CHAPTER IV

RESEARCH FINDINGS AND DISCUSSION

This chapter discusses the description of the data related to the variables involved in the research as the result of the data analysis, pre-analysis testing, and hypothesis testing and their interpretation.

A. Data Analysis

The description of the data is concerned with the variables of the study. Each of the variables was described using appropriate descriptive statistics. The descriptive statistics presented below are mean, mode, median, maximum score, minimum score and standard deviation. This following is the summary of the descriptive statistics in each groups of experiment both pretest and post test.

Table 7. The Descriptive Statistics of the Pretest Score

Group	N	Mean	Std. Deviation	Minimum	Maximum
Authentic Audiovisual	22	52.4773	13.39107	11.50	71.00
Inauthentic Audiovisual	20	57.0000	10.27900	38.00	75.00
Pedagogical Audio	19	54.5000	16.12968	25.00	77.50

Table 8. The Descriptive Statistics of the Posttest Score

Group	N	Mean	Std. Deviation	Minimum	Maximum
Authentic Audiovisual	22	69.2955	7.80210	57.50	85.00
Inauthentic Audiovisual	20	68.7525	9.68348	50.00	87.50
Pedagogical Audio	19	59.0789	14.41475	30.00	80.00

The tables above clearly depict that there were differences in the pretest and posttest score of every group of listening material. The raise of the mean score of the authentic audiovisual group was about 16,8 points from 52,5 (pretest) to 69,3 (posttest). Further, inauthentic audivisual group was gaining for about 11,7 points from 57 (pretest) to 68,7 (posttest). The last group or the control group shows that it was gaining for about 4,6 points from 54,5 (pretest) to 59,1 (posttest). Moreover, the minimum and the maximum scores also showed some differentiation. The minimum score of the pretest of authentic audiovisual group was 11,5 and the maximum was 71. It could be compared with the posttest minimum (57,5) and maximum score (85). The pretest minimum score for inautentic audiovisual group was 38 and the maximum was 75. The comparison showed that the minimum score for the posttest was 50 to 87,5 for the maximum score. The last group was the control group. The minimum pretest score of this

group was 25 and the posttest was 30, while the pretest maximum score was 77,5 and the posttest maximum score was 80.

The next is about the score classification of the pretest and posttest in this research.

Table 9.
The Norm of Authentic Audiovisual Group Pretest Score Classification

Range of Score	F	Category
> 75.05	0	Very High
58.35 < X ≤ 75.05	8	High
41.65 < X ≤ 58.35	10	Average
24.95 < X ≤ 41.65	3	Low
X ≤ 24.95	1	Very Low

According to the table of pretest score classification; there was no student in very high level, 8 students in high level, 10 students in average level, 3students in low level and 1 student in very low level.

Table 10.
The Norm of Authentic Audiovisual Group Posttest Score Classification

Range of Score	F	Category
> 75.05	7	Very High
58.35 < X ≤ 75.05	14	High
41.65 < X ≤ 58.35	1	Average
24.95 < X ≤ 41.65	0	Low
X ≤ 24.95	0	Very Low

It can be seen clearly that there were three categories of score in the posttest, those were very high (7students), high l (14 students), and average (1

student) level of score. There was no student in the low or very low level. It meant that there was a significant difference between the pretest and posttest score. There was an increase in the score gained by students in their listening comprehension post treatment.

Table 11.
The Norm of Inauthentic Audiovisual Group Pretest Score Classification

Range of Score	F	Category
> 75.05	0	Very High
58.35 < X ≤ 75.05	8	High
41.65 < X ≤ 58.35	11	Average
24.95 < X ≤ 41.65	1	Low
X ≤ 24.95	0	Very Low

The pretest score classification above shows that none was in very high level, 8 students in high level, 11 students in average level, 1 student in low level and none in very low level.

Table 12.
The Norm of Inauthentic Audiovisual Group Posttest Score Classification

Range of Score	F	Category
> 75.05	3	Very High
58.35 < X ≤ 75.05	13	High
41.65 < X ≤ 58.35	4	Average
24.95 < X ≤ 41.65	0	Low
X ≤ 24.95	0	Very Low

An improvement can also be seen clearly in the posttest of the Inauthentic Audiovisual group. The table pictures out that there were 3 students in very high

level, 13 students in high level, and 4 students in average level. No students were categorized in low and very low level. Treatment using inauthentic audiovisual material was successfully implemented.

Table 13. The Norm of Pedagogical Audio Group Pretest Score Classification

Range of Score	F	Category
> 75.05	1	Very High
58.35 < X ≤ 75.05	6	High
41.65 < X ≤ 58.35	9	Average
24.95 < X ≤ 41.65	3	Low
X ≤ 24.95	0	Very Low

The pretest score table of the ordinary audio group, as the control group in this research, illustrates that there was 1 students in high very high level, 6 students in high level, 9 students in average level, 3 students in low level and none in very low level.

Table 14. The Norm of Pedagogical Audio Group Posttest Score Classification

Range of Score	F	Category
> 75.05	1	Very High
58.35 < X ≤ 75.05	7	High
41.65 < X ≤ 58.35	10	Average
24.95 < X ≤ 41.65	1	Low
X ≤ 24.95	0	Very Low

The posttest score of the ordinary audio group shows that there was 1 student in very high level, 7 students in high level, 10 students in average level, 1 student in the low level and none in very low level. Comparing with the pretest

score classification above, it can obviuosly be seen thet there was also an improvement in the students' listening comprehension post treatment, eventhough not very sharp.

Overall, the difference among the experiment groups (authentic and inauthentic audiovisual material) and the control group (pedagogical audio material) can be obviously seen that there were only very high, high and average level in the posttest score of the experiment groups while in the control group, there was still 1 student categorized in low level.

Table 15. The Raise of Score from Pretest to Posttest in every Group

Group	Raise of Score
Authentic Audiovisual	16,8
Inauthentic Audiovisual	11,7
Ordinary Audio	4,6

The treatment applied in both the experiment and control groups showed positive effect onto the students' listening comprehension. This could be seen from the data in table. However, based on what had been described previously, it could be concluded that the highest improvement of the mean score came from the authentic audiovisual group, followed by the inauthentic audiovisual group and the ordinary audio class as the control group reached the lowest increase in score.

In conlusion, from the comparison of the pretest and posttest listening comprehension score classification among the experiment groups (authentic and

inauthentic audiovisual) and control group (pedagogical audio), it could be concluded that authentic audiovisual material was the most effective material among other ones to be used in listening class.

Furthermore, the data obtained showed that the treatment given to the experiment groups resulted in higher score or improvement on the students' listening comprehension than that of the control group. In other words, there was a significant difference on the students' listening comprehension between the classes which were taught using authentic and inautentic audiovisual material (experiment groups) and the class which was taught using pedagogical audio material (control group).

B. Pre-Analysis Testing

Before applying inferential statistics, it was required that the distribution form of each variable in the population should be normal or close to a normal distribution, and that the data should be homogeneous.

1. Test of Normality

In order to find out the value of the distribution of the variables, One-Sample Kolmogorov-Smirnov test in the level of significance at 0.05 was applied. It meant that the data was distributed normally if $p > 0.05$. The following table shows the result of One-Sample Kolmogorov-Smirnov test of the pretest and posttest score of all groups of experiment.

Table 16. Pretest: One-Sample Kolmogorov-Smirnov Test

		Pretest Score of Authentic Audiovisual Material	Pretest Score of Inauthentic Audiovisual Material	Pretest Score of Pedagogical Audio Material
N		22	20	19
Normal Parameters[a,,b]	Mean	52.4773	57.0000	54.5000
	Std. Deviation	13.39107	10.27900	16.12968
Most Extreme Differences	Absolute	.112	.132	.114
	Positive	.094	.127	.090
	Negative	-.112	-.132	-.114
Kolmogorov-Smirnov Z		.524	.589	.499
Asymp. Sig. (2-tailed)		.947	.878	.965

a. Test distribution is Normal.

b. Calculated from data.

Table 17. Posttest: One-Sample Kolmogorov-Smirnov Test

		Posttest Score of Authentic Audiovisual Material	Posttest Score of Inauthentic Audiovisual Material	Posttest Score of Pedagogical Audio Material
N		22	20	19
Normal Parameters[a,,b]	Mean	69.2955	68.7525	59.0789
	Std. Deviation	7.80210	9.68348	14.41475
Most Extreme Differences	Absolute	.160	.151	.144
	Positive	.160	.109	.123
	Negative	-.136	-.151	-.144
Kolmogorov-Smirnov Z		.753	.674	.628
Asymp. Sig. (2-tailed)		.623	.755	.825

a. Test distribution is Normal.

b. Calculated from data.

The tables above illustrate that each of the scores of *p* in the pretest score of the authentic audiovisual (.947), inauthentic audiovisual (.878), and pedagogical audio group (.965) was > 0.05. So was the posttest score of audiovisual (.623), inauthentic audiovisual (.825), and ordinary audio group (.755), each shows that the value of p > 0.05. All the results show that all of the *p* scores > 0.05. It can be concluded that the data in this reasearch was distributed normally.

2. Test of Homogeneity

To find out the homogeneity of the variances, Levene's Test was applied. The analysis was done by SPSS 17. In this test, the decision was taken by considering the score of probability. If the probability score (*Sig*.) was > 0.05, the dependent variables' variances were homogeneous. If the probability score (*Sig*.) is < 0.05, the dependent variables' variances were not homogeeous (Hartono, 2011: 205).

Table 18. Levene's Test of Equality of Error Variances[a]

Dependent Variable: Listening Comprehension Post Treatment

F	df1	df2	Sig.
5.113	2	58	.009

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

The result of Levene's Test informed that F was 5.113 with the significance of probability (*Sig*.) 0.009. It was lower than 0.05 (0.009 < 0.05). It can be concluded that the variables' variances were not homogeneous.

C. Hypothesis Testing

Referring to the result of homogeneity (Levene's) test, the variances were found not homogeneous. This meant that the prerequisite for allowing the parametric test to be applied for the hypothesis test, as a conclusion, was not fulfilled. As a result, nonparametric test namely Kruskal-Wallis test was done for the hypothesis test. This test's objective was to find out the answer to the second research question stated in the formulation of the problem: Is there any significant difference on the students' listening comprehension between the classes taught using authentic and inautentic audiovisual material (experiment groups) and the other taught using pedagogical audio material (control group)?

The null hypothesis (H_0) in this research was that there was no difference on the students' listening comprehension between those taught using authentic and inauthentic audiovisual material and the other taught using pedagogical audio material. The alternative hypothesis (H_a) was that there was a significant difference on the students' listening comprehension between the classes taught using authentic and inauthentic audiovisual material and the other taught using ordinary audio material. If the probability > 0.05, H_0 is accepted and H_a is rejected. If the probability < 0.05, H_0 is rejected and H_a *i*s accepted. The table showing the result of computation using Kruskall-Wallis Test with SPSS 17 was as follows.

Table 19. Kruskall-Wallis' Test Statistics[a,b]

	Pretest Score	Posttest Score
Chi-Square	.887	6.636
df	2	2
Asymp. Sig.	.642	.036

a. Kruskal Wallis Test

b. Grouping Variable: Listening Material

The data presented in the table showed that the F of pretest score was .887 and the posttest score was 6.636 with the significance of probability 0.036. For the probability score was lower than 0.05 (0.036 < 0.050), H_0 was therefore rejected and H_a was accepted. A clear conclusion could be drawn from this result of analysis: there was a significant difference on the students' listening comprehension between the classes taught using authentic and inauthentic audiovisual material and the other taught using pedagogical audio material.

D. Discussion

Referring to the result of data analysis gained previously, interpretation was done. There were several tests required for conducting this research. The first test taken was the ITEMAN. This test was applied to the test items used for taking the pretest and posttes scores as the main data needed in the research. The result of the test instrument try out was analyzed using ITEMAN program in order to find out the item validity and reliability of the test instrument. Based on this item analysis test, it was konfirmed that the instrument was ready and sufficiently good to be used for taking the research data.

Having the data gathered, the researcher took the other tests required. Descriptive test was done to picture out the result of the data gained, some information as the number of group samples, the mean score of the pre and posttest, the minimum and maximun score, in each group of experiment, and the like, were presented. The result of the descriptive test revealed that that there were improvement in every group of material used in listening class pretest and posttest score. The mean score of listening comprehension test result of the authentic audiovisual group was gaining about 16.8 points from 52.5 (pretest) to 69.3 (posttest). Further, inauthentic audiovisual group was gaining for about 11.7 points from 57 (pretest) to 68.7 (posttest). The last group or the control group showed that it was gaining for about 4.6 points from 54.5 (pretest) to 59.1 (posttest). Then, the comparison of the pretest and posttest listening comprehension score classification among the experiment groups and control group showed that the experiment groups (authentic and inauthentic audiovisual) gave more effect onto the students' listening comprehension than the control group did.

From the result of descriptive statistics, it can be concluded that the use of all kinds of material given during treatment, namely authentic and inauthentic audiovisual material and pedagogical audio material, had positive effects on the students' listening comprehension. The highest mean score of improvement came from the group having authentic audiovisual material in the treatments (16.8 points). Following it was the group with inauthentic audiovisual material (11.7 points), and the group with the least score of improvement was the one with

pedagogical audio material (4.6 points). It obviously showed that authentic audiovisual material was the most effective material to be used in listening class as a way of enhancing students' listening comprehension.

The next test done was the inferential tests. Normality and homogeneity tests were taken in this phase. After doing the research, the data that the researcher gained must be tested on its normality and homogeneity as preliminary tests (using SPSS 17). The normality test was done by using One-Way Kolmogorov Smirnov. The result of the test showed that the data of the research was distributed normally. The next step was, then, taking the homogeneity test by using Levene's Test. It was taken to find out whether the data were homogeneous or not. The result of the test showed that it was not homogeneous. It was concluded so because based on the computation in Levene's Test got F is 5.113 with the significance of probability .009, and it was lower than 0.05 (0.009 < 0.05), which meant that the data was heterogeneous.

The last test taken was the hypothesis test. In regards to the fact that the result of the Levene's test was pointing at the significance of probability .009, which meant that the variance was heterogeneous, the hypothesis test was therefore taken by applying Kruskal-Wallis test. The result of this Kruskall-Wallis Test with SPSS 17 showed that the F of pretest score was .887 and the posttest score was 6.636 with the significance of probability 0.036. This significance value was lower than 0.05 (0.036 < 0.050), which meant that H_0 was rejected and H_a was accepted. It could be concluded that there was a significant difference on the students' listening comprehension between the classes taught

using authentic and inauthentic audiovisual material and the other taught using pedagogical audio material.

The result of the hypothesis test revealed that the use of authentic audiovisual material was the most effective in enhancing the students' listening comprehension compared to that of inauthentic audiovisual material and pedagogical audio material. This is supported by the result of Ghani's research (2013) on the effectiveness of the use of authentic audiovisual materials in English listening test result. The use of authentic audiovisual materials was found out to be effective to be apllied in the classroom(Ghani, 2013: 81-82). The use of supporting materials which are authentic made the learning more enjoyable and therefore more motivating for the students (Little, Davitt and Singleton, 1989: 6). As their motivation increases, their participation in the classroom arises as well (Peacock, 1997). An enjoyable class will raise the students' eagerness to learn which then result in the raise of the students' mastery of the English as the target language. This is supporting the idea that video contains plenty of potentials to help language learners to learn for it is motivating, culturally abundant and authentic (Norris in Ghani, 2013:1). By using authentic materials, the students can experience the exposure to more amount of real language applied in real communication. Confirming the idea, Berardo (in Ghani, 2013: 2) argued that authentic materials contribute positively to learning process for they are more real, and motivate students to engage actively in classroom learning.

The authentic materials which are taken into the class as how they are without editing or adjustmnt to their natural contents are suitable for learners to

improve their English. Learners keep extracting new knowledge of the various grammatical rules and language features exposed from the materials. Learners will not be able to learn new things if they are not being exposed to it. Once they get used into the complicated world of the language features, their language proficiency will be more likely to improve (Gilmore (2007) in Febrina (2017: 7)). Furthermore, it was seen from the class activities authentic materials were more appropriate and culd fulfil the need of students of higher level like university. These materials also cover wide ranges of ideal sources of materials which can present the students with many real sampes of the target language used by speakers of many different language backgrounds with many different purposes (Trabelsi, 2010).

For more emphasis, Carter and Nunan (2001) proposed that authentic materials can give bigger and real function of the target language so that students can get clear description of English in its real world daily life use. Having goood enough exposure to the use of the target language, especially its' real world use, will exactly contribute much to the learners' mastery of the target language itself. They added that the strengths offered by authentic materials are that they can give bigger and real value of the target language, so that students can get real description of the use of the target language in its daily life application (Carter dan Nunan, 2001). Al-Azri and Al-Rashdi (2014) as cited in Febrina (2017: 4) underpinned that real-life materials are significantly lessen the gap between the language taught in the classroom and the language used in real life. Other scholars who support this are Huang, et al. (2011) who argued that experiencing the real

language in the classroom will prepare them better to employ English outside the classroom and use them to communicate effectively. Having been familiar with the language and its use through classroom practices, learners will find it much easier for them to employ the language learned in real situation.

Kumaravadivelu (2006: 206) stated that Authentic materials are also "promoting learner autonomy". It means that these kind of materials support students to be more independent in learning. During the treatment period, learners tended to feel curious and excited to looking forward to the next lesson that they searched similar topic by themselves in the internet. This self-practice surely will contribute to the learners' improvement on their listening comprehension.

Another result of the data analysis indicated that there was a significant difference between the classes taught using authentic and inauthentic audiovisual materiasl and the other taught using pedagogical audio material. This has proven the theory by experts and relevant researches that the use of audiovisual media or materials is effective in EFL classes. The use of audiovisual materials, such as video, film, and so on is a great assisstance for language learning – especially in listening classes. The use of video might result in assessing learners' ability to use visual cues to understand the aural text, and this surely would help the students understand and make better sense on what they have listened to. Armiun (2011:122) based on his research results also stated that video documents are a better choice for practicing listening comprehension in language classes but an occasional use of audio documents should not be rejected – still, they can be used in the class. It is also necessary to mention that a video document, by nature, is

less tiring and could be tolerated by learners for a longer time compared to an audio document. Combining audio and visual works together would be easier than working solely by auditory.

Norris (in Ghani, 2013: 1), strngthen the idea of the use of audiovisual media in teaching listening. Video contains plenty of potentials to help language learners to learn the target language because it is motivating, culturally abundant and authentic. It is motivating in the way that not many teachers use video as supporting media in teaching listening. As an authentic materials, video can also show the real use of the target language in the real setting situation complete with the people's culture. This surely help the students learn cross cultural understanding in advance, which will be a good thing for them when they have the opportunity to engage with the people of the country in reality.

Facial expression, visual cues, and headings seen from the video would assist the learners' understanding of the conversation or talk (Field, 2008). According to Wagner (2010), the benefits of using video technology in teaching English is very obvious whereas most interpersonal communication involves face to face contact in which the listener can see the speaker, and thus video technology offers a more authentic input for L2 listeners than audio-only texts. Pollack (1954) in Ghani (2013: 2) confirmed that the movements of the mouth helps to recognize what the speaker is trying to say especially in a noisy environment.

These advantages therefore confirm that authentic audiovisual material, with careful selection of materials regarding the age, language level, interests,

usefulness and background of the learners, provide the students with a rich listening resouce that can be used to enhance their listening comprehension, and indirectly, at the next stage, their speaking competence as well.

E. Limitation of The Research

Careful planning and control on each of the steps required had been done in order to get the best result. However, there were some obstacles faced by researcher. They are described as follows.

The curriculum of the institution applies integrated listening and speaking course. It took 100 minutes per meeting for the course, but only about 60 minutes in practice that could be used for listening, while the other 20 to 40 minutes were used for speaking practice. This resulted in the less amount of material brought to class and fewer numbers of practice done by the students, which might influence the listening learning process during treatment.

The test used in the posttest was the same as the one used for the pretest. Referring to one of the internal validity threats, the instrument, it was therefore possible that the outcome of the posttest might not merely as a result of the treatment given, but it might also be caused by the pretest which had exactlty the same questions as the posttest. Having experienced the pretest, the students probably still remembered some of the questions and knew the right answers – especially after the treatments applied – of which, then, resulted in the higher posttest score.

The data analysis testing for ANACOVA required a pre analysis test namely The Levene's test. This test measured the level of homogeneity of the variances. If this Levene's test result showed that the variances was homogeneous, the next step for analyzing the ANACOVA test could be done. The Levene's test result showed that the variances of the data were not homogeneous. The researcher therefore could not apply ANACOVA. To answer the hypothesis test question, as a consequence, was done by taking non-parametric statistics namely Kruskal-Wallis Test.