

THE EFFECTIVENESS OF AUDIO AS AN ALTERNATIVE MEDIA IN IMPROVING STUDENTS' LISTENING COMPREHENSION ACHIEVEMENT

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Abstract : In order to develop the listening skill, there are many kinds of media that can be used, including CD, tape record, audio, video, etc. However, the researcher chose audio as a media in teaching and learning. Therefore, the objectives of this study were to find out if there was a significant improvement on students' listening comprehension achievement after being taught by using audio. The other one was that if there was a significant mean difference between the students who were taught by using audio and those who were not. The research method was a quantitative. Furthermore, the researcher employed an experimental study. As a design, the researcher employed a quasi-experimental study. The population of this research were all of the second year of SMP Negeri 38 Palembang students. Therefore, the researcher took VIII.3 class (experimental) and VIII.7 class (control) for being the sample. The researcher employed a fill in the blank test, true false, multiple choices, matching the answer, order, and matching the phrases as the primary instrument to collect data. The researcher used the Paired and Independent Sample T-Test formula to calculate the data. With regard to the effect of using audio as an alternative method in improving students' listening comprehension achievement, the result of Paired Sample T-test reveals that using audio as an alternative method has a positive effect. According to the outcomes of the independent sample t-test, there was a significant difference between the post-test scores of control and experimental class. It can be concluded that audio gave positive effect on the students' listening comprehension achievement of SMP Negeri 38 Palembang.

Keyword : *Listening, Audio, Listening Comprehension Achievement*

INTRODUCTION

In studying English language, listening is one of the most crucial abilities. But students have a lot of challenges when they listen to English. It is because schools place a greater emphasis on writing, reading, and vocabulary, meanwhile students struggle greatly with listening comprehension. According to Hamouda (2013), due to schools' emphasis on grammar, reading, and vocabulary, EFL learners struggle tremendously with listening comprehension. In Indonesia, in the same case, there are still a lot of students that have difficulties in listening comprehension. One of the cases is as the result found by Saraswaty (2018) in her study. Many course books and curricula do not emphasize listening abilities, and teachers do not appear to pay attention to

these skills while structuring their courses. Most teachers take it for granted, believing that it will develop spontaneously as part of the language acquisition process. Teachers in classrooms appear to assess listening skills rather than teach them. Students seem like only listening, not comprehending. They could not understand what the speaker said, did not give attention to the course material, and did not participate fully in the activities. As a result, it continues to be the area of language teaching that is both the most ignored and the least understood.

Based on the observation conducted by researcher in classes VIII.3 and VIII.7 SMP Negeri 38 Palembang, many students have difficulty in listening in the class. The students show an insufficient capability in listening

course. They have problem with some unfamiliar words, rate of speech, and unusual accent. If students do not listen properly, the latter phases of the complicated pattern of language learning within a productive framework in the communicative classroom will be challenging. Addressing listening in the language classroom presents some difficulties for teachers as well. If teachers are expected to help students improve their skill, they must first understand their students' difficulties and then teach them effective strategies to fix their problems.

There are many kinds of media that can be used in order to develop listening skill, including CD, tape record, audio, video, etc. It will undoubtedly be able to give some authentic listening materials to encourage students to enroll in a listening course. As Heinich (2013) states that teaching media can stimulate the students' interest and encourage students' participation, using media in classroom is more effective. Among all of the media which are commonly used, the researcher chose audio as a media in teaching and learning.

Audio

In general, audio is sound, especially when recorded, transmitted, or reproduced. The term "audio" in this sense refers to the area of technology involved with using electrical to record, process, store, and deliver audible sound. According to Sheldon (2022), audio is any sound that falls inside the audible frequency range for humans. The field of technology known as audio is involved with using electrical to capture, process, store, and deliver audible sound. Today, for instance, the majority of computers allow for voice input via a microphone audio file, are capable of storing and running audio files in various formats, and can playback audio through speakers or headphones. The audio capabilities of a computer are represented by these features. In short, audio is made of electrical energy (analog or digital signals) that represent sound electrically.

Based on Wate (2022), there are three different categories audio formats: Uncompressed Audio Formats, Audio Formats

with Lossy Compression, and Audio Formats with Lossless Compression.

1. The most precise and authentic depiction of the original sound waves is provided by uncompressed audio formats: Pulse-Code Modulation (PCM), Waveform Audio File Format (WAV), Audio Interchange File Format (AIFF).
2. Audio Formats with Lossy Compression is a type of compression that loses data as it is being compressed: MPEG-1 Audio Layer 3 (MP3), Advanced Audio Coding (AAC), OGG (Vorbis), Windows Media Audio (WMA).
3. Audio Formats with Lossless Compression, keeps the audio quality without any data loss while reducing the file size of an audio file: Free Lossless Audio Codec (FLAC), Apple Lossless Audio Codec (ALAC), Windows Media Audio (WMA) – Lossless.

Based on the various audio formats stated above, the researcher decided to employ the MPEG-1 Audio Layer 3 (MP3) in her research. MP3, which has become the standard audio and music format, makes it easy to obtain nowadays. In addition to being less in size, the quality is comparable to other audio formats of its type. In order to run the research using audio (MP3 format), the researcher used some audios that are short in duration, which are in between 1 to 3 minutes. The researcher took those audios from British Council, a website that was already very well known and trusted in educational circles, especially in the field of English.

Abid (2017) mentions about the advantages and disadvantages of using audio as a media in teaching and learning activities. There are several advantages, some of which are students can practice more easily with audio because it can be done at any time and from any location. Audio media can also help students improve their abstract imagination and can encourage active participation of students, and so on. Then, the several disadvantages are because communication is one-way, it is difficult for students to discuss topics that are difficult to grasp. Moreover, only students with a high level of word and language competence may be

able to understand audio media that uses more voice and spoken language.

Listening Comprehension

Listening is hearing what others are saying, and trying to understand what it means. Understanding a stream of words and phrases well enough to comprehend the message is the goal of listening. According to Ospina (2021), listening comprehension is when someone can generate skills for retention, relationship and understanding a message. Nadig (2013) also mentions that listening comprehension is the various processes of understanding and making sense of spoken language. These involve knowing speech sounds, comprehending the meaning of individual words, and understanding the syntax of sentences. According to Hamouda (2013), listening comprehension is a collaborative process in which listeners contribute to the creation of meaning. Listeners can better understand oral input by using sound discrimination, past knowledge, grammatical structures, stress and intonation, and other linguistic or nonlinguistic cues. Based on the definitions above, it can be concluded that listening comprehension is the ability to understand, interpret, and respond to spoken language.

Listening Comprehension Strategies

Gilakjani and Sabouri (2016) mention that in listening comprehension, there are three sorts of strategies. They are cognitive (it deals with understanding and retaining knowledge in either short- or long-term memory for later application), metacognitive (students utilize it as a management approaches to govern their learning by planning, checking, assessing, and altering), and socio-affective (students utilize socio-affective in order to cooperate with others, assess their comprehension, and lessen their anxiety).

Types of Listening Activities in The Class

Ruthwickham (2022) mentions that there are various activities that can be used before, during, and after listening, and then later in the class or on another day.

1. Pre-listening activities, there are two kinds of activities that can be given to students. The first one is predicting and guessing, and the

second is vocabulary preparation. When it comes to predicting and guessing, the teacher can tell students the title of the audio, the names of the characters involved, and then offer a question to get them thinking about the idea or something in it. In vocabulary preparation, hopefully, students will recall English words that they have already learned. All of this will aid in the review of previously learned vocabulary as well as the introduction of new vocabulary. It is not necessary to teach all of the new vocabulary to the students at the first time. Just pick a few essentials and teach them before playing the audio.

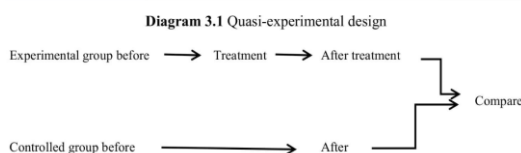
2. During listening activities, while students are listening to the audio, it might be difficult to detect if they are really paying attention or not. As a result, it is a good idea to assign some tasks to them while playing the audio. Let them listen for specific words and look for specific items, sequence and order, and specific events. Therefore, the students must pay close attention to the teacher's words and expressions.
3. After listening activities, a crucial moment occurs immediately after listening to the audio for the first time. At this point, the teacher will calm the students who are feeling lost or overwhelmed, assist them in making sense of what they have just heard, assist them in holding on to what they have just learned, and link back to pre-listening vocab and sequences, and finally, replay the audio, as some students may have missed it.

RESEARCH METHOD

Research method that was used in this research was a quantitative method. A quantitative method, according to Creswell (2014), constructs an idea's analysis by defining certain assumptions and employing data collection to support or disprove the assumptions. Furthermore, the researcher was employed an experimental study in this research, which assisted the researcher in determining the cause and effect relationship between independent and dependent variables. According to Creswell (2012), the standard method for conducting quantitative research is

an experimental design. Experimental method is a quantitative method by which researcher try to determine the impact of an intervention on an outcome for a group in a study. Experimental method means planning a set of procedures to investigate a relationship between variables, (Bevans 2019). An experimental design is required to do quantitative research. It involves testing or attempting to prove a hypothesis by way of experimentation.

As a design, the researcher employed a quasi-experimental study. It is one of many different kinds of experimental design research. In the realm of educational research, quasi-experimental design is fairly common. Because experimental study researchers commonly use intact groups in the educational field, quasi-experimental studies are common in educational research.



Population

A population in research does not always refers to people. It can refers to any set of items that you want to investigate, such as things, organizations, countries, organisms, and so on. A population, according to Bhandari (2020), is the total group about which you want to draw conclusions. Shukla (2020) defines population as "all the units that have variable characteristics under study and for which research findings can be generalised." The population of this research were all of the second year of SMP Negeri 38 Palembang students.

Table 3.1 Population

No.	Class	Number of students
1.	VIII.1	34
2.	VIII.2	34
3.	VIII.3	34
4.	VIII.4	33
5.	VIII.5	34
6.	VIII.6	34
7.	VIII.7	34

8.	VIII.8	32
Total		269 students

Source; SMP Negeri 38 Palembang

Sample

The control and experimental groups in a quasi-experimental study must be as similar as feasible in terms of gender, achievement, or ability. Therefore, the researcher took VIII.3 and VIII.7 class for being the sample in this research. The researcher selected those classes because they were similar, not only in grade, but also similar in number of students, and in English daily assignment scores. The experimental group were the VIII.3 class of 34 students, while the control group were the VIII.7 class of 34 students.

Procedures

1. Pre-test administering: The listening comprehension pre-test was given to the participants after the sample selection in order to gauge their listening comprehension before to the start of the course. The researcher introduced herself and provided clear directions for filling out the question before they start the test. The test; true false and order was administered, in which the researcher played an audio file while instructed the students to pay close attention while doing the test. After 30 minutes, they returned their paper test to the researcher. The researcher asked for input before left the classroom after the pre-test is finished.
2. Treatment: Ten listening sessions were required for the treatment. Ten audios total, one for each session, were used. In contrast to the control group, which got usual listening instruction, the experimental group had had treatment that involved teaching listening comprehension through the use of audio. They were requested to complete the tasks of the audio they listened during the learning session. The goal of this stage was to improve students' listening skills by asked them to concentrate on the audio. The researcher instructed them to listen to the audio three times while completing the tasks. Then, asked them to response to a few questions from the audio, followed by an explanation of their responses. The teaching

period and materials were the same for both groups.

3. Post-test administering: After ten sessions of treatment, both the experimental and control groups received a listening post-test in order to collect data. The test format was similar to the treatments; true false and matching answer, but the content was different. They were also given 30 minutes for the post-test, following which the researcher compared the pre-test and post-test scores.

Technique of Data Collection

The researcher employed fill in the blank test, true false, multiple choices, matching the answer, order, and matching the phrases as the primary instrument to collect data. Pre-test and post-test were the two sorts of tests. The pre-test was administered to both the experimental and control classes to see how well the students could listen prior to treatment. After the treatment, they were given a post-test to determine their listening comprehension.

Technique of Data Analysis

The researcher used the paired sample t-test formula to calculate the information. According to Bevans (2022), T-test is a statistical test used to compare two groups' means. It was frequently used in hypotheses testing to assess whether a treatment has an effect on the population or not. The T-test was designed in

this research to see if students' listening skills were affected by listening to audio or not. The T-test calculated the genuine difference between two groups' means by dividing the difference in means by the pooled standard error of both groups.

The grade point system in Indonesia was modified to a 0-100 scale after the Ministry of Education authorized the implementation of Kurikulum Berbasis Kompetensi (Competency-Based Curriculum). However this grade point system was used by the researcher in assessing students' listening comprehension achievement:

100	Highest point (rarely given)
75–99	Passing score in all subjects (above average)
55–74	Pass or fail grades differ between subjects (average).
0–54	Student is considered failed and must take a remedial exam.

FINDINGS AND DISCUSSION

The results of this research deals with the normality and homogeneity test, the descriptive analysis of pre-test and post-test in experimental class, the descriptive analysis of pre-test and post-test in control class, the results of paired sample t-test experimental and control class, and the results of independent sample t-test in experimental and control class.

Table 4.1 Normality and Homogeneity test

	Normality Shapiro-Wilk				Homogeneity	
	Experimental Group		Control Group		Levene Statistic	.Sig
	Statistic	.Sig	Statistic	.Sig		
Pre- Test	.959	.226	.946	.091	.614	.436
Post- Test	.961	.268	.945	.089	.273	.603

Based on the normality calculation, the researcher determined that all of the pre-test and post-test data for both experimental and control groups were normally distributed. On the other hand, based on the homogeneity calculation, the all the pre-test and post-test data for both experimental and control groups were homogeneous.

Table 4.2 The descriptive statistics of experimental class

Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Pre-test Experimental class	34	34	33	67	1904	56,00	11,750	138,061
Post-test Experimental class	34	50	50	100	2715	79,85	13,953	194,675
Valid N (listwise)	34							

The results showed that there was a significant improvement between the pre-test and post-test scores for the experimental class. The pre- and post-test results differed on 56,00 to 79,85 points. The standard deviation (std. deviation) of the score in post-test was 13,953. In accordance with the test results, the p-value (Sig. 2-tailed) was 0.000, which is less than the typical significance level of 0.05.

Table 4.3 The descriptive statistics of control class

Descriptive Statistics								
	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Pre-test control class	34	34	33	67	1954	57,47	10,387	107,893
Post-test Control class	34	33	50	83	2120	62,35	11,796	139,144
Valid N (listwise)	34							

According to the table, the pre-test scores in the control class ranged from 33 to 67 with 67 being the highest score. Additionally, the lowest post-test scores in the control class was 50 and the highest was 83. On the other hand, the pre-test mean was 57,47, while the post-test mean was 62,35. The mean difference between the pre- and post tests was 8,97.

Table 4.4 Pair Sample T-test

Variable	Paired Sample T-Test in Experimental class			Paired Sample T-test in Control class		
	t	df	.Sig (2-Tailed)	t	df	.Sig (2-Tailed)
Pre- and Post-test of experimental class	-14,934	33	.000	-2,359	33	,024

The significant level of students' listening comprehension achievement improvement in experimental class was 0.000. It can be seen in the .Sig (2-tailed) column which was lower than 0.05, and the t-obtain was 14.934 > t-table (df=33) was 2.035. In conclusion, there was a significant improvement in students' listening comprehension achievement after being taught by using audio.

Table 4.5 Independent Sample T-Test

Variable	Independent Sample T-Test		
	t	df	.Sig (2-Tailed)
Post-test of Experimental and Control Groups	5,585	66	.000

According to the outcomes of the independent sample t-test, there was a significant difference between the post-test scores of control and experimental class. As shown in the .Sig (2-tailed) column, the significant level of improvement in listening comprehension achievement between experimental and control classes' were 0.000, which was lower than 0.05, and the t-obtain was 5.585 > t-table (df=66) was 1.997. It means that the implementation of audio resulted in a significant improvement in students' listening comprehension achievement.

DISCUSSION

With regard to the effect of using audio as an alternative media in improving students'

listening comprehension achievement, the result reveals that using audio as an alternative media has a positive effect. There are several reasons of the improvement of students' listening comprehension achievement. The first one is listening to audio can help them grasp how words are pronounced and how intonation and accent vary, which can improve our listening comprehension skills. According to Muniem (2015), by carefully listening to a recorded conversation, you will learn to notice how other speakers express themselves through intonation. They clearly demonstrate how you have progressed over time. Furthermore, listening to audio can help them automatically develop their vocabulary and understand language. According to Tosunoğlu (1999), the child who learns new words by listening realizes speaking in this way. The other reason is that students can practice more easily with audio because it can be done at any time and from any location. Abid (2017) mentions that students can practice more easily with audio because it can be done at any time and from any location. It was clear that using audio as media in teaching and learning activity was effective in order to improve the students' listening comprehension achievement.

There was significant difference in listening comprehension achievement among the students who were taught by using audio and those who were not. This difference resulted from the treatments given to the experimental class. A positive mean difference of (62,35 to 79,85) demonstrates that the experimental class regularly outperforms the control class in post-test results. This illustrates how the treatments improved post-test results in the experimental class compared to the control class. In the context of the research, if the treatment is successful, the outcomes of this independent t-test demonstrate that there is a statistically significant difference between the post-test scores of the experimental class and the control class. The treatment that the experimental class received was what caused this difference. The experimental class frequently outperforms the control class in post-test scores, as shown by a positive mean difference. This demonstrates how the treatment increased post-test scores in the experimental class compared to the control

class. It can be concluded that audio gave positive effect on the students' listening comprehension achievement of SMP Negeri 38 Palembang.

CONCLUSION

According to the results, the researcher might draw conclusions. There was effect of audio toward listening comprehension achievement of class VIII.3 students of SMP Negeri 38 Palembang. Based on the outcomes of the paired sample t-test, there was a significant difference between the experimental class' pre-test and post-test scores. The test results show that the p-value (Sig. 2-tailed) is 0.000, which is smaller than the generally used significance level (usually 0.05). It meant that the usage of audio was effective in improving the listening comprehension achievement of class VIII.3 students of SMP Negeri 38 Palembang.

There was significant difference in listening comprehension achievement among the students who were taught by using audio and those who were not. The results of the independent sample t-test indicate that the t-statistic had a value of 5,585 and a degree of freedom (df) of 66. The p-value (Sig. 2-tailed) was 0.000 and is below the typical significance level of 0.05. As a result, there was enough statistical data to conclude that there was a significant difference between the post-test scores of the experimental and control class. This research found that audio had a favorable effect on students' listening comprehension achievement. More specifically, audio had been shown to improve students' listening comprehension. The success of audio, on the other hand, was dependent on the teachers' proficiency with such e-tools and the suitable selection of content in a way that guided the students to accomplish the learning objectives. The findings lead to the conclusion that it was a dependable and useful aid for increasing students' listening comprehension achievement.

REFERENCES

Abid, M. N. (2017). *Advantages and Disadvantages of Audio Learning Media and Their References*. Advantages and

- Disadvantages of Audio Learning Media (dosenmuslim.com). April 1, 2023. 12:14.
- Bevans, R. (2019). *Guide to Experimental Design/Overview, 5 steps & Examples*. Retrieved from: <https://www.scribbr.com/methodology/experimental-design/>. March 24, 2023. 11:24.
- Bevans, R. (2022, December 19). *An Introduction to t Tests | Definitions, Formula and Examples*. Scribbr. Retrieved from: <https://www.scribbr.com/statistics/t-test/>. April 2, 2023. 12:49.
- Bhandari, P. (2020). *Population vs. Sample | Definitions, Differences & Examples*. Retrieved from: <https://www.scribbr.com/methodology/population-vs-sample/>. March 23, 2023. 12:03.
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Thousand Oaks, CA: Sage.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.)*. Thousand Oaks, CA: Sage
- Gilakjani, A. P., & Sabouri, N. B. (2016). *Learners' Listening Comprehension Difficulties in English Language Learning: A Literature Review*. English Language Teaching: Canadian Center of Science and Education. URL: <http://dx.doi.org/10.5539/elt.v9n6p123>.
- Hamouda, A. (2013). *An Investigation of Listening Comprehension Problems Encountered by Saudi Students in the EL Listening Classroom*. International Journal of Academic Research in Progressive Education and Development, 2(2), 113-15.
- Heinich, R., et. al. (2013). *Instructional Media and Technologies for Learning*. Prentice Hall, Englewood Cliffs: New Jersey.
- Muniem, F. (2015). *How English learners can improve intonation*. Retrived from: <https://www.britishcouncil.org/voices-magazine/how-english-learners-can-improve-intonation>. August 21, 2023. 12:12.
- Nadig, A. (2013). *Listening Comprehension*. Encyclopedia of Autism Spectrum Disorders, 1743.
- Ospina, A. D. (2021). *Listening Comprehension*. Retrieved from Toolshero: <https://www.toolshero.com/communication-methods/listening-comprehension/>. April 1, 2023. 13:37.
- Ruthwickham. (2022). *How to Teach Listening in the ESL Classroom: 15 Valuable Activities That Create Solid Skills*. Retrieved from Fluento: [How to Teach Listening in the ESL Classroom: 15 Valuable Activities That Create Solid Skills | FluentU English Educator Blog](https://www.fluently.com/blog/how-to-teach-listening-in-the-esl-classroom-15-valuable-activities-that-create-solid-skills). May 12, 2023. 21:27.
- Saraswaty, D. S. (2018). *Learners' Difficulties & Strategies in Listening Comprehension*. English Community Journal (2018), 2 (1): 139–152.
- Sheldon, R. (2022). *Definition audio What is audio? TechTarget Definition*. Retrieved from: <https://www.techtarget.com/whatis/definition/audio>. February 14, 2023. 22:17.
- Shukla, S. (2020). *CONCEPT OF POPULATION AND SAMPLE*. Retrieved from: https://www.researchgate.net/publication/346426707_CONCEPT_OF_POPULATION_AND_SAMPLE. March 23, 2023. 11:58.
- Tosunoğlu, M. (1999). *Importance of vocabulary in education. Milli Eğitim Dergisi, (144)*. Retrieved from: http://dhgm.meb.gov.tr/yayimlar/dergiler/Milli_Egitim_Dergisi/144/tosunoglu.htm. August 21, 2023. 12:54.
- Wate, Yash. (2022). *Explained: Different Types of Audio File Formats*. Retrieved from: <https://techpp.com/2019/09/30/audio-formats-explained/>. March 23, 2023. 11: 23.
- Wikipedia. (2023). *Academic grading in Indonesia*. Retrieved from: Academic grading in Indonesia - Wikipedia. May 13, 2023. 13:26.