

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

This part examines the discoveries of the concentrate in engaging measurements, the t-test result including the speculation and conversation of the review.

A. Data Description

In the wake of leading the exploration, the author found two sorts of information. There is the information from exploratory class (X-IPA) and the controlled class (X-IPS). The students were given a pre- and post-test to collect the data. Before the treatment was administrated to the class, each class was given a pretest. It was hung on first of Mei 2023. In the mean time, the post-test was given in the last gathering of each class after the treatment was applied in class. It took place on June 29, 2023.

1. The Pre-Test and Post-Test Results for the Experimental Class

The Pre-Test and Post-Test Results for the Experimental Class Tenth-Grade Students at MA Muhammadiyah 01 Medan in the Academic Year 2022/23 are presented in Table 4.1. The exploratory class had 33 understudies, while the controlled class had 47 understudies. like the following table:

NO	Initial Name	Pre-test	Post-test
1	AK	42	77
2	ANA	37	69
3	AHH	52	85
4	AFN	52	86
5	AAN	44	77
6	CS	50	80
7	DK	47	78
8	DAPP	43	78
9	JMG	57	90
10	FHL	52	85
11	GAM	48	79

12	HRL	55	85
13	KF	58	87
14	KSS	49	79
15	KAS	40	76
16	IAN	46	74
17	MAH	55	87
18	MF	55	86
19	MNS	43	77
20	MSM	41	70
21	NHN	45	77
22	PNC	45	80
23	RAK	44	84
24	RK	50	85
25	RA	43	87
26	RAA	46	88
27	RM	46	80
28	SA	44	79
29	SS	45	79
30	SNN	45	79
31	SMS	55	86
32	YHP	40	77
33	ZNZ	49	79
Mean		47.36	80.76
Variant		28.989	26.502
Deviation Standart		5.384	5.148

Table 4.1 Pretests and Posttest score from Experimental class

In light of the table 4.1 above, it tends to be closed the Posttest and Pretest score in the experimental class had a massive distinction. The fact that the mean on the pre-test was 47.36 and the mean on the post-test was 80.76 demonstrates this.

2. The Controlled Class Score

The table 4.2 below demonstrates the pre-test and post-test scores for controlled class at tenth grade students of MA Muhammadiyah 01 Medan under academic year 2022/2023. as the table below:

NO	Initial Name	Pre-test	Post-test
1	AA	44	56
2	AAP	43	45
3	AL	44	56
4	AM	39	42
5	AM	45	57
6	AM	52	52
7	AM	43	50
8	AP	44	47
9	AS	45	60
10	ASA	45	57
11	AT	41	52
12	AY	47	57
13	BPL	41	50
14	DA	44	50
15	DK	48	55
16	FA	46	54
17	FA	44	55
18	FA	44	55
19	FRT	45	56
20	HI	46	54
21	I	43	55
22	IEI	44	53
23	KHA	42	54
24	MA	45	49
25	MAP	44	50
26	MFA	44	50
27	MFA	46	50
28	MFN	53	60
29	MGR	55	59
30	MZM	43	43
31	N	42	49
32	NA	44	54
33	NH	45	53
34	NN	53	62
35	NS	44	53
36	PAU	47	57

37	RD	40	50
38	RN	43	50
39	RS	44	52
40	SA	48	59
41	SKP	45	50
42	SM	41	41
43	SS	43	45
44	SS	43	50
45	ST	44	49
46	TH	45	50
47	WHWS	50	58
Mean		44.89	52.45
Variant		10.836	22.861
Deviation Standart		3.292	4.781

Table 4.2 Pre-test and Post-test score from Controlled class.

According to the data presented in table 4.2 above, the controlled class's pre-test mean was 44.89, while the post-test mean was 52.45.

Based on all of the information gathered, the author created a diagram of the improvement score before and after treatment. It was derived from both the pre-test score and the post-test score, as shown in the following diagram.

UNIVERSITAS ISLAM NEGERI
SUMATERA UTARA MEDAN

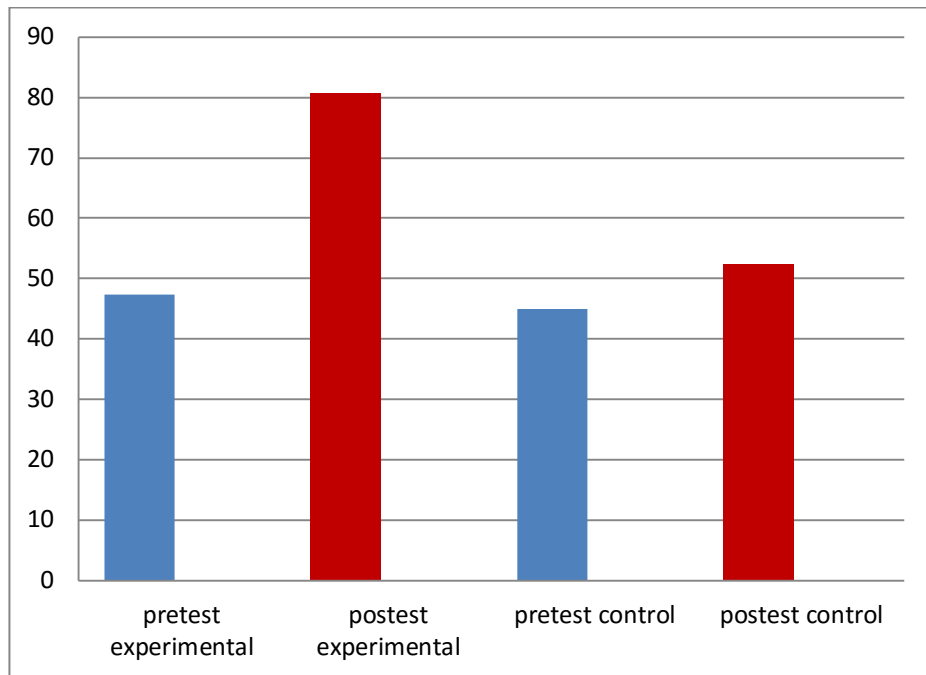


Figure 4.3 the Mean Score of Pre-test and Post-test in Experimental and Controlled Class

It is evident from the diagram above that both controlled and experimental classes have improved. It tends to be demonstrated from the distinction in mean scores of pre test and post-test scores for the two classes. The controlled class had a mean pre-test score of 44.89, while the experimental class had a mean of 47.36. The experimental group's mean post-test score was 80.76, while the control group's was 52.48.

B. Data Analysis

In this study, the writer analyzed and calculated the data in three main steps. Initially, the writer examined the data analysis using the normality and homogeneity test. Then the writer counted the dependent T-test. The statistical hypothesis is the last step in determining the study results.

1. Normality test

Using the statistical of Lilliefors test, a normality test was calculated to obtain the data for this study. The result of the normality test is shown below:

	Liliefors Test ($\alpha = 0,05$)		Result
	Lo	Lt	
Experimental class	0.074	0.1542	Normal
Controlled class	0.000	0.1292	Normal

Table of 4.5 Normality of Pre-test.

It indicates that the data are normal distributed, as shown in the table above. It is evident from Lilliefors's observation (Lo) that the experimental class yields approximately 0,074, whereas the controlled class yields 0,000. Liliefors table (Lt) of exploratory class is 0,1542 and 0,1292 for controlled class. The pre-test Liliefors table (Lt) includes samples from 33 students in the experimental class and 47 students in the controlled class at the level $\alpha = 0,05$. The experimental and controlled class data clearly show that the Lilliefors observation (Lo) is smaller than the Lilliefors table (Lo Lt). As a result, it is possible to determine that the pre-test data from both classes are normal. (The full data of the normality test of pre-test from both classes can be found in appendix VI).

	Liliefors Test ($\alpha = 0,05$)		Result
	Lo	Lt	
Experimental class	0.024	0.1542	Normal
Controlled Class	0.082	0.1292	Normal

Table of 4.6 Normality of post-test

It indicates that the data are normal distributed, as shown in the table above. It very well may be seen from Lilliefors perception (Lo) in trial class shows the outcome around 0,024 while Lilliefors perception (Lo) in controlled class is 0,082. Lilliefors table (Lt) of trial class is 0.1542 and 0.1292 for controlled

class. Post-test samples from Lilliefor's table (Lt) with samples from 33 students in the experimental class and 47 students in the controlled class at a level of = 0,05. Lilliefor's observation (Lo) and table (Lo Lt) are clearly smaller in the experimental and controlled classes of data. As a result, it is possible to ascertain that the post-test results for both the controlled and experimental classes are normal. (The full data of the normality test of post-test from both classes can be found in appendix VI).

2. Homogeneity Test

The writer then calculates the homogeneity test after obtaining the results of the normality test. The homogeneity test determines whether the variants found in the data for the two classes are identical. The Fisher test was used to calculate the test. The homogeneity test's pre-test result is as follows:

$$F = \frac{\text{variance biggest}}{\text{variance smallest}}$$

$$F = \frac{28,989}{10,836} = 2,6193$$

$$F_{\text{value}} < F_{\text{table}} = 2,61 < 4.16 = 1.70$$

The Fcount (Fo) is 2,61, the Ftable value is 4.16 at = 0,05, and the F critical one-tail is 1.7059, as shown in the preceding data. It shows that coefficient of Fcount is more modest than Ftable (Fo = 2,6193 < Ft = 1.7059). It is possible to draw the conclusion that the experimental and controlled classes' pre-test variant data are homogenous.

The result of homogeneity test in post-test is shown below:

$$F = \frac{26,502}{22,861} = 1,648$$

$$F_{\text{value}} < F_{\text{table}} = 1,1648 < 4.16 = 1.7059$$

From the calculated above, it can shows that Fcount (Fo) is 1,1648. The value of Ftable at the lavel of $\alpha = 0,05$ and the the F critical one-tail is 1.7059. It shows that coefficient of Fcount is smaller than Ftable (Fo = 1,1648 < Ft = 1.7059). It is possible to conclude that the post-test variant data for the experimental and controlled classes are Homogenous.

3. T-test

Following the calculation of the homogeneity and normality tests, The subsequent stage is working out T-test. To see if there is a tremendous contrast between the capacity of the Understudies of Mama Muhammadiyah in listening cognizance when being educated by utilizing Spotify Digital broadcast, the speculation testing by utilizing the accompanying advances:

- a. H₀ (the empty hypothesis): Students of MA Muhammadiyah's listening comprehension scores did not significantly differ before and after they were taught to use Spotify Podcasts.
- b. H_a (elective theory): Students at MA Muhammadiyah have significantly lower listening comprehension scores before and after being taught with Spotify Podcasts.

In this examination, the specialist utilized a T-test to test the speculation of the review. The Independent sample T-test table was presented by the researcher in this study, which made use of the SPSS 22.0 software. The result should be visible to utilizing the standard of Sig. (2) in the following order:

- a. If the value of the probability or Sig. 2-followed) < 0.05, then H_a is acknowledged
- b. Assuming the likelihood esteem or Sig. (2-tailed) > 0.05, then H is rejected. Additionally, the researcher employed an Independent Sample T-test to determine the significance of differences in students' listening comprehension scores between students who were taught with Spotify Podcast prior to and after the lesson. The objective is to determine how the Spotify app affects students'

listening comprehension. To examine the consequence of the Example T-test, the analyst utilized SPSS 22.0 for windows and Manual count. The outcome should be visible in the table underneath:

$$\begin{aligned}
 t &= \frac{X_1 - X_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \\
 &= \frac{80.76 - 52.45}{\sqrt{\frac{(33 - 1)26.502 + (47 - 1)22.861}{33 + 47 - 2} \left(\frac{1}{33} + \frac{1}{47}\right)}} \\
 &= \frac{28.31}{\sqrt{\frac{(32)26.502 + (46)22.8}{78} \left(\frac{16 + 12}{528}\right)}} \\
 &= \frac{28.31}{\sqrt{\frac{848.16 + 1048.8}{78} \left(\frac{7}{132}\right)}} \\
 &= \frac{28.31}{\sqrt{\frac{1896.96}{78} \left(\frac{7}{132}\right)}} = \frac{28.31}{1.131} = 25.08
 \end{aligned}$$

The value of Sig is known because of the output labeled "Independent Samples Test" in the section titled "Equal variances assumed." (two-tailed) 0.000 0.05 So as the reason for dynamic in the free example t test, it very well may be presumed that H0 is dismissed and Ha is acknowledged. Subsequently, it very well may be deciphered that there were huge contrasts score in listening cognizance when educate by involving Spotify Application in Understudies of Mama Muhammadiyah. This indicates that the hypothesis is true and that Spotify Podcast can effectively enhance students' listening comprehension.

C. Discussion

The participants in this study's research were tenth-grade students at MA Muhammadiyah. The subject of this examination comprised of 33 understudies. In this examination, the specialist utilized two sorts of the

test; those were pre-test and post-test. The following is the research's conclusion:

The impact of the Spotify app on teaching listening comprehension to MA Muhammadiyah students. In this exploration, the information calculation of T-test shown the worth of Sig. (two-tailed) 0.000 < 0.05. Therefore, the independent sample t test can conclude that H₀ is rejected and H_a is accepted as the basis for decision-making. It is possible to draw the conclusion that the alternative hypothesis is accepted and the Paired t-test null hypothesis is rejected. It shows that there is huge contrasts score in listening cognizance when educate by involving Spotify Application in Understudies of Mama Muhammadiyah. It implies that Spotify Application is really used to improve students' listening cognizance. One might say that spotify digital broadcast is compelling to be utilized in showing listening understanding and recommended to be utilized.

Spotify is a computerized music, webcast, and video web-based feature that gives you admittance to a large number of melodies and other substance from craftsmen around the world (Spotify.com, 2019). Spotify Web recording is extraordinary in light of the fact that you can listen any place we like. All we want is a phone. When driving to the office or taking the bus or subway, we can listen in the car. We can stroll around and keep on rehearsing English. Assuming we study with PCs, it would be great in the event that you rested and paid attention to web recordings and kept on examining (Conor, 2020). The utilization of current media in the educating educational experience was vital. As a result, the instructor ought to select a substantial amount of instructional media, particularly for teaching listening comprehension. As indicated by Arsyad (2003, p. 15), in educating and learning exercises utilizing the media, supplanting terms that utilization the term perspectives that are heard, showing materials, correspondence of perspectives that are heard, instructive showing helps, instructive innovation, instructive guides, and logical media. Spotify

Application had positive energy toward this e-learning movement. This is a great option for teaching because it is engaging and allows students to gain new experiences through the use of their smartphones or other mobile devices.

The contrast between students' listening appreciation when shown utilizing Spotify Digital recording at 10th grade understudies of Mama Muhammadiyah. After the information were gathered, the information were examined by involving of SPSS program 22.0 variants for windows. The outcome examination show there is a tremendous impact of involving Spotify Application to improve students' listening understanding in Understudies of Mama Muhammadiyah. It tends to be seen from the mean score the pre-test is 47.36, and the mean score of the post-test is 80.76.

According to the preceding explanation, the Spotify Application contributes to the teaching of listening comprehension. The results of a previous study by Saputra (2014) also demonstrate the effect of using the Spotify app. The study's goal was to compare listening comprehension between audio-visual and podcasts in Senior High School (SMA) CaturSakti, Indonesia. As indicated by the consequences of the post-listening test and the connected examinations, discoveries showed that utilizing web recordings affected further developing listening appreciation. The aftereffect of this investigation discovered that showing listening perception by utilizing Spotify Digital broadcast is compelling in Understudies of Mama Muhammadiyah 01 Medan.