A Comparative Study of Students' Listening Comprehension Achievement Taught through Video and Audio

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Abstrak. Penelitian ini bertujuan untuk mengetahui perbedaan kemampuan menyimak setelah diajar menggunakan video dan audio. Penelitian ini menggunakan pendekatan kuantitatif yang melibatkan siswa kelas satu Sekolah Menengah Atas. Sampel penelitian ini terdari atas dua kelompok; kelas kontrol dan kelas eksperimen. Instrumen penelitian ini adalah 30 butir soal dalam bentuk pilihan ganda. Untuk mengetahui perbedaan kemampuan menyimak, peneliti menganalisis nilai pos-tes siswa dengan menggunakan Independent Sample t-test pada level signifikansi 0.05. Hasil penelitian ini menunjukan adanya perbedaan kemampuan menyimak antara siswa yang diajar dengan menggunakan video dan audio karena level signifikansi 0.008 dan 0.009 lebih rendah dari alpha (0.05). Di kelas video memiliki peningkatan nilai sebesar 1.57707, sedangkan di kelas audio peningkatan nilainya sebesar 0.81045. Ini berarti siswa yang diajar dengan menggunakan video menunjukan hasil yang lebih tinggi daripada audio dengan perbedaan skor 0.71233. Oleh karena itu, dapat disimpulkan bahwa video lebih baik untuk membantu meningkatkan kemampuan menyimak karena video menyediakan informasi tambahan seperti gambar yang membuat siswa lebih tertarik pada proses belajar.

Abstract. The objective of this study is to find out the significant difference of students' listening comprehension achievement after being taught through video and audio. This study used quantitative approach involving the first grade of senior high school students. The sample consisted of two groups: control class and experimental class. The instrument of this research was 30 items of multiple choice questions. To know the significant difference of listening achievement, the researcher analyzed students' post-test score through Independent Sample t-test at the level of 0.05. The result of this research shows there is significant difference of students' listening comprehension between students who were taught using video and audio with the significance level of 0.008 and 0.009 which lower than alpha (0.05). In video class, the gain score was in the point of 1.57707, while in audio class the gain score was in the point of 0.81045. This means, students who were taught using video showed higher result than that of audio class with the difference score of 0.71233. Therefore, it can be concluded that video is better to help students to improve their listening comprehension since video provides additional information such as pictures in which it makes students interested in learning process.

Key words: audio, comparative study, listening comprehension, video

INTRODUCTION

Listening is an activity in which a listener listens to a speaker who produces sound to be listened. According to Zhu (2011) listening is one of the four language skills that is mostly used in communication. Moreover, Machado (2010) says that the success of children's speaking, reading and writing skills relies on their listening abilities. Additionally, Krashen (1982) argues that listening is the primary important in the language learning and that the ability to speak and write fluently in the second language will come on its own with time. Furthermore, in academic atmosphere listening plays an important role in learning language. It is in line with Datko (2015), who states that in the context of teaching English as a foreign language, listening is one of the skills that form the basis of one's communicative competence. This means, besides producing a foreign language, a person also needs to perceive and cognitively decode the aural input in order to be successful in the oral communication process.

However, the previous observation done by the researcher at SMA Negeri 1 Pringsewu found that students had problem in listening as the students lacked of listening practice. Although, the school had already been equipped with media of listening such as a loudspeaker and overhead projector, yet, listening was rarely practiced in the class. Accordingly, the students got difficulty in listening comprehension. Regarding to the issue, the researcher intended to conduct the research of listening comprehension practice using media.

With respect to the media used in learning listening, an audio format is the most popular media in listening class. According to Anitah (2012), audio is media to give message toward hearing. Audio media is very helpful for beginner because it can give language learning experience, and for physical defect of student (blind or illiterate) can learn toward audio media. In addition, Sudjana and Rivai in Arsyad (2014) say that audio media can help learners to achieve some abilities in listening such as ability of focusing and maintaining their attention, ability of following the guidance, ability of defining the meaning from the context, ability of sorting out the information or idea and ability of summarizing. Anitah (2012) also added that audio media is benefit to use because it is easy to operate and it is inexpensive. However, there was a problem in students' listening ability if the material is only in audio file. According to a study done by Anitah (2012), it could be indicated that using audio with no instructor that face to face directly to student can make students not interested in learning process, and when the students listen to the same audio in long time without variations, sometimes it can make students feel bored.

On the other hand, many researchers have found that a video file can help students' listening comprehension better. Yousofi, et al. (2015) argue that video materials could provide many additional types of information available to the language learners, thus they can help the learning of listening more effectively. Moreover, Arsyad (2014) states that video increases students' motivation and it is also able to show a process in detail which can be repeated. On the contrary, Arsyad (2014) believes that a video can show moving picture continually which

can make the students unable to catch the materials. In addition, Yousofi, et al. (2015), state that students cannot concentrate on the listening comprehension and they just focus on some other things available in videos.

Although both audio and video could help students to develop listening comprehension, they also have both strengths and weaknesses. Therefore, the researcher conducted a comparative study of the using between audio and video in teaching listening. The objectives of the research were (1) to find out whether there is a significant difference of students' listening comprehension achievement taught through video and taught through audio and (2) to find out the significant different of students' achievement in terms of macro skills.

METHODS

This research is a quantitative research which employed Pre-test and post-test. There were two groups of students in this research; a control class and an experimental class. In control class, the researcher used audio as the media, while in experimental class, the researcher used video.

This research was conducted at the first grade students of SMA Negeri 1 Pringsewu. There were two classes chosen as sample of the research, and each of which consisting of 30 students. The topic discussed was monologue text about description of famous historical buildings. Both recorded materials; video and audio were spoken by native speakers. Moreover, the researcher used multiple

choices test consisting of four alternative answers. To analyze the data, the researcher used Independent Sample t-test through SPSS version 16.0 at the level of significance of 0.05.

RESULTS AND DISCUSSION

Results

After conducting a research, the researcher gathered the result of pre-test and posttest. The following describes the explanation of the result.

Before giving the treatments, the researcher administered the pre-test both in control class (audio) and experimental class (video) in order to know the homogeneity of the two classes. The result of statistic analysis of homogeneity test is explained in the following table.

Table 1 Homogeneity test of the Control Class & the Experimental Class

Independent Samples Test

		t-test for Equality of Means								
		F	Sig.	g. t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						,			Lower	Upper
Pre- test	Equal variances assumed	1.944	.169	.246	58	.806	06633	.26935	60549	.47282
	Equal variances not assumed			.246	55.487	.806	06633	.26935	60601	.47334

Table 1 shows that the significance of homogeneity test of pre-test in control class and experimental class was higher than α , with the result of 0.806 (0.806 > 0.05). With respect to the result, it can be inferred that null hypothesis (H₀) was accepted

and those classes had the same ability in listening comprehension before being given the treatment.

Moreover, In order to know whether there is a significant difference of students' listening comprehension achievement after being taught through video and audio, the researcher compared the students' post-test score. The following table describes the results of the calculation in control class (audio) and experimental class (video). The following table describes the result of the analysis.

Table 2 The Analysis of Significant Difference of Students' Listening Comprehension Achievement

Independent Samples Test

	Levene's Test for Equality of Variances		t-test for Equality of Means							
					Sig. (2-	Std. Mean Error Differ- Differ-		95% Confidence Interval of the Difference		
	F	Sig.	t	df	tailed)	ence	ence	Lower	Upper	
Equal variances assumed	7.249	.090	2.728	58	.008	73400	.26909	-1.27265	19535	
Equal variances not assumed			2.728	47.721	.009	73400	.26909	-1.27513	19287	

The result showed that the significance level were 0.008 and 0.009 which lower than α (0.05). This means, the proposed hypothesis (H₁) was accepted that there is a statistically significant difference of students' listening comprehension achievement after being taught through video and audio.

In addition to the analysis of significant difference of students' listening comprehension achievement, the researcher also analyzed the significant difference of students' listening comprehension achievement in terms of macro

skills. The following table describes the calculation of students' macro skills achievement in control class (audio) by using Microsoft Excel 2007.

Table 3 Results of Macro Skills in Pre-test and Post-test of the Control Class (audio)

Macro skills	Mean score of Pre-test	Mean score of Post-test	Gain		
Main idea	3.133	3.6	0.467		
Specific information	8.433	9.867	1.433		
Reference	0.833	0.867	0.033		
Inference	2.3	2.867	0.567		
Vocabulary	2	2.067	0.067		
Total	16.699	19.268	2.567		

Table 3 describes the students' improvement of macro skills from pre-test to post-test. The result shows that there was an improvement on each skill. The most improved skill was specific information with the gain score was 1.433. The inference was the second most improved skill with the gain score was 0.567. The third most improved skill was main idea with the gain score was 0.467, followed by vocabulary as the forth most improved skill with the gain score was 0.067, and the last improved skill was reference with the gain score was 0.033.

Moreover, the researcher also calculated the students' macro skills achievement in experimental class (video) by using Microsoft Excel 2007. The following table describes the result of computation.

Table 4 Results of Macro Skills in Pre-test and Post-test of the Experimental Class (video)

Macro skills	Mean score of Pre-test	Mean score of Post-test	Gain	
Main idea	2.8	3.133	0.333	
Specific information	8.767	11.467	2.7	
Reference	0.8	0.967	0.167	
Inference	2.333	3.467	1.133	
Vocabulary	2.267	2.433	0.167	
Total	16.967	21.467	4.5	

Based on the table, the result shows that there was the students' improvement of macro skills from pre-test to post-test. From the result, it can be seen that the most improved skill was specific information with the gain score was 2.7. The inference was the second most improved skill with the gain score was 1.33. The third most improved skill was main idea with the gain score was 0.333, followed by vocabulary as the forth most improved skill with the gain score was 0.167 similar to the reference with the gain score was also 0.1.67.

Furthermore, the researcher analyzed the significant difference of students' listening comprehension achievement in terms of macro skills. The data used to determine the significant difference were the post-test results of control class and experimental class. The researcher used Independent Sample t-test as the statistic computation. From the table, it shows that the results of significant analysis of students' listening comprehension achievement in terms of macro skills were varied. The most significant of the difference was Specific Information which the significance was 0.003 lower than α (0.05). The second most significant was Main Idea with the significance were 0.039 and 0.040 which also lower than α . However, there was no significant difference of students' macro skills achievement in terms of Reference, Inference and Vocabulary. It can be seen from the table that reference had the significance of 0.167 and 0.168 which higher than α (0.05). Additionally, the table shows that there was no significant difference of Inference. The results of the significance were 0.086 and 0.087 which higher than a. Moreover, the result of Vocabulary also shows that there was no significant difference between control class (audio) and experimental class (video). The significance was 0.098 which higher than α . The following table illustrates the result of the analysis.

Table 5 The Analysis of Significant Difference of Students' Listening Comprehension Achievement in terms of Macro Skills

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Differ- ence	Std. Error Differ-	Interva Diffe	rence	
	- P. 1							ence	Lower	Upper	
Main idea	Equal variances assumed	3.954	.051	2.107	58	.039	.467	.221	.023	.910	
	Equal variances not assumed			2.107	50.639	.040	.467	.221	.022	.911	
Specific information	Equal variances assumed	2.989	.089	-3.053	58	.003	-1.600	.524	-2.649	551	
	Equal variances not assumed			-3.053	54.560	.003	-1.600	.524	-2.650	550	
Reference	Equal variances assumed	8.930	.004	-1.401	58	.167	100	.071	243	.043	
	Equal variances not assumed			-1.401	44.006	.168	100	.071	244	.044	
Inference	Equal variances assumed	1.297	.259	-1.744	58	.086	600	.344	-1.289	.089	
	Equal variances not assumed			-1.744	56.632	.087	600	.344	-1.289	.089	
Vocabulary	Equal variances assumed	3.839	.055	-1.684	58	.098	367	.218	802	.069	
	Equal variances not assumed			-1.684	51.617	.098	367	.218	804	.070	

Discussion

The pre-test was administered in both classes; control class (audio) and experimental class (video). This test was used to determine the students' listening ability before being given the treatments. In this test, the researcher found there

was no significant difference of students listening comprehension achievement between those in audio class and those in video class. Thus, the treatments should be conducted.

After giving the treatments, the researcher administered the post-test. This test was used to see the students' listening comprehension achievement and the data taken from the test were statistically analyzed to meet the objective of this research. The result showed there was statistically significant difference of students' listening comprehension achievement between control class which used audio and experimental class which used video. Moreover, students in video class showed higher result than those in audio class. The students in video class were more interested in the using of the media since video not only provides sound but also provides moving pictures, hence video can help students comprehend the text easier. For this reason, there was also a statistically significant difference of students listening comprehension achievement in terms of identifying main idea and identifying specific information.

With respect to the finding of this research, there are some previous studies which also believe that the using audio and video in listening comprehension can affect different results. The first was done by Karlina (2010), who found there was a significant difference of students' listening comprehension achievement after being taught through video and tape recorder. The result of this research showed that students who had been taught using video scored higher than the using of tape recorder. Moreover, another study was conducted by Puspita (2014) who found

that there was a relative difference between video and audio in improving students' listening comprehension achievement and the using of video can help students' listening comprehension improved better compared to audio. Furthermore, the finding of this research confirms the study done by Fatmawati (2017) who also believed that there was a significant difference between students taught by video and audio in listening comprehension for the first grade students of SMP Muhammadiyah 9 Gemolong in the academic year 2016/2017. It can be seen based on the students' post-test scores taught by using video was higher than the students' post-test scores taught by using audio.

From the explanation above, it can be concluded that the using of different media can differently improve the students' listening comprehension achievement. In fact, video is better to help students improve their listening comprehension skill than audio.

CONCLUSION AND SUGGESTIONS

Based on the results of this research, it can be concluded as follows:

(1) There is a difference of students' listening comprehension achievement after being taught through video and audio. It happened because the pictures presented in video can help students get the information easier. Therefore, students who were taught using video got higher results than those who were taught using audio since the students were more interested in learning process while using video

(2) It is found that there is also a difference of students' listening comprehension achievement in terms of macro skills. It happened because the students comprehend the text easier than those in audio class since video provides additional information. Therefore, the students' macro skills could be improved better after they were taught using video.

With reference to the conclusion, the researcher made some suggestions as follows:

- (1) It is suggested that video can be used by English teachers as a variation of media in teaching listening comprehension since video is better to help students improve their listening comprehension.
- (2) It is found that the students were lack of listening practice. Accordingly, the English teacher should allocate the time to give listening practice more regularly.
- (3) This research was conducted in Senior High School level. Thus, the future researchers can conduct this kind of research in different level of study, for instance in university level.
- (4) This study was merely focused on macro skills. Hence, the future researchers are suggested to focus on the significant difference of students' listening comprehension achievement in terms of micro skills.

REFERENCES

Anitah, S. (2012). Media pembelajaran. Surakarta: Yuma Pustaka.

Arsyad, A. (2014). Media pembelajaran. Jakarta: PT Rajagrafindo Persada.

- Datko, J. (2015). *Teaching listening using multimedia*. Retrieved September 20, 2018, from: https://www.researchgate.net/publication/272485574
- Fatmawati, A. (2017). A comparative study between teaching students by video and audio in listening comprehension for the first grade students of SMP Muhammadiyah 9 Gemolong in the academic year 2016/2017. Unpublished Thesis. IAIN Surakarta.
- Karlina, L. (2010). A comparative study of listening comprehension achievement between students who are taught by using video and those taught by using tape recorder at SMAN 1 Sukoharjo. Unpublished Script. FKIP Unila Bandar Lampung.
- Krashen, S. (1982). *Principles and practice in second language acquisition*. Oxford: Pergamon Press.
- Machado, J. M. (2010). Early childhood experiences in language arts: Early literacy (9th Ed.). Boston, MA: Cengage Learning.
- Puspita, L. B. (2014). A comparative study of students' listening comprehension achievement taught through video and those taught through audio in SMPN 26 Bandar Lampung. Unpublished Script. FKIP Unila Bandar Lampung.
- Yousofi, N., Davoodi, A., and Razmeh, S. (2015). A comparative study of audio and video listening practice in a private language institute in Iran. Iran: *International Journal of Educational Investigation*. Retrieved September 9, 2018, from:www.ijeionline.com/attachments/article/40/IJEIonline_Vol.2_No.3_20153-02.pdf
- Zhu, X. (2011). Study on the influence of voice on listening comprehension. Paper presented at the 2011 IEEE 3rd International Conference on Communication Software and Networks. 27-29 May, Xi'an, China.