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Abstract

The aim of this study was to assess the effectiveness of audio-visual teaching media in improving students' listening comprehension. A quantitative approach was utilized, employing a quasiexperimental research design. Pre-tests and post-tests were administered to two whole-class groups: VIII-1 (experimental group, n=22) and VIII-2 (control group, n=22). The sample size consisted of 44 students, determined through purposive sampling. The experimental group received instruction using audio-visual teaching media, specifically movie clips in the listening class, while the control group was taught using audio-recording media. Analysis of the data indicated that the mean score for the pre-test in the experimental group was 42.95, which increased to 70.22 in the post-test. Conversely, the control group had a pre-test mean score of 39.09, which rose to 50.45 in the post-test. By applying the t-test formula, it was discovered that the t-value (5.75) exceeded the t-table (1.68195) with a degree of freedom (df) of 42. Consequently, the null hypothesis (H0) was rejected and the alternative hypothesis (Ha) was accepted. Hence, the utilization of audio-visual teaching media had a significant impact on the listening comprehension of eighth-grade students at SMP Swasta Taman Asuhan Pematang Siantar. This study suggests that audio-visual teaching media can be effectively employed as a teaching method to enhance students' listening comprehension skills.

Keywords: Audio-Visual, Teaching Media, Listening Comprehension

1. INTRODUCTION

Language is a crucial tool for communicating thoughts and emotions to others. Without language, communication will not function properly and can lead to misunderstandings. As a means of communication, all humans must possess an original language acquired since birth. Additionally, people also need to acquire other languages for effective communication with individuals from different countries. Learning English is imperative in the modern era of globalization, as it enables the establishment of connections between two or more nations, particularly in areas such as business, education, and healthcare. This is why English is taught in institutions and schools.

One should embrace the process of learning English if fluency is the goal. Listening, speaking, reading, and writing are interconnected abilities that must be cultivated when studying the English language. To master English, individuals must attain proficiency in all of these skills. Listening, in particular, has long been regarded as the most crucial language skill in the educational environment. According to Peterson in Muria (2001), through developing listening skills, students can perceive the connectivity of the language and establish a more fluent foundation for productive skills. In addition to honing listening skills, the ability to comprehend spoken language is essential. Therefore,

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achieving proficiency in listening comprehension is a vital component, complementing strong listening abilities.

Listening comprehension is defined by Gilakjani & Sabouri (2016) as ability to recognize another person using one's sensory and hearing organs to determine meaning of what is being spoken to comprehend. Listening comprehension not only understanding, but also listening to speakers' thoughts, feelings, and goals in delivering the message. The theory above leads to the conclusion that listening comprehension is an activity where learners must apply their language knowledge (vocabulary and syntax) as well as prior knowledge to understand what is stated. Unfortunately, students' ability in listening comprehension is very lacking because several factors have not been mastered, one of which is the ability to master vocabulary, while good listening comprehension skills are needed to obtain information from spoken material. This makes listening one of the four abilities that must be built when learning English.

Based on the internship program that the researchers conducted at SMP Swasta Taman Asuhan Pematangsiantar, it appears that students experience difficulties in exploring their understanding of English, especially in listening comprehension. The lack of students' listening comprehension was caused by several things. First, students lack vocabulary mastery of English words. This can be seen from the teaching practice experience that the researchers had: students cannot express their ideas in listening class and, sometimes, cannot understand what the teacher is saying. This is because students have difficulty understanding every phrase and have no idea about the words to use due to their limited vocabulary. As a result, students are less motivated to learn to listen. They feel confused and believe English is very hard for them. This reduced students' motivation to learn in English classes. Due to their poor listening comprehension, students cannot understand the topics taught to them. In this situation, the teacher must be innovative in selecting appropriate media to motivate children to learn to listen.

The effectiveness of learning activities can be controlled if the correct and appropriate media is used. Undoubtedly, some conventional media are left behind in this globalization era. Students are increasingly provided with interactive media because technology can bring many advantages and advances in teaching and learning. Bhavard (2009), said, "Technology could provide many solutions that may be utilized not just to enhance teaching enjoyably however make teaching simpler and better about a student's improvement." In general, using technology as a teaching media makes learning more inspiring and interesting to students.

As a result, based on some of the researcher's findings, the researchers propose audio-visuals as a teaching media for students' listening comprehension. The audio-visual media collaborates audio (sound) and visuals (pictures). When using this media, both the sense of hearing and sight are active. The use of this media encourages students to listen more intently and to correlate information heard with the support of graphic representation for better comprehension. Video, audio slides, films or movies, lectures, and broadcast news are all examples of audio-visual media that can be applied in teaching listening comprehension. The audio-visual helps teachers make their classes more enjoyable.

In the classroom, the researchers applied films or movie clips as one of the teaching methods to improve listening comprehension. According to Brown et al. (2006), Movie

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clips are a type of audio-visual media that, if correctly prepared and applied by educators or teachers, can be very useful in the learning process. "Movies offer both visual and audio content that assist students in better understanding what is being said," (Hu, 2006). Teachers can create an exciting atmosphere in their classrooms by using movie clips as teaching media to involve students in the learning process, especially for listening comprehension. Furthermore, these media assist students in mastering the subjects taught by the teacher. Therefore, the researchers had a proper audio-visual media for student listening comprehension. It is predicted that the use of audio-visual in listening will encourage students to become involved in the educational process, particularly in listening comprehension.

In light of the preceding discourse, the focus of the researchers centered on investigating the impact of audio-visual teaching media on the listening comprehension of grade eight students at SMP Swasta Taman Asuhan Pematang Siantar. The research aimed to examine the effectiveness of employing audio-visual teaching methods, specifically utilizing movie clips, in comparison to traditional audio-recording media in enhancing students' listening comprehension skills within the specified academic context.

2. LITERATURE REVIEW

2.1. Listening

According to Arici (2008), Listening is a person's first language skill and the one they apply the most throughout their lives. Listening begins in early childhood with someone's attempts to absorb what is going on around them, which results in feelings, thoughts, and the development of basic brain structures. Understanding and comprehending what others are saying, according to Hamouda (2013), is part of listening. This includes comprehending a speaker's word choice, grammar, and pronunciation. A good listener is capable of performing all four of these tasks at the same time.

According to expert opinions, listening is a process that combines hearing the sounds of language and reacting to the meanings included in what they hear. Listening is also an active process that involves memorizing and comprehending the speaker's words. To achieve effective communication, the listener must be able to engage the pronunciation, grammar, and vocabulary of the spoken sentence, and comprehend the meaning of the words spoken by the speaker to avoid misunderstanding.

2.2. Listening Comprehension

Listening comprehension according to Hamouda (2013) is a person's understanding of what he hears, and being able to interpret what they heard correctly without actual understanding. According to Rost (2013), this method includes comprehending a speaker's dialect and comprehension of meaning. The message must be given enough attention or concentration to be heard over all competing sounds

According to various perspectives above, listening comprehension can be characterized as a communication process between the speaker and the listener in which the listener receives the meaning and delivers the message. The ability to understand communication will influence the understanding of the message received by the listener.

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2.3. Media

The media is a tool that is used to assist an activity. Several media in education are used to facilitate learning activities to obtain messages and information. The media can be viewed as an intermediary. Teaching media refers to a tool for transferring messages or learning information from the teacher to the students. The media can be viewed as an intermediary. Teaching media refers to a tool for transferring messages or learning material from the communicator or teacher to the learners. Teaching media, as defined by Munadi (2013), is an aid to help students understand the meaning of content delivered through print or electronic media so that the learning process can operate smoothly and successfully. The teaching media is a body of knowledge that must be expanded to achieve optimal learning outcomes. Teaching media, according to Nurdiyanti (2019), is an intermediary tool that may be used in a lesson to increase children's interest in and comprehension of the information delivered in front of the class by the teacher.

2.4. Audio-Visual Media

Audio-visual media can be defined as a tool that can both display images and produce sound. Sound films, television, and video are examples of this media (Prasetya, 2020). According to Sundayana (2015), audio-visual media can also be defined as a sort of media that includes both image and audible sound elements, such as sound slides, films, video recordings, and others. According to Priansa (2017), audio-visual media is also known as listening-field media. Audio-visual learning media certainly helps the teaching activity run more smoothly; yet, within limits, this audio-visual media can also replace the teacher's tasks. According to Suryani et al. (2019) this audio-visual technology is a method of producing or transferring material through mechanical and electronic machines to deliver crucial messages and information. As a result, audio-visual media is a media that communicates information through a device.

2.5. Previous Research

There was some previous research, suitable to this study. Istiqomah (2021), Putra (2022) and Sari (2017) conducted the study. This research used audio-visual media to improve students' listening comprehension. The findings indicated that audio-visual media had a substantial effect on students' listening comprehension. The thing that distinguishes these three studies from this research is the topic used in this research. The research conducted by Sari (2017) used the topic of asking and giving opinions; the research conducted by Istiqomah (2021) used the topic of the announcement; and the topic used by Putra (2022) was expressing hope and wish. Another thing that distinguishes this research from previous research is the test given to students. The tests conducted by Sari (2017) used a fill-the-blank test consisting of 20 questions; Istiqomah (2021) used an essay and multiple-choice test consisting of 15 essays and 10 multiple-choice questions; and Putra (2022) used a fill-the-blank test consisting of 15 questions. The researchers applied a multiple-choice test with 20 questions as the research instrument for this research.

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3. RESEARCH METHODS

The researchers employed a quantitative technique and a quasi-experimental research design in this research to evaluate if audio-visual media for learning affects students' listening comprehension at SMP Swasta Taman Asuhan Pematang Siantar in grade eight. In this research design, there were two classes: experimental class in this class, the researchers employed audio-visual-instruction media to display movie clips as a treatment. and control class in this class, the researchers did not employ audio-visual media to teach listening.

3.1. Population and Sample

The population used in this research were all of the students in grade eight at SMP Swasta Taman Asuhan Pematangsiantar, which consisted of 3 classes. The sample used in this research consisted of two classes, VIII¹ with a population of 22 for the experimental class, and VIII² with a population of 22 for the control class at SMP Swasta Taman Asuhan Pematangsiantar, for a total sample of 44 students.

3.2. Instrument of Research

The instrument that the researchers applied in this study was an objective test. The objective test can be evaluated objectively by anyone and produce the same score. The type of test used in this research to measure students' listening comprehension through movie clips was a multiple-choice test. The test was made based on expression, giving instruction, and prohibition as teaching material. The researchers decided to use 20 questions in this study.

3.3. Technique of Data Collection

A listening assessment comprising 20 multiple-choice questions was employed as the data collection instrument for this study. To gauge students' listening comprehension across the two classes, researchers administered both pre-tests and post-tests. In the experimental class, audio-visual aids were integrated into the listening sessions to furnish unique learning experiences aimed at comprehension improvement. In contrast, the control class exclusively utilized conventional media, a customary practice among English educators for listening instruction.

During the intervention phase, a post-test was administered to both classes. This post-test sought to scrutinize the impact of the audio-visual media treatment on students' listening comprehension achievement. The analytical approach employed encompassed the calculation of mean scores for both pre-tests and post-tests in each class. Subsequent to this, a t-test was conducted to discern disparities in mean scores between the experimental and control groups, furnishing statistical insights into the efficacy of the audio-visual teaching methodology.

4. RESULTS AND DISCUSSION

The data is obtained from grade eight students of SMP Swasta Taman Asuhan Pematang Siantar. The sample of this research is 44 students. Students in grade VIII¹ are the experimental class, whereas students in grade VIII² are the control class. In the

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experimental class, audio-visual teaching media is used, whereas in the control class, audio recordings are used as teaching media in the listening class.

4.1. Research Results

The data analysis suggests that using audio-visual teaching media substantially impacts the listening comprehension of eighth-grade students at SMP Swasta Taman Asuhan Pematang Siantar. The following are some of the findings:

- a. The results show that students' listening comprehension scores are higher when taught using audio-visual media than when taught using audio-recording media. It is obvious that the experimental class mean in the pre-test was 42.95 and the control class mean in the pre-test was 39.0 demonstrating this. The post-test mean for the experimental class is 70.22, while the mean for the control class is 50.45. As a result, it demonstrates that learners in the experimental class had greater scores than learners in the control class.
- b. At a level of significance of 0.05, the t-table is 1.68195, and the degree of freedom (df) is 42. The testing hypothesis is approved at the 0.05 level of significance since the t-value is greater than the t-table (5.75 > 1.68195). It shows that using audio-visual teaching media to students' listening comprehension on eighth grade at SMP Swasta Taman Asuhan Pematang Siantar increase their test score significantly. As a result, the alternative hypothesis (H_a) is approved, while the null hypothesis (H_0) is rejected.

4.1.1. Descriptive Statistics

After completing the pre-test and post-test in the experimental class and control class, the researchers received the following results from the students:

Table 1. The score of the Pre-Test and Post-Test in the Experimental Class

	Name	Pre-Test		Post-Test					
No		Correct	Score (X)	Correct	Score (Y)	\mathbf{X}^2	\mathbf{Y}^2	da	da ²
1.	AU	12	60	18	90	3600	8100	30	900
2.	AS	9	45	14	75	2025	5625	25	625
3.	AA	8	40	14	75	1600	5625	30	900
4.	C	9	45	16	80	2025	6400	35	1225
5.	CA	10	50	14	75	2500	5625	20	400
6.	DFP	8	40	14	75	1600	5625	30	900
7.	FR	8	40	17	85	1600	7225	45	2025
8.	FZ	8	40	15	75	1600	5625	35	1225
9.	HS	9	45	14	70	2025	4900	25	625
10.	JS	7	35	12	60	1225	3600	25	625
11.	JA	6	30	10	50	900	2500	20	400
12.	KV	12	60	18	90	3600	8100	30	900
13.	LS	8	40	13	65	1600	4225	25	625
14.	MI	8	40	10	50	1600	2500	10	100

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15.	ND	9	45	15	75	2025	5625	30	900
16.	NDH	7	35	12	60	1225	3600	25	625
17.	NC	10	50	15	75	2500	5626	25	625
18.	RV	10	50	16	80	2500	6400	30	900
19.	RF	7	35	11	55	1225	3035	20	400
20.	RAT	6	30	10	50	900	2500	20	400
21.	TSM	8	40	15	75	1600	5625	35	1225
22.	TJS	10	50	16	80	2500	6400	30	900
Total	Na =					$\sum X^2$	∇V^2 –	∑da	$\sum da^2$
	Y X = 945		945	$\sum Y = 1545$		=	<u>1 </u>	=	=
(\sum)	22	_				41975	111575	600	17450

Table 2. The score of the Pre-Test and Post-Test in the Control Class

	Name	Pre-Test		Post-Test			Control		
No		Correct	Score (X)	Correct	Score (Y)	X2	Y2	db	db2
1.	A	10	50	13	65	2500	4225	15	225
2.	A	7	35	11	50	1225	2500	20	400
3.	AR	6	30	8	40	900	1600	10	100
4.	AD	10	50	14	70	2500	4900	20	400
5.	BS	7	35	8	40	1225	1600	5	25
6.	CP	6	30	9	45	900	2025	15	225
7.	DP	11	55	14	70	3025	4900	15	225
8.	DT	10	50	13	65	2500	4225	15	225
9.	FA	10	50	12	60	2500	3600	10	100
10.	HAA	7	35	10	50	1225	2500	15	225
11.	IA	7	35	8	40	1225	1600	5	25
12.	JP	8	40	10	50	1600	2500	10	100
13.	KS	4	20	8	40	4000	1600	20	400
14.	ODK	10	50	13	65	2500	4225	15	225
15.	RRV	9	45	12	60	2025	3600	15	225
16.	RMS	6	30	8	40	900	1600	10	100
17.	RAA	7	35	8	40	1225	1600	5	25
18.	RGR	6	30	5	25	900	625	5	25
19.	SAS	8	40	10	50	1600	2500	10	100
20.	В	8	40	9	45	1600	2025	5	25
21.	TA	8	40	12	60	1600	3600	20	400
22.	YH	7	35	8	40	1225	1600	5	25
Total	Nb=	$\sum X =$	860	$\sum Y =$	1110	∑X2 =	∑Y2 =	∑db =	\sum db 2 =
<u>(∑)</u>	22			<i></i>		33700	59150	265	3825

The researchers administered a multiple-choice examination to the students as a pre-test and post-test to determine the significant impact of applying audio-visual teaching media on students' listening comprehension. According to the data in the table

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above, the experimental class had a mean post-test score of 70.22, whereas the mean in the control class in the post-test was 50.45. After the mean score was found the researchers determined the t-test. The t-test formula is used to recalculate the data above. The experimental class's mean and standard deviation are larger than those of the control class. Because the sum of the two classes (Na and Nb) is the same, determining the two classes using the t-test formula is simple. The researchers must first compute the degrees of freedom (df) to determine the value of t-table to be compared with the t-test before performing the t-test.

$$df = Na + Nb - 2$$
Therefore, the result of df is:
$$df = 22 + 22 - 2$$

$$df = 42$$

The researchers obtain a t-test value of 5,75 after examining the data. The ttest is used as the basis for calculating the value of the t-test at various degrees of freedom (df) when determining the distribution table. In this research, the degrees of freedom are 42 (obtained from Nx + Ny - 2; 22 + 22 - 2 = 42) at significant level of 0,05.

4.2. Discussion

The researchers receive findings that can be applied to address the research question after completing the investigation, evaluating the data, and testing the hypothesis. The study aims to explore the influence of audio-visual teaching media on the listening comprehension of eighth-grade students at SMP Swasta Taman Asuhan Pematang Siantar. Employing a quantitative approach and a quasi-experimental design, the researchers process and collect data, administering pre-tests and post-tests to the experimental and control classes. The experimental class exhibits a pre-test mean score of $(\bar{\ }(\bar{\ }x'') = 42.95)$ and a post-test mean score of $(\bar{\ }(\bar{\ }x'') = 70.22)$. The control class registers a pre-test mean score of ((x) = 39.09) and a post-test mean score of ((x) = 39.09)50.45). Following the data analysis, the researchers obtain a t-test value of 5.75 and a ttable value of 1.68195 (df) at a significance level of 0.05. Assessing hypotheses Ha and H0, where significant effects of audio-visual teaching media on students' listening comprehension favor Ha and reject H0, the calculated results (t-value > t-table) affirm Ha acceptance and H0 rejection. Academically, the researchers conclude that audio-visual teaching media enhances students' listening comprehension in eighth grade at SMP Swasta Taman Asuhan Pematang Siantar.

While the study yields promising results indicating a significant improvement in eighth-grade students' listening comprehension through the use of audio-visual teaching media at SMP Swasta Taman Asuhan Pematang Siantar, it is crucial to acknowledge certain limitations. The findings may not be universally applicable due to the study's narrow focus on a specific grade level and school. Additionally, the sample size and selection process may limit the generalizability of the results. The short-term nature of the intervention and the absence of consideration for potential influencing factors, such as individual learning styles or teacher variables, highlight areas for future exploration. Moreover, the reliance on pre-tests and post-tests as measurement tools may not capture

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the full spectrum of listening comprehension skills. Recognizing these limitations is essential for interpreting the findings and encourages future research to address these aspects for a more comprehensive understanding of the relationship between audio-visual teaching media and students' listening comprehension.

5. CONCLUSION

After scrutinizing the research data and rigorously evaluating the hypotheses, the researchers conclusively accepted Hypothesis Ha and rejected H0. Notably, at SMP Swasta Taman Asuhan Pematang Siantar, the utilization of audio-visual teaching media demonstrated a statistically significant impact on the listening comprehension of eighthgrade students. It is pertinent to highlight that the use of audio recordings alone (sound) did not exhibit a noteworthy influence on the listening comprehension of eighth-grade students at SMP Swasta Taman Asuhan Pematang Siantar, as indicated by the absence of a significant variation in average scores between the pre-test and post-test phases.

The researchers underscored the pedagogical significance of incorporating audiovisual learning and teaching media in educational activities, substantiated by substantial differences in pre-test and post-test scores between the experimental and control classes. For future academic research, a more nuanced exploration into specific elements or techniques within audio-visual teaching media that significantly enhance comprehension is recommended. These insights could offer educators precise guidance for refining instructional practices and maximizing the educational impact of multimedia approaches on eighth-grade students' listening comprehension.

REFERENCES

- Arici, A. F. (2008). Okuma eğitimi. Ankara: Pegem Akedemi Yayınları.
- Bhavard, R. (2009). Audio video Aids in Teaching English. *English Language Teaching Weekly. Issue No*, 6.
- Brown, T. J., Dacin, P. A., Pratt, M. G., & Whetten, D. A. (2006). Identity, intended image, construed image, and reputation: An interdisciplinary framework and suggested terminology. *Journal of the Academy of Marketing Science*, *34*(2), 99–106.
- Gilakjani, A. P., & Sabouri, N. B. (2016). Learners' Listening Comprehension Difficulties in English Language Learning: A Literature Review. *English Language Teaching*, 9(6), 123–133.
- 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), 113–155.
- Hu, S. F. (2006). On teaching non-English majors listening and speaking through videos. *China English Language Education Association Journal*, 29(2), 42–48.
- Istiqomah, N. (2021). The Impact of Using Audio Visual Media in Teaching English on the Students' Listening Comprehension Ability of the English Department Students at IAIN Metro. IAIN Metro.
- Munadi, Y. (2013). Media Pembelajaran. Jakarta: Referensi. GP press group.
- Muria, M. C. (2001). Teaching English as a Second or Foreign LanguageTeaching.

Khaterina Vonbora Situmeang et al



- Heinle & Heinle Thomson Learning. USA.
- Nurdiyanti, S. (2019). Implementasi Media Visual Dan Audiovisual Terhadap Pembelajaran Anak Usia Dini Di Era Revolusi Industri 4.0. *Prosiding Seminar Nasional Pendidikan FKIP*, 2(1), 642–650.
- Prasetya, S. P. (2020). Media Pembelajaran Geografi. Penerbit Ombak.
- Priansa, D. J. (2017). Pengembangan strategi dan model pembelajaran: inovatif, kreatif, dan prestatif dalam memahami peserta didik.
- Putra, M. A. I. P. (2022). The Effects of Using Audio-Visual Learning Media on The Student's Listening Skill. Universitas Negri Makassar.
- Rost, M. (2013). Teaching and researching: Listening. Routledge.
- Sari, N. (2017). The effect of using audio-visual in teaching English on the students' ability in listening comprehension at tenth year MAL UIN-SU Medan. Universitas Islam Negeri Sumatera Utara.
- Sundayana, H. R. (2015). Media dan Alat Peraga Dalam Pembelajaran Matematika, untuk guru, calon guru, orang tua dan para pecinta matematika.
- Suryani, N., Setiawan, A., & Putria, A. (2019). *Media pembelajaran inovatif dan pengembangannya*.

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