

CHAPTER IV

RESULT OF RESEARCH AND DISCUSSION

In this chapter, the researcher would like to present the finding and discussion of research. The data collected from the test which are discussed based on the theory and concept from the previous chapter.

A. Presentation of Data

In this research, the researcher presents some data based on the research instrument that were used to collect data. The researcher used test to collect data. Data which are obtained from the test will be analyzed by using statistical method. The researcher uses two kind of test, namely pre-test and post-test.

1. The Result of Pre-Test

The researcher conducted the pre-test to measure the students' ability on listening skill before implementing BTS' song or before the students get treatment. The researcher used the lyric of the song as a test to measure the students' ability in listening skills. The test consists of 10 questions with four alternatives, namely a, b,c, and d. For scoring, the researcher gave a point for the right answer and 0 point for the wrong answer. So, if the students answer the question correctly, they will get a 100 score. The question of the pre-test is different from the post-test but still in the same material, namely the lyric of the song. The result of pre-test in 10 IPA 1 following table:

Table 4.1

The Result of Pre-Test

No	Name	Score
1	Achmad Dany Gunawan	50
2	Agung Wahyu Triyanto	70
3	Ahmad Fathoni	40
4	Andini Septia Dewi Utami	60
5	Anggita Cahya Faris	60
6	Anindhita Riyanda Putri	60
7	Bagas Pratama Yulianto	70
8	Dika Ayu Ningtyas A	50
9	Dwi Ayu Nur Azizah Junianti Hamid	50
10	Dwi Maulidia Suciati	70
11	Enny Herawati	50
12	Feby Aurelia	50
13	Fildzah Shabrina	60
14	Fitria Anggraini Sukmaning Hadi	70
15	Helyatul Mahsunah	70
16	Ibnan Alfian Khoiri	40
	Mean	60

This table above is the result of pretest that contains about the score of the student who follow the pretest. The pretest was followed by

16 students. And the researcher also find the mean of the result of pretest is 60. The lower score is 40 and the highest score is 70.

2. The Result of Post-Test

After the researcher got the score of pre-test, the researcher gave treatment to the students of 10 MIPA 1 with using BTS' song exactly Butter as media in teaching learning listening skill. The researcher gave an explanation about the use of the song in learning the listening skill, and also the researcher gave explanation related to the material with using BTS' song as media in teaching learning listening skill to the students of 10 MIPA 1. The post-test is an essay that there are 10 questions. Every question has 10 points, if the student answers correctly but not grammatically, the researcher gave 5 points, and if they answer do not correctly and not grammatically, the researcher gives 1 point. And then, if they not answer the question the researcher gave 0 point. The result of post-test in 10 MIPA 1 following table:

Table 4.2

The Result of Post-Test

No	Name	Score
1	Achmad Dany Gunawan	77
2	Agung Wahyu Triyanto	90
3	Ahmad Fathoni	70

4	Andini Septia Dewi Utami	80
5	Anggita Cahya Faris	85
6	Anindhita Riyanda Putri	80
7	Bagas Pratama Yulianto	91
8	Dika Ayu Ningtyas A	91
9	Dwi Ayu Nur Azizah Junianti Hamid	85
10	Dwi Maulidia Suciati	82
11	Enny Herawati	80
12	Feby Aurelia	86
13	Fildzah Shabrina	90
14	Fitria Anggraini Sukmaning Hadi	81
15	Helyatul Mahsunah	90
16	Ibnan Alfian Khoiri	75
	Mean	85

This is the result of post-test. The post test is taken by the same students who have taken the pretest before, which is a total of 16 students. The mean of the result of post-test is 85. The lower score is 75 and the highest score is 91.

3. Data Analysis

Reliability and validity are bound together in complex ways. These two term sometimes overlap and at other times are mutually exclusive. The ideal situation exist when scores are both reliable and

valid. In addition, the more reliable the scores from an instrument, the more valid the scores will be. Scores need to be stable and consistent before they can be meaningful.

a. Validity of The Instrument

Validity of instrument is very important quality of any test. Validity is the development of sound evidence to demonstrate that the test interpretation (of scores about the concept or construct that the test is assumed to measure) matches its proposed use. Validity can be thought of as the larger, more encompassing term when you assess the choice of an instrument.¹ The test is used to measure the students' listening skills. In this research, the researcher used content validity to get the validity of the instrument. It means that in conducting the test, the material will be tested include the material that was taught by the researcher.

In this research, the validity computation was calculated with r_{table} of $n=16$ by determining the degree of significant level 5% is 0,497. R_{xy} is the total score of pretest and posttest. If r_{xy} is higher than r_{table} , it means that the instrument is valid. In contrast, if r_{xy} is lower than r_{table} , it means the instrument is invalid.

Table 4.3

¹John Creswell W, *Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, P. 159

Data of Validity

Correlations

		pretetst	posttest
Pretetst	Pearson Correlation	1	,581*
	Sig. (2-tailed)		,018
	N	16	16
Posttest	Pearson Correlation	,581*	1
	Sig. (2-tailed)	,018	
	N	16	16

*. Correlation is significant at the 0.05 level (2-tailed).

In the table above proved that all instruments is valid. Because r_{xy} is 0,581, it means that r_{xy} is higher that r_{table} ($0,581 > 0,497$)

b. Reliability of The Instrument

After checking the validity of the test, the researcher must to measure the reability of the test because a good test must valid and reliable. Reliability means that the scores from an instrument are stable and consistent. Scores should be nearly the same when the researcher administer the instrument multiple times at different times. Also, scores need to be consistent. Reliability is generally easier to understand as it is a measure of consistency. If scores are not reliable, they are not valid; scores need to be stable and consistent first before

they can be meaningful.² The researcher used statistical formula. To know the reliability of the test, the researcher calculated the reliability of the test using SPSS program.

Table 4.4

Data of Reliability

Reliability Statistics	
Cronbach's	
Alpha	N of Items
,674	2

The criteria for a research instrument is said to be reliable if the reliability coefficient (r_{11}) $>$ r_{table} .³ The table above proved that the instrument used the researcher in this research is reliable because $r_{11} = 0,674 > r_{table} = 0,497$. Therefore, this instrument is usable in this research.

1) Reliability of pretest

In the reability of pretest, the researcher use the formula of Kuder Richardson 20. This formula measures test reliability of inter-item consistency. A higher value indicates a strong relationship between items on the test.

²John Creswell W, *Educational Research Planning, Conducting, and Evaluating Quantitative and Qualitative Research*, P. 159

³Syofian Siregar, *Metode Penelitian Kuantitatif Dilengkapi dengan Perbandingan Perhitungan Manual&SPSS*, (Jakarta: Kencana Prenadamedia Group, 2013), P. 57

The formula is:

$$\mathbf{KR} = \frac{n}{n-1} \left[1 - \frac{\sum pq}{s^2} \right]$$

Where:

KR= Kuder Richardson

N= Number of item in the test

P= Proportion of correct answer of question

q= Proportion of incorrect answer of question (1-p)

S²= variance of the raw scores

to get the value of S², we have to find the value of X. The

formula of X is $X = \frac{\sum Xt}{N} = \frac{92}{10} = 9,2$. Xt is sum of total value.

Than we have to find S², the formula is:

$$S^2 = \frac{\sum xt^2}{N} - X^2 = \frac{546}{10} - (9,2)^2 = -30$$

Now we have to find KR20

$$\mathbf{KR} = \frac{n}{n-1} \left[1 - \frac{\sum pq}{s^2} \right] = \frac{10}{10-1} \left[1 - \frac{1,54}{-30} \right] = 1,11(1 -$$

(-0,051))

$$= 1,17$$

So, in conclusion, the reliability pretest score of 1,17 is included in the very high category, meaning that the questions by the researcher made are of good quality. It can be proven by the table below:

Table 4.5

The value of reliability

Interval Koefisien Tingkat Hubungan	
0,00 – 0,200	Sangat rendah
0,200 – 0,400	Rendah
0,400 – 0,600	Sedang
0,600 – 0,800	Tinggi
0,800 – 1,00	Sangat tinggi

2) Reliability of posttest

Same as reliability of posttest, the researcher use the formula of Kuder Richardson. Firstly we have to find $X =$

$$\frac{\sum Xt}{N} = \frac{1333}{10} = 133,3. \text{ Then we have to find } S^2 = \frac{\sum xt^2}{N} - X^2 =$$

$$\frac{1776889}{10} - (133,3)^2 = 159920,01. \text{ Now we have to find}$$

KR20

$$KR = \frac{n}{n-1} \left[1 - \frac{\sum pq}{s^2} \right] = \frac{10}{10-1} \left[1 - \frac{-634,91}{176355,9} \right] = 1,11(1 - (-0,0036)) = 1,113$$

In the reliability of posttest score is 1,113. It include in the very high score, it also the test is good quality. Can see in the table above (**table 4.5**).

4. The Computation of Pre-Test and Post-Test

After now the result of pre-test and post-test is valid and reliable, the researcher will compute the pre-test and post-test value. So, the researcher describes it on table to make it right.

Table 4.6

The Pre-Test and Post-Test Value

No	Pre-Test	Post-Test	Gain = post-test – pre-test
1	50	77	27
2	70	90	20
3	40	70	30
4	60	80	20
5	60	85	25
6	60	80	20
7	70	91	21
8	50	91	41
9	50	85	35
10	70	82	12
11	50	80	30
12	50	86	36
13	60	90	30
14	70	81	11
15	70	90	20
16	40	75	35

This table is the computation of the pretest and the post test. The score is varies, the lowest score is 11 and the highest score is 36.

B. Presentation of Treatment

Before teaching, the researcher prepared a lesson plan to make easier for the reasearcher to teach and make the teaching method more organized or systematic. And than, the researcher prepared the tool like laptop and speaker bluetooth to play a song easily, and material needed when teaching. The researcher make note about what will be explained when teaching, the researcher make a question of pretest and posttest. In this teaching learning, the researcher used lecture method.

In the second meeting, the researcher gave the first treatment, it was conducted on 27 October 2021 on Wednesday at 09.35 until 10.10 AM. Before started the lesson, the researcher asked to prayed first to the students than taked attendace to the students. The researcher ask to the students about regulation in the lesson that who makes the class crowded will be recorded and notified to the English teacher so that he/she will be deducted points in his/her score. The researcher also told the students it was okay to eat or play handphone but after the researcher explained the material and who was caught eating or playing handphone while explaining, the food or handphone would be confiscated and returned after class. In this meeting, the researcher explained listening. At first the students are confused with the material because listening is rarely apply in their school. After the researcher explain listening detail, the students is very interested. After explained listening, the researcher explained learning through song. The students are very excited because they learn use song. It can make the

students are relax and enjoy during the lesson. After they understand about the material, the researcher explained next material about the tips/tricks to answer the listening question. The researcher explained it in order to the students are not confused and easy to answer the listening question. In this material, some students are not understand. So it take a lot of time to explained this material. And then, after the researcher have done explain all the material, the researcher repeated the material that she explained in order to the students are more understand. The researcher asked again to the students if there is anything they do not understand about the material. After all the students are undertand, the researcher played the audio of BTS' song until time is up.

In the third meeting, the researcher gave the second treatment. The second treatment was conducted on 02 Nopember 2021 on Wednesday at 09.35 until 10.10 AM. As usual before starting the lesson, the students prayed first and then the researcher taked attendance to the students. In this meeting, the researcher explains the benefit of listening to a song and learning with a song. The researcher also explains the meaning of the lyric of the song in detail. In this meeting, the students are very enjoy during a lesson because they are listening to the song. But the researcher are a little difficult to explain because some students just listening to the song and not listening the explanation, so the researcher have to find a way to get them to focus. The researcher hold a game and who wins will be give a prize. And it way, the students listen and try to understand the material. The researcher

asked about what the student does not understand in material that have been explained with the researcher. After all the students are understand, the researcher gave a game. And the last moment, the researcher played the audio of BTS' song. During a lesson, the researcher recorded active students so that they are give additional point by the English teacher.

And in the fourth meeting, the researcher repeated all the material from the firs material to last material that have been explained in the third meeting. After the reseacrher repeated the material, the research gave posttest.

C. Hypothesis Testing

Many hypothesis that are formulated are rejected after empirical testing. Their predictions are not supported by the data. many beginning researchers believe that if the data they collect do not support their hypothesis, then their study is a failure. This is not the case. In the history of scientific research, hypothesis that failed to be supported have greatly outnumbered those that have been supported. Experienced researchers realize that unconfirmed hypothesis are an expected and useful part of the scientific experience. They can lead to reconsideration or revision of theory and the generation of new hypothesis, which often brings science closer to a correct explanation of the state of affairs. Although you may find support for a hypothesis, the hypothesis is not proved to be true. A hypothesis is

never proved or disproved; it is only supported or not supported.⁴ The researcher needs to test hypothesis that used is accepted or rejected. In this research, the researcher use 5% level of significance.

This research use linear regression in SPSS program because to make sure the result of reliability in this research. The step to use SPSS program on linear regression: a) Open the SPSS program; b) Click variable view column and then fill it; c) After finish fill the column, click analyze → regression → linear on the top menu; d) Transfer the independent variable into the independent box and dependent variable into the dependent box. You can do this by either drag and dropping the variables or by using the appropriate right arrow buttons; e) You now need to check four of the assumptions discussed in the discussion section. You can do this by using the statistic and plots features and then selecting the appropriate options within these two dialogues boxes; f) Click on the OK button. This will generate the results.

If t_{value} is higher than t_{table} , the alternative hypothesis (H_a) is accepted. If t_{value} is lower than t_{table} , the alternative hypothesis (H_a) is rejected and null hypothesis (H_o) is accepted.⁵ The alternative hypothesis (H_a) in this research is yes, the students have higher achievement after taught by using BTS' song as listening media. Otherwise, the null

⁴Donald Ary, et all, *Introduction To Research In Education Eight Edition*, 8th ed. (Canada: Wadsworth, 2010), P. 93

⁵Anas Sudijono, *Pengantar Statistik Pendidikan*, (Jakarta: Raja Wali Press, 2011), P. 284

hypothesis (Ho) is no, the students do not have higher achievement after taught by using BTS' song as listening media. To proved whether hypothesis is accepted or rejected.

Table 4.7

The Data of Linear Regression

ANOVA Table

			Sum of Squares	Df	Mean Square	F	Sig.
posttes	Between	(Combined)	296,588	3	98,863	4,024	,034
t *	Groups	Linearity	199,592	1	199,592	8,123	,015
pretest		Deviation from Linearity	96,996	2	48,498	1,974	,182
	Within Groups		294,850	12	24,571		
	Total		591,438	15			

The table above means that t_{value} is 0,182. So, the t_{value} is higher than t_{table} because $0,182 > 0,05$. It means that the alternative hypothesis (Ha) is accepted and the null hypothesis (Ho) is rejected. We can also proved that the alternative hypothesis (Ha) is accepted with other way. In other way, we must measure F score. The key term in this formula is if $F_{value} < F_{table}$ is the alternatif hypothesis (Ha) is accepted. In the contrast, if $F_{value} > F_{table}$ is the alternative hypothesis (Ha) is rejected. Now we define the F_{table} of this data. the formula:

$$F_{tabel} = (df \text{ deviation from linearity ; } df \text{ within groups})$$

$$= (2;12)$$

= 3,89 → we can see the distribution of F_{table} score

So, we can conclude the $F_{value} = 1,974 < F_{table} = 3,89$, it means that the alternative hypothesis (H_a) is accepted and the null hypothesis (H_0) is rejected. And then, from both of the formula that the researcher measure, can conclude that alternative hypothesis (H_a) is accepted that yes, the students have higher achievement after taught by using BTS' song as listening media.

C. Discussion of Finding

In chapter I has been explained that the researcher has two research problems that all of them need to be answered in this research follow:

1. Do the students have higher achievement after taught by using BTS' song as listening media?
2. How is the significant effect of using BTS' song as listening media to 10th graders of SMAN 3 Pamekasan?

Before analyzing the research problem above, the research has been analyzed the students' listening skills by using test test and hypothesis testing.

After knowing the result, the answer of the research problem:

The students have higher achievement after taught by using BTS' song as listening media. The student who taught by using BTS' song is experiencing development in their listening ability. Before they got treatment, many students can not answered some questions. And after the researcher gave treatment and played the song repeatedly, the student can answered any

questions and they also got a new vocabulary. With the treatment, the student can know the tips/tricks to answer listening questions. So that the student can answered the other listening question even though they have not yet mastered it. And the researcher conclude that there is an effect of using BTS' song as listening media because the students have higher achievement.

Table 4.8

Data of Correlation

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 pretest & posttest	16	.581	.018

From the table above, the researcher now that the significant of correlation is 0,018. If the significant of correlation > 0,05 it means that this research is not correlate. Meanwhile the significant of correlation < 0,05 it means that this research is correlate. And then, the reseacher can conclude the pre-test and the post-test is not correlate because the significant of correlation is $0,018 < 0,05$.

Table 4.9

Data of Significance

Paired Samples Test

Paired Differences	t	Df
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Pair		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference			Sig. (2-tailed)
					Lower	Upper		
1	pretest – posttest	25.8125	8.66579	2.16645	-30.43017	-21.19483	11.915	.000
		0					15	

To measure the significance in this research, the researcher use SPSS program. The result of this research is 0,000. If the result of this research > 0,05 it means that this research is not significant. And in the result of this research < 0,05 it means that this research is significance. The researcher can conclude that this research is significant because $0,000 < 0,05$.

