In content validity, the coverage of the tasks becomes the evidence.⁵¹ To know whether or not the test instrument tested related to the material given, the researcher showed the topic taught and the test to the English teacher in that school before giving them to the student. In order to know the validity of the test to be given.

b. Reliability of The Instrument

Reliability is used to make sure that the obtained data test above is reliable. In order to help the researcher counting the data gotten to show

⁵⁰ Sugiono, *Metode Penelitian Kuantitatif Kualitatif dan R&D*, (Bandung: Alfabeta, 2019), 68

⁵¹ Adnan Latief, *Research Methods on Language Learning an Introduction* (Malang: UM Press 2013), 226

the reliability of the listening test done by the students, the researcher used statistical formula. Then the researcher calculated the reliability of the test listening narrative text by using *Kuder-Richardson (KR-21)*, the formula is :

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{kv_t} \right)$$

With description :

r_{11} = Instrument reliability

k = Number of the items on the test

m = Means score

V_t = Total variances

Then it can be known :

$$k = 10$$

$$M = \frac{\sum x}{N} = \frac{127}{28} = 4,535$$

$$V_t = 0,36$$

If put into the formula, the calculation :

$$\begin{aligned} r_{11} &= \left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{kv_t} \right) \\ &= \left(\frac{10}{10-1} \right) \left(1 - \frac{4,535(10-4,535)}{10 \times 0,36} \right) \\ &= \left(\frac{10}{9} \right) \left(1 - \frac{4,535(5,465)}{10 \times 0,36} \right) \end{aligned}$$

$$\begin{aligned}
&= \left(\frac{10}{9}\right) \left(1 - \frac{24,783775}{10 \times 0,36}\right) \\
&= \left(\frac{10}{9}\right) \left(1 - \frac{24,783775}{36}\right) \\
&= \left(\frac{10}{9}\right) (1 - 0,688438194) \\
&= \frac{10}{9} \times 0,3115 \\
&= 0,3461
\end{aligned}$$

From the formula of Kuder-Richardson (K-R21), it was gotten the total of reliability was 0,3461. It mean the value of reliability 0,3461 is lowest (<) than 0,50 or not reliable

c. T-Test Computation

To analyze data of this research, the researcher used t-test formula. The formula is as follows :⁵²

$$t_o = \frac{Md}{\sqrt{\frac{\sum Xd^2}{N(N-1)}}}$$

⁵² Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik* (Jakarta: Rineka Cipta, 2013), 349

Before computing data with using the t-test formula, firstly, the researcher determined the value, as follows :

Table 4.5
Difference Score of Pre-test and Post-test Value

No	Pretest	Posttest	Gain (d) = Posttest- Pretest	d^2
1	30	50	20	400
2	50	70	20	400
3	40	50	10	100
4	20	40	20	400
5	60	60	0	0
6	40	50	10	100
7	100	100	0	0
8	50	80	30	900
9	30	40	10	100
10	50	50	0	0
11	40	70	30	900
12	60	60	0	0
13	70	90	20	400
14	40	70	30	900
15	40	80	40	1600
16	20	40	20	400
17	30	40	10	100
18	50	80	30	900
19	50	70	20	400
20	70	70	0	0
21	40	40	0	0
22	60	90	30	900
23	40	70	30	900

24	30	60	30	900
25	50	50	0	0
26	20	50	30	900
27	50	100	50	2500
28	40	100	60	3600
N =	$\sum x =$	$\sum x =$	$\sum d =$	$\sum d^2 =$
28	1270	1820	550	17.700

Secondly, the researcher determined the Mean of Difference, as follows :

$$\begin{aligned}
 M_d &= \frac{\sum d}{N} \\
 &= \frac{550}{28} \\
 &= 19,64
 \end{aligned}$$

After that, the researcher determined the sum of quadrate of deviation ($\sum xd^2$), as follows :

$$\begin{aligned}
 \sum xd^2 &= \sum d^2 - \frac{(\sum d)^2}{N} \\
 &= 17.700 - \frac{(550)^2}{28} \\
 &= 17.700 - \frac{302.500}{28} \\
 &= 17.700 - 10.803,57 \\
 &= 6.896,43
 \end{aligned}$$

Then the researcher can analyze the data with inserting the result of Mean of Difference (M_d) and the sum of quadrate of deviation ($\sum xd^2$) to the t-test formula, and calculating it, as follows :

$$\begin{aligned}
 t_o &= \frac{Md}{\sqrt{\frac{\sum xd^2}{N(N-1)}}} \\
 &= \frac{19,64}{\sqrt{\frac{6.890,43}{28(28-1)}}} \\
 &= \frac{19,64}{\sqrt{\frac{6.890,43}{28(27)}}} \\
 &= \frac{19,64}{\sqrt{\frac{6.890,43}{756}}} \\
 &= \frac{19,64}{\sqrt{9,1143253968253}} \\
 &= \frac{19,64}{3,0189941034764} \\
 &= 6,5054780919857 \\
 &= \mathbf{6,505}
 \end{aligned}$$

With $t_o=6.505$, if this value is greater than the critical t_c value for $df = 27$ and $\alpha = 0.05$ (which is usually around 2.052), then the mean difference is considered significant. This means that the calculation results indicate a significant difference between the two groups tested.

B. Hypothesis Testing

Hypothesis testing is a procedure for making decision about result by comparing an observed value of sampling with a population value of determine if no difference or relationship exist between the value.⁵³

Hypothesis testing is them most important step in conducting a research. This step examine wether the hypothesis is accepted or rejected. So, this step can prove the theory or the current finding is suitable with fact or not. There are two kinds of hypotheses; null hypothesis and alternative hypothesis.

The are two hypothesis, namely:

1. Alternative hypothesis (H_a) of this research is “there is significant effect learning method using religious moderation-based fairytale video on students listening comprehension achivement at 12th grade of MA Miftahul Ulum Bettet.”
2. Null hypothesis (H_o) of this research is “there is no significant effect learning method using religious moderation-based fairytale video on students listening comprehension achivement at 12th grade of MA Miftahul Ulum Bettet.”

The researcher can conclude that value of this statistical significant is $6,505 > 2.052$. It means that the alternative hypothesis is accepted and null hypothesis is rejected. so that researchers know that there is effect of using

⁵³ John W. Creswell, *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research* (Boaton:Person Education 2012), 621

religious moderation-based fairytale video on students listening comprehension achievement at 12th grade of MA Miftahul Ulum Bettet.

C. Discussion of Findings

In discussion, the researcher presented the effect of using religious moderation-based fairytale video on students listening comprehension achievement at 12th grade of MA Miftahul Ulum Bettet.

On Tuesday, 21 May , 2024, researchers gave treatment by watching a fairy tale video based on religious moderation to students. after watching the video, the researcher explained and asked questions to students related to the fairy tale video, how the fairy tale video story was, how the plot was, and whether there was a moral message contained in the fairy tale video, then the researcher gave conclusions related to the fairy tale. after giving treatment, then the researcher gave a pre-test to find out how students' knowledge or listening skills were after being given treatment.

On Wednesday, May 22, 2024, researchers gave a post-test to evaluate whether there was a change or improvement in students' listening knowledge or skills.

After giving the pre-test and post-test, the researcher then compared and analyzed whether there was a significant difference between the 2 groups.

In this section, researchers try to describe students' progress towards the use of videos on understanding students' listening skills. Based on data exposure and hypothesis testing, there are differences between before and after treatment. Researchers can see from students' scores between the pre-test and

post-test. In the pre-test, the highest score was 100 which was only obtained by 1 student and the lowest score was 20 which was obtained by 3 students. While in the post-test, the highest score was 100 obtained by 3 students and the lowest score was 40 obtained by 5 students.

From the progress above, researcher can analyze the result of the data with the t-test formula. The mean score of students' pre-test is 45,3 which is lower than the mean score of students' post-test is 65. This means that there is a significant difference between the two tests before further treatment is given. Furthermore, by using data from t-test analysis proposes that the value of is 2,052 and Df (Degree of Freedom) taken from om) taken from total number of students minus 1, so the df is 27 because total number of students in this research is 28 students and the value of is 6.505.

It indicates that $(6.505 > 2.052)$ which means that t_0 (the obtained t) is higher than t_t (the table of critical values). Then H_a (Alternative Hypothesis) is accepted and H_0 (Null Hypothesis) is rejected. This means that the calculation results indicate a significant difference between the two groups tested.

So the use of videos on students' listening comprehension can help improve students' listening skills. by using videos, students are more interested and increase students' interest in learning more.

From the result above supported thesis written by Suwaibah, as her thesis entitled "The Use of Videos to Improve Students' Listening Ability". Their conclude that the use of video such as animated video significantly affected the students' listening comprehension achievement. It is evident by the result of

the result showed that the means score of post-test in experimental class was 82,44 which was higher than means score in pre-test scoring 68,84. The result also revealed that the difference of mean score of post-test in experimental class was 68,84 which was 3,76 times higher than the mean value in control class scored 65,08. The similarities of the previous study with this research about the effect of using video on student's Listening comprehension. But the different are if the previous study focuses on listening ability but in this research, the researcher focuses on listening comprehension and the previous study using animated video and this research using religious moderation fairytale video.⁵⁴

⁵⁴ Monica Fanoni, "The Effect Of Using Video On Junior High School Students' Listening Comprehension Achievement. ", (Jember: Jember university, 2018), 12.