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EFFECTIVENESS OF AUDIOVISUAL MEDIA IN TEACHING *MAHĀRAH ISTIMĀʿ* THROUGH BEHAVIORIST AND COGNITIVIST APPROACHES

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Abstract: This study investigates the effectiveness of audiovisual media in teaching Mahārah Istimāʿ (Arabic listening skills) by integrating behaviorist and cognitivist approaches. Responding to the challenges of passive learning methods and low student engagement, this research applies a mixed methods design to evaluate both student performance and learning experience. Twenty-nine eighth-grade students at SMPIT Adzkia, Jombang participated in the study. Quantitative data were gathered through pre- and post-tests, while qualitative insights were obtained via classroom observations and interviews. The findings indicate a notable improvement in students' listening comprehension after the use of audiovisual media. Students not only achieved higher scores but also demonstrated increased focus, motivation, and participation during lessons. Audiovisual content provided contextual and visual reinforcement, helping students associate meaning and recall information more effectively. From a behaviorist view, audiovisual media acted as a stimulus that shaped students' responses through repetition and engagement. Cognitively, it supported active processing by combining visual and auditory input, which enhanced understanding and memory retention. The study concludes that audiovisual media is an effective instructional tool for improving Arabic listening skills, offering both academic benefits and a more engaging learning experience. It suggests that integrating audiovisual media in language instruction can bridge pedagogical gaps, particularly in digital-era classrooms where students respond better to interactive and multisensory content.

INTRODUCTION | مقدمة | PENDAHULUAN

The Arabic language learning process faces major challenges, especially in the digital era which requires students not only to understand the language structure theoretically, but also to master functional language skills (Rakhlin et al., 2021). In this context, learning listening skills (*Maharah Istima'*) becomes one of the important elements that must be developed seriously. This is in line with Tarigan's view (Goh & Vandergrift, 2021) that listening skills are the initial foundation that supports other language skills, such as speaking, reading, and writing. Unfortunately, in many learning practices in schools, these skills are still neglected or trained ineffectively due to limited media and methods.

The phenomenon of low student listening skills is inseparable from the learning approach that is still conventional, namely only relying on printed texts and one-way lectures without involving multisensory aspects. In fact, listening is a complex process that requires active involvement between the sense of hearing and cognitive abilities in understanding oral messages. The low motivation of students to listen to Arabic texts is also a problem in itself, especially when the material presented is not packaged in an interesting way or is not relevant to the real world they experience.

The paradigm shift in education in the digital era has forced educators to rethink the learning strategies that have been used so far. Information and communication technology is no longer just a complement, but has become the main medium in delivering teaching materials, especially in the context of language skills learning. Arabic language learning, as part of the curriculum in Islamic educational institutions, is also required to adapt to this flow of change in order to remain relevant and adaptive to the needs of the current generation of learners.

One of the main challenges in learning Arabic at the secondary level is how to make the learning process an interesting and meaningful experience, especially in listening skills (*Maharah Istima'*). This skill is often marginalized in the teaching and learning process, either due to time constraints or the unavailability of appropriate learning media. In fact, listening is the initial foundation in language acquisition, where understanding oral messages is the key to developing speaking, reading, and writing skills.

Many Arabic teachers at the junior high school or MTs level still rely on lecture methods and textbooks as the main means of teaching listening. This approach is less able to stimulate active student involvement, because listening is a skill that requires real context, visualization, and direct meaning. When students are not given contextual and communicative listening experiences, they tend to have difficulty grasping meaning, building concentration, and developing comprehension strategies.

In this context, audiovisual media is present as a potential solution. Audiovisual media has the advantage of presenting material simultaneously between visual and auditory aspects, so that it is able to describe the meaning completely and concretely. According to (Mayer, 2024), learning that involves more than one sensory channel will strengthen the cognitive process in understanding information. This means that when students listen to text in the form of a video that has contextual narration and images, they not only hear the words, but also see their meaning in a real context.

The application of audiovisual media in foreign language learning has been widely carried out and proven to increase learning effectiveness, especially in terms of motivation, concentration, and understanding of meaning. In the study (Mohammed, 2022), it was found that students who learned using Arabic culture-based learning videos showed better comprehension in listening to Arabic dialogues than students who only used textbooks. This shows that visual and audio experiences simultaneously can enrich the linguistic context received by students.

The general picture in Islamic-based schools, such as SMPIT Adzkia, Jombang. shows a strong spirit in improving the quality of Arabic language learning. However, in practice, not all teachers utilize technology-based media optimally. Minimal teacher training, lack of multimedia facilities, and the absence of audiovisual learning guides are obstacles that are often faced. As a result, listening skills are still taught with a conventional approach, which results in minimal active student participation in the learning process.

On the other hand, the characteristics of today's students who grow up in a visual and digital culture, demand an approach that suits their learning style. They are used to absorbing information through screens, listening to podcasts, or watching short videos. Therefore, learning that combines elements of images, sound, and real context becomes more effective in reaching their attention and building their learning motivation. Audiovisual media, in this context, is not just a complement, but an integral part of the learning process itself. To comprehensively examine the effectiveness of using audiovisual media in *Maharah Istima'* learning, a research

approach is needed that is able to capture two sides at once: the visible behavioral side and the internal process side of students. This is where the mixed methods approach becomes relevant. Through a convergent parallel design, researchers can directly observe changes in students' learning behavior, while exploring their experiences and perceptions of the listening process through audiovisuals.

This study refers to two main complementary approaches: the behaviorist and cognitive approaches. Behaviorism assumes that learning occurs in response to external stimuli. In this case, audiovisual media acts as a stimulus that stimulates students to pay attention, imitate, and respond to information received verbally. On the other hand, the cognitive approach views that listening learning involves complex mental processes such as attention, perception, and meaning processing. The combination of the two provides a strong theoretical framework in analyzing the impact of audiovisual media on listening learning.

The literature review shows that although there have been many studies on audiovisual media in language learning, studies that specifically highlight Arabic listening skills at the junior high school level are still relatively few. Moreover, there are not many studies that explicitly combine behavioristic and cognitive approaches in explaining the effectiveness of these media. Most studies focus solely on improving students' grades or achievements, without touching on the affective and cognitive aspects that accompany the learning process.

This study is here to fill the gap. Not only observing changes in students' learning behavior, but also exploring how they interpret learning delivered through audiovisual media. This is important because a positive learning experience can have a long-term impact on students' attitudes towards Arabic as a whole. More than just increasing academic scores, audiovisual media is expected to be able to foster interest, self-confidence, and sustainable listening skills.

This study was conducted with the aim of analyzing the application of audiovisual media in learning Arabic listening skills, with a focus on students' behavioral responses and cognitive processes during learning. This study also aims to evaluate students' experiences in using audiovisual as a learning medium, as well as to provide a strong theoretical basis for the integration of technology in teaching Arabic.

This study offers a comprehensive approach by integrating two learning theories into one integrated methodological design. Its main focus on listening skills, which have so far received less attention than reading and writing, is a significant contribution in enriching technology-based Arabic language learning strategies. By prioritizing a combination of theory, practice, and modern learning contexts, this study is expected to be a meaningful reference for teachers, curriculum developers, and education policy makers. Especially in creating a more lively, communicative Arabic language learning atmosphere that is in line with the characteristics of the digital age.

METHOD | منهج | METODE

This study uses a mixed methods approach with a convergent parallel design. This design allows researchers to collect and analyze quantitative and qualitative data simultaneously, then combine the results of the analysis of both to gain a complete understanding of the effectiveness of using audiovisual media in *Maharah Istima'* learning. The choice of this design is based on the need to evaluate the success of audiovisual media not only through improving student learning outcomes, but also through their affective responses during the learning process. The subjects of

this study were all students of class VIII of SMPIT Adzkia, Jombang in the 2024/2025 academic year, totaling 29 students. The entire population was used as a research sample (Total Sampling), because the number allowed for comprehensive coverage and was the only class that implemented audiovisual media in *Maharah Istima'* learning. Data collection was carried out using two types of instruments. First, quantitative data was obtained through a pre-test and post-test which were designed to measure the ability to listen to simple Arabic texts. This test contains indicators of the ability to understand general information, details, and the ability to recognize basic linguistic structures in Arabic. The pre-test and post-test scores were analyzed descriptively-comparatively, using the following gain score formula: . The interpretation category of gain score results refers to Hake's Theory in$Gain\ Score = \frac{(Post\ Test - Pre\ Test)}{(100 - Pre\ Test)}$ (Aziz et al., 2021), namely high (≥ 0.7), medium (0.3–0.69), and low (< 0.3). Second, qualitative data were collected through participant observation and semi-structured interviews. Observations were made during the learning process, by recording students' responses to the delivery of material through audiovisual media, especially in terms of their interest, attention, and involvement. Meanwhile, interviews were conducted with five students who were selected purposively based on their level of involvement in class, with the aim of obtaining deeper data regarding their perceptions of the ongoing learning. Quantitative data were analyzed using descriptive statistics to obtain an overview of the increase in student learning achievement. The results of data processing are displayed in the form of tables and graphs to facilitate visualization of changes in student grades. Meanwhile, qualitative data were analyzed using a thematic approach (Zhang & Ramos, 2023), through the stages of data reduction, data presentation, and drawing conclusions. Thematic categories that emerged included learning interest, attention to audiovisual materials, and active participation in the listening process. The data merging strategy (mixing) was carried out at the stage of interpreting the results, by juxtaposing quantitative and qualitative results side by side. The results of the scores that increased significantly compared to the increase in student participation in the audiovisual class, so that a deeper understanding was obtained regarding the relationship between the application of audiovisual media and the improvement of students' listening skills. To maintain the validity of qualitative data, technical triangulation was carried out between observation and interviews, as well as member checking of informants to ensure the accuracy of the researcher's interpretation. The entire research process refers to the mixed methods design standards as explained by Creswell and Plano Clark in (Poth, 2023), by emphasizing the alignment of the weight of quantitative and qualitative data in the analysis and conclusion process.

RESULTS | نتائج | TEMUAN

The Quantitative data in this study were obtained through student tests before and after the intervention of using audiovisual media in learning *Maharah Istima'*.

Table 1. Pre-Test and Post-Test Results

No	Student Name	Pre-Test Score	Post-Test Value
1	Adhitya Ibanez Saputra	55	79
2	Adilina Hestyani Yasmine	60	81
3	Ahmad Taufik Tri Saputra	50	78
4	Alfath Hasan Assadzily	61	79
5	Alya Zakiyah	55	75
6	Andini Fitria Sari	65	79
7	Asyifa Nur Salsabilla	63	78

No	Student Name	Pre-Test Score	Post-Test Value
8	Azizah Naqiyatus Syita	69	80
9	Azka Rafisqy Mustofah	69	89
10	Azzahra Eka Rayantri	61	79
11	Enggar Alzidan Fahamsyah	54	80
12	Felisa Noviandini Pradipta	63	83
13	Haura Insiyah Ardhani	62	79
14	Hawai Hifdatul Zuwanda	59	81
15	Husna Lathifunisa	68	88
16	Ilmy Harokatul Islamy	69	87
17	Indy Ma'arif	69	89
18	Kirana Kholisatul Fauziyah	65	81
19	Nabila Azzahrah Putri	67	88
20	Nafisah Husna	56	85
21	Naina Tsabita Salam	54	80
22	Qonita Musfiroh Hakim	69	90
23	Qonitah Nuryn Najah	66	89
24	Revo Kadavi Al Fairus	60	88
25	Shafa Wahyu Inayah	65	89
26	Shega Angamas	66	89
27	Syauqi Alfaqih	58	86
28	Tazkiyah Farah Aulia	68	90
29	Nadya Bimas	55	80

A total of 29 students of class VIII SMPIT Adzkia, Jombang were used as samples, with scores collected individually. To measure the effectiveness of learning, the gain score formula (Hake, 1999) was used, namely: .$Gain\ Score = \frac{(Post\ Test - Pre\ Test}{(100 - Pre\ Test)}$

Table 2. Average Scores for Pre and Post *Maharah Istima'* Learning

Statistics	Pre-Test	Post-Test
The highest score	69	90
Lowest Value	50	75
Average	61.86	83.41
Standard Deviation (±)	5.86	4.25
Number of Students Reaching KKM (≥75)	12 students	25 students

The table above shows an increase in the average score of 21.55 points. In addition, the percentage of students who achieved the KKM increased significantly from 41% to 86%. This shows that the use of audiovisual media has a real positive impact on students' academic performance in listening skills. Furthermore, the calculation of the average class gain score is carried out:$Gain\ Kelas = \frac{83.41 - 61.86}{(100 - 61.86} = \frac{21.55}{38.14} \approx 0.565$

According to Hake's classification in (Aziz et al., 2021), the gain score of 0.565 is included in the moderate category, which means that the effectiveness of audiovisual media in improving listening comprehension is quite significant and pedagogically meaningful.

This finding strengthens the assumption in the behaviorist approach which states that learning occurs in response to environmental stimuli. In this context, audiovisual media acts as a concrete and interesting stimulus, thus increasing student motivation and engagement, and producing output in the form of higher scores in daily tests.

Furthermore, qualitative data were obtained through teacher observation and semi-structured interviews with several students. These findings were analyzed thematically to explore students' learning experiences and perceptions of audiovisual media.

1. Teacher Observation Results

   Based on teacher observations during four meetings, several student behavior patterns were obtained that showed increased interest and involvement in learning:

   a. Attention and focus: Most students showed full attention when the audiovisual display was played. They tended to be quiet, pay attention to the sound and images, and were not easily distracted by other things.

   b. Active participation: After watching the show, students respond more quickly to questions and show courage to express their opinions.

   c. Conceptual understanding: Teachers noted that students had an easier time answering oral questions after the video, especially when the video contained contextual narration and visualizations of familiar characters or objects.

Table 3. Results of Teacher Observations on Student Learning Behavior

Observed Aspects	Observation Indicators	Information
Attention	Eye contact, silence, no joking	It seems to have increased significantly
Participation	Answer, ask, comment	More active after audiovisual
Understanding	Accuracy of oral answers	More precise and faster
Enthusiasm	Body language, facial expressions	More lively and full of enthusiasm

2. Student Interview Findings

   Interviews were conducted with 5 students with representation from three categories (very active, moderate, and passive). Here are some narrative quotes from students that strengthen the observation results:

   "I understand better if there is a video. Because I can see the movements directly and hear how to pronounce them." (Student With The Initials AER)

   “Usually listening lessons make me sleepy, but when I use videos, I want to know more.” (Student With The Initials AZ)

   “I remember faster because the video is like everyday life, so it feels connected.” (Student With The Initials NB)

   From the interviews, it appears that the use of audiovisuals not only helps with the technical aspects of listening, but also fosters an intrinsic interest in Arabic as a living and contextual material.

In the behaviorist approach, quantitative findings showing increased learning scores can be interpreted as the result of a reinforcement process through video/audio stimuli. Visual displays serve as positive reinforcement that shape students' habits to be more focused and active in capturing information.

Meanwhile, from a cognitive perspective, the results of observations and interviews show that audiovisual media facilitate students' internal thinking processes, such as processing meaning, visualizing context, and connecting memories. This is in line with the dual processing

theory (Mayer, 2024), which states that learning is more effective if delivered through visual and auditory channels simultaneously.

Thus, both approaches provide complementary foundations in understanding the effectiveness of audiovisual media on *Maharah Istima'* learning. Effectiveness is not only seen from test results, but also from the quality of students' learning experiences which are more active, enjoyable, and memorable.

DISCUSSION | مناقشة | DISKUSI

The Effectiveness of Audiovisual Media in *Maharah Istima'* Learning

Learning listening skills in Arabic often faces challenges, both in terms of methodology and students' readiness to receive the material. Basically, *Maharah Istima'* is one of the receptive skills that relies heavily on auditory input and contextualization of meaning. When the material is delivered only through sound or text without the support of concrete media, the process of internalizing meaning will be slow, especially for middle-level students. In this context, the use of audiovisual media is considered as an alternative that can increase the effectiveness of listening learning.

Effectiveness in this context is interpreted as the success of learning in achieving the expected goals, both in terms of learning outcomes (Cognitive), student involvement (Affective), and strategy accuracy (Methodological). Based on data collected from class VIII of SMPIT Adzkia, Jombang, there is a strong indication that audiovisual media has given a positive influence on the achievement of *Maharah Istima'* learning. This indication can be seen from the comparison of student scores before and after the application of audiovisual media.

The average score before treatment was 61.86 and increased to 83.41 after the learning process using audiovisual displays. The increase in scores did not only occur in students with high initial abilities, but also evenly distributed to students who were initially classified as low. In addition, the number of students who reached the Minimum Completion Criteria (KKM) threshold increased significantly from 12 to 25 students from a total of 29 students. This indicates that learning with audiovisual media is inclusive and is able to reach almost all levels of student ability.

To determine the level of effectiveness quantitatively, the gain score formula from Hake is used, which is used to measure improvements in learning outcomes as follows:

$$Gain\ Score = \frac{(Post\ Test - Pre\ Test}{(100 - Pre\ Test)}$$

From the calculation of the average value, we obtain:

$$Gain\ Kelas = \frac{83.41 - 61.86}{(100 - 61.86} = \frac{21.55}{38.14} \approx 0.565$$

The gain score of 0.565 is included in the moderate category according to Hake's classification. However, in the context of foreign text-based listening skills learning, this result is quite high and shows didactically meaningful effectiveness.

This improvement can be explained through several pedagogical mechanisms. First, audiovisual displays provide visual and sound contexts that help students grasp the full meaning. This is in accordance with the theory (Mayer, 2024), on dual channel processing, which states

that the human brain processes information more effectively when presented visually and auditorily simultaneously. Information presented only in audio form tends to be lost quickly from short-term memory, whereas when accompanied by visualization, the information is more easily processed in long-term memory.

Second, the presence of narrative elements in the video can facilitate deeper semantic processing. The videos used in learning are not only technical instructions, but contain dialogues and scenes that reflect real-life situations, so that students can relate Arabic text to their world of experience. This is important in the context of meaningful learning, as emphasized by (Whittington et al., 2022), that understanding will occur more deeply when new information is connected to previously held cognitive structures.

Third, audiovisual media stimulates positive emotions during learning, such as happiness, curiosity, or even humor if the material is packaged in an interesting way. These positive emotions have a direct impact on focus and retention of information, as conveyed by (Camacho-Morles et al., 2021), that academic emotions influence motivation, learning strategies, and overall academic performance.

To strengthen the analysis, the following table is presented:

Table 4. Analysis of Pre-Test and Post-Test Results

Value Category	Pre-Test	Post-Test	Information
Value < 60	8 students	0 students	Reduced drastically
Score 60–74	9 students	4 students	Down
Value ≥ 75 (KKM)	12 students	25 students	Increased 108%

The table above shows that not only the average value increased, but the distribution of values also moved from the low category to the complete category. This indicates that the effectiveness of learning is not only experienced by certain groups of students, but in general by almost all students.

This effectiveness is also supported by a more flexible and accommodating material delivery structure. In the learning process, teachers are no longer the only source of information, but shift to being facilitators who direct, strengthen understanding, and provide clarification on the contents of the display. This shift in role strengthens the constructivist learning approach where students actively build knowledge from the visual-auditory input they receive.

It cannot be ignored that the effectiveness of audiovisual media is also greatly influenced by the quality of the teaching materials used. The videos selected in this study have been adjusted to the students' language ability level and are equipped with relevant linguistic elements such as intonation, thematic vocabulary, and basic sentence structures. This contextual selection of materials is what makes the listening experience more focused and meaningful.

Although the results show high effectiveness, it should be noted that audiovisual learning also requires adequate guidance. Without proper guidance and listening learning strategies, students can become mere passive spectators. Therefore, a combination of appropriate media and an active pedagogical approach is the key to success in optimizing *Maharah Istima'* learning.

From all the descriptions above, it can be concluded that the effectiveness of audiovisual media in learning listening skills lies not only in its ability to convey information in an interesting way, but also in its ability to activate students' cognitive processes, improve the quality of responses, and expand the scope of contextual language understanding. Therefore, this media is worthy of being an integral part of the design of Arabic language learning in modern Islamic

schools.

Student Response and Engagement to Audiovisual Media

Student engagement in learning is an important indicator in determining the quality and effectiveness of the teaching and learning process. In the context of Arabic language learning, especially in listening skills (*Maharah Istima'*), student engagement is often a challenge. This is because listening requires focus, concentration, and the ability to capture meaning simultaneously in a short time. When the material is delivered in a conventional way, such as through lectures or just by reading, most students have difficulty persisting in the abstract listening process. Therefore, the application of audiovisual media is present as a strategy that is believed to be able to significantly increase student engagement, both affectively, cognitively, and behaviorally.

Students' responses to audiovisual media in this study were obtained from direct observation data during the learning process and semi-structured interviews with several selected students. In general, audiovisual media created a more lively and interactive classroom atmosphere. Students were not only passive listeners, but also showed a higher interest in paying attention, observing, and engaging in discussions after the video was shown. This can be seen from the frequency with which they asked questions, gave comments, and tried to imitate the pronunciation of the video narration.

Based on the teacher's observation results during four meetings, most students showed bright facial expressions and bodies directed at the screen during the video playback. This kind of response indicates positive visual and emotional engagement. They seemed intensely involved when the narrative was delivered in the form of visual dialogue that was close to real experience. Students also tended to be calmer and more focused during the audiovisual session, compared to regular learning sessions without the help of media.

Cognitive engagement also increased. This is reflected in the students' ability to answer oral questions after watching the video. They are better able to capture the main ideas and important details contained in the video. In the discussion process, students can mention the sequence of events, summarize the contents of the story, and even relate it to their own lives. This activity shows that students not only listen, but also process and internalize the meaning of the material presented.

Meanwhile, interviews conducted with five students from various categories (very active, moderate, and passive) also provided a rich picture of their perceptions of audiovisual media. Most students stated that they found it easier to understand lessons when presented in video form. Students expressed that the combination of sound and images made them “feel” the content of the material, not just “hear”. One student said that he usually gets bored quickly when listening, but when using videos, he actually felt that the learning time went quickly and was enjoyable.

This positive response cannot be separated from the way the brain works in processing multisensory information. According to research conducted by (Kahsay et al., 2024), students who learn using audiovisual media show increased engagement, information retention, and intrinsic motivation compared to students who learn only with text or audio. Simultaneous activation of two sensory channels (visual and auditory) makes learning messages easier to understand and remember.

To illustrate student involvement during learning, the following table presents the results

of teacher observations of the four main aspects of student involvement:

Table 5. Results of Teacher Observations on Student Responses

Observed Aspects	Observation Indicators	Percentage of Students Showing Positive Responses
Attention	Staring at the screen, listening, silence	89%
Participation	Answering questions, discussing, interrupting	76%
Emotional response	Smile, laugh, show interest	81%
Cognitive processing	Summarize, relate to context	72%

The table shows that the majority of students showed active involvement during the learning process. This high positive response signals that listening learning is no longer a boring passive activity, but can be transformed into a fun and meaningful learning experience.

Student responses are also influenced by the type and quality of audiovisual media used. Videos that are contextual, featuring characters with natural expressions and familiar settings, are more easily accepted by students than videos that are monologue or too formal. Therefore, the selection of audiovisual teaching materials cannot be arbitrary, but must go through a selection that considers linguistic, visual, and cultural factors. This is reinforced by the opinion (Perez, 2022), that the effectiveness of audiovisual media in foreign language learning is greatly influenced by the quality of the content used, including the authenticity of the context and suitability to the students' ability level.

From a behaviorist perspective, high student engagement can be seen as the result of consistently providing positive stimuli. Video acts as a reinforcer that increases the likelihood that students will focus, respond, and understand. This reinforcement is not in the form of punishment or rewards, but rather in the form of enjoyable and relevant visual-auditory stimuli. When students like what they see and hear, they will naturally show greater attention and engagement.

Meanwhile, from a cognitive perspective, student engagement is the result of an active internal process, where audiovisual media helps activate students' previously held cognitive schemes. In other words, when students watch videos that depict real or similar situations to their life experiences, their brains will associate new information with old knowledge, thus facilitating the formation of meaning and storage of information in long-term memory.

The affective aspect also cannot be ignored. When students feel interested, happy, and emotionally involved in learning, the learning process does not only occur at the cognitive level, but also fosters a positive attitude towards the subject matter. This is important in learning a foreign language which is often considered difficult. Audiovisual media in this case functions as an emotional bridge that brings students closer to the target language without pressure.

High student engagement is also directly proportional to increased self-confidence. Some students who previously tended to be passive began to dare to answer questions, imitate pronunciation of words, and even engage in discussions. This reinforces the idea that audiovisual media not only strengthens understanding, but also opens up psychological space for students to take language risks without fear.

Overall, students' responses and engagement with audiovisual media indicate that this strategy is worth maintaining and developing in Arabic language learning, especially in listening skills. Learning becomes more interactive, interesting, and emotionally and cognitively effective. Teachers also have a greater opportunity to create a dynamic classroom atmosphere without having to rely entirely on traditional methods.

By considering the results of observations and interviews, it can be concluded that audiovisual media not only has an impact on student learning outcomes, but also on the learning process they undergo. This process is the core of meaningful learning, where students not only achieve high grades, but also experience growth in interest, understanding, and self-confidence.

Effectiveness Analysis in Behavioristic Perspective

The behaviorist approach to learning theory emphasizes that the learning process is the result of interactions between stimulus and response, where correct responses are strengthened through reinforcement.(Belo da Fonseca et al., 2025). In the context of learning Arabic, especially listening skills (*Maharah Istima'*), the effectiveness of learning strategies can be analyzed from the extent to which the stimulus provided, in this case audiovisual media, is able to produce the expected learning response, namely increased attention, participation, and understanding of language input by students.

Audiovisual media, when viewed from a behaviorist perspective, functions as a more complex sensory stimulus compared to verbal media alone. Video displays that combine visual, audio, narrative, and motion elements create multisensory stimuli that stimulate more attention centers in students' brains. When students are exposed to such stimuli consistently and in a structured manner, the responses that emerge become stronger, more persistent, and more easily controlled by the teacher as the learning director.

BF Skinner, a major figure in operant behaviorism, emphasized the importance of reinforcement in shaping learning behavior. In learning practices that use audiovisual media, reinforcement is not always given verbally by the teacher, but can be present implicitly through students' success in understanding the contents of the display and responding to questions correctly (Belo da Fonseca et al., 2025). When students realize that they are able to understand the video content, answer questions, or imitate pronunciation, then the internal satisfaction itself becomes a form of positive reinforcement that strengthens engagement in the next learning session.

In this study, the data showed that there was a significant increase in student scores after the use of audiovisual media. The average class score increased from 61.86 to 83.41. In a behaviorist framework, this is a real manifestation of a response that has been successfully formed through repeated stimulus and continuous reinforcement. Teachers who consistently display audiovisual materials and accompany them with questions or exercises directly have created a learning scheme that allows for the formation of predictable stimulus response patterns.

To understand this more deeply, we can see how the learning process is conditioned. Before the stimulus is given (Audiovisual Display), students are in a passive learning condition. After being given a stimulus and reinforcement (Repeat Display, Questions And Answers, Feedback), students begin to show changes in learning behavior. This is in accordance with the principle of operant conditioning which states that a response will be more likely to be repeated if it gets a pleasant or satisfying consequence (Fu et al., 2023).

The learning responses displayed by students can be grouped into three forms: (1) affective responses, namely attention, interest, and focus while listening; (2) cognitive responses, in the form of the ability to understand the contents of the narrative, capture the main information, and answer questions correctly; and (3) motor-verbal responses, namely the ability to imitate sentences or structures used in the display. These three forms of response are concrete evidence

of the effectiveness of audiovisual stimuli in forming productive learning habits (Schnakers, 2024).

This effectiveness is increasingly apparent when observing learning behavior during four meetings. Based on teacher records, students who were initially reluctant to answer questions, after two meetings began to show initiative to speak. This shows that repeating stimuli in the form of audiovisual displays accompanied by reinforcement (verbal appreciation from the teacher, repetition of exercises, or questions and answers) successfully fosters courage as part of the learning behavior response.

To illustrate the relationship between stimulus, response, and reinforcement in audiovisual learning, here is a simple scheme based on operant conditioning theory:

Table 6. Analysis of Operant Conditioning Theory

Element	Implementation in Learning
Stimulus	Contextual, engaging and relevant audiovisual displays
Response	Focus on listening, answering, repeating, understanding the contents of the narrative
Reinforcement	Teacher appreciation, personal satisfaction for successfully understanding, practice
Repetition	Video replay, practice questions, step by step Q&A
Consolidation	The emergence of focus habits, increasing student self-confidence

In addition, the principle of shaping (Gradual Behavior Formation) also occurs during the learning process. The teacher does not immediately demand students to understand the entire contents of the display, but provides gradual direction, from recognizing keywords, understanding general content, to capturing details of the conversation. This process slowly strengthens students' responses from the beginning simple to more complex, according to the levels in the theory of behavior formation (Susetyarini et al., 2024).

Reinforcement used in audiovisual learning is not limited to praise, but also in the form of assurance of success (Flores & Antonio, 2023). Shows that have a storyline or logical content give students a sense of "knowing what will happen" or "being able to guess what will happen next," which behaviorists call contingency awareness. When students' predictions are correct, there is psychological reinforcement that encourages the formation of positive learning patterns.

Observation data also shows that the presence of audiovisual media indirectly creates a more controlled learning environment. Students become more easily directed, more focused, and less likely to engage in deviant behavior. This indicates that audiovisual stimuli function not only as learning aids, but also as behavioral cues that create a classroom atmosphere conducive to active learning.

Effectiveness reviewed from the behaviorist theory is also related to the duration of retention. Responses that are consistently reinforced tend to last longer. Students who repeatedly hear and see Arabic sentences in the display will find it easier to remember the structure, even without realizing it. This is known as the automaticity effect, which is when behavioral responses become automatic due to repeated reinforcement (Divine & Astill, 2025).

However, behaviorism also has limitations. It does not fully explain the thought process in understanding context or capturing implicit meaning. However, in the context of this study, behaviorism remains relevant in explaining how audiovisual stimuli can influence students' learning responses in a concrete, measurable, and consistent manner.

Referring to the basic principles of behaviorism, it can be concluded that the effectiveness of audiovisual media in *Maharah Istima'* learning lies in its ability to create strong, interesting,

and repetitive learning stimuli, which are then responded to by students in the form of positive learning behavior, and systematically reinforced by teachers through various forms of reinforcement. This cycle contributes to the formation of a focused, productive, and sustainable learning pattern.

Students' Cognitive Process in Listening Through Audiovisual

Learning listening skills in Arabic is not only related to the ability to hear, but also involves a series of complex mental processes (Wahyuni et al., 2023). When students listen to audiovisual materials, they do not only record the sounds they hear, but also process information simultaneously through perception, attention, understanding meaning, and storage in memory. This process is the focus of attention in the cognitive approach, which views learning as an active mental activity in constructing knowledge and meaning based on the input received.

One of the initial cognitive processes involved when students listen to audiovisual displays is selective perception, namely the student's ability to choose and focus attention on relevant stimuli (Kosel et al., 2021). When a video is shown, not all elements are captured completely by students. They will automatically select information that is considered important or familiar, such as facial expressions, voice intonation, or the context of a recognized image. This process occurs under the control of working memory, a temporary information processing location that is very limited in capacity (Shine et al., 2023).

In the context of Arabic language learning, the limited capacity of working memory is a challenge in itself. Beginner students are generally unable to catch every word in a foreign language narrative, so they have to rely on compensatory strategies such as catching keywords, recognizing sentence structures, or associating sounds with relevant visual images. Therefore, learning videos equipped with contextual images, subtitles, or phrase repetitions help reduce students' cognitive load and allow for more efficient processing (Malakul & Park, 2023).

According to (Ceken & Taşkın, 2022), in multimedia learning theory, effective learning occurs when information is delivered through two cognitive channels: visual and auditory. When students watch a video, the narration sound will be processed through the auditory channel, while the images or scenes in the video will be processed visually. Both are then combined in working memory and processed to form a mental representation, which is called dual-channel processing. This process allows students to build a more complete understanding of meaning than if they only received input from one channel, for example only listening to the teacher talking.

The results of the interviews in this study showed that students felt that it was “easier to understand” the learning content when using videos, compared to just listening to or reading text. This statement shows that students experience a stronger meaning-making process when there is a visual context that accompanies the sound. Visualizations in videos help students form new schemas or strengthen old schemas, which are mental structures that store previous knowledge and experiences. When new and old schemas are connected, the learning process becomes more meaningful (Granda et al., 2024).

At the same time, students also carry out a cognitive process in the form of semantic coding, namely understanding the meaning of words or sentences not only literally, but in the context of the situation presented. When the video narration talks about "*syābun yaktubu risālah ilā ummih*", students not only understand the word "*yaktubu*” as “writing”, but also imagines a scene of a young man writing a letter to his mother. The image helps build context, while the

narrative helps recognize sentence structure. This collaboration forms a semantic reinforcement that deepens understanding.

The process of listening through audiovisuals also involves the activity of storing information in long-term memory. Information that has been processed in working memory will be transferred to long-term memory if students succeed in understanding and relating it to the knowledge they already have. Learning videos that have elements of stories or logical sequences are easier to store in long-term memory because they are narrative and emotional. According to recent research by (Low et al., 2022), narrative and contextual learning materials can increase information retention by up to 40% compared to materials delivered in a conventional descriptive manner.

Specifically, the audiovisual displays used in this learning are designed to build prediction skills. When the video is shown gradually, students are encouraged to guess the next content based on the previous scene. This activity triggers cognitive inference, which is the ability to think to fill in the gaps in information that has not been conveyed explicitly. Inference is an important indicator of active cognitive engagement and shows that students are not just passively listening, but are doing mental analysis of the information they receive.

In addition, metacognitive aspects also emerged in the listening process. Some students revealed that when they did not understand the contents of the video, they tried to "repeat in their heads", or guess the meaning based on the images. This shows the existence of monitoring and control over their own learning strategies. According to (Shamsi & Bozorgian, 2024), metacognitive abilities like this are very important in language learning because they help students recognize their difficulties and adjust strategies to understand the content of the message.

The level of complexity of the cognitive process in listening through audiovisuals can be described in the following scheme:

Table 7. Analysis of cognitive processes through audiovisuals

Cognitive Process Stages	Description of Mental Activity	Audiovisual Media Supporters
Selective Perception	Selecting relevant input from the display	Clear visuals, slow narrative
Focused Attention	Focusing attention during the show	Short video duration, contextual theme
Semantic Understanding	Capture the meaning of words/phrases contextually	Visual illustration, character expression
Association and Inference	Relating new information to old schemas	Sequential story, realistic scenes
Memory Storage	Storing information in long-term memory	Narrative repetition, logical flow
Metacognitive Monitoring	Assess self-understanding and improve listening strategies	Pause/play video, repeat certain shows

The table illustrates that the cognitive process of students in listening is not linear, but occurs in parallel and integrated. The existence of audiovisual media allows these processes to be facilitated more effectively, as long as they are supported by appropriate display design and directed teacher guidance.

One of the challenges in this cognitive process is the gap in cognitive capacity between students. Not all students are able to absorb information at the same speed and depth. Therefore, it is important for teachers to provide displays that are tailored to the level of student development, as well as provide time for reflection or repetition. Strategies such as "pause and predict" have been shown to be effective in deepening cognitive processing because they force students to think before receiving further information (Johnson et al., 2023).

Based on the analysis above, it can be concluded that the cognitive process of students in

listening through audiovisuals takes place actively, complexly, and interactively. Audiovisual media not only helps to understand words literally, but also accelerates the process of associating meaning, strengthening memory, and increasing mental involvement. This process is in accordance with the characteristics of modern constructivist learning which emphasizes that students must be active in building understanding, not just receiving information passively.

Thus, the use of audiovisual media in *Maharah Istima'* learning not only accelerates learning achievement, but also enriches the learning experience through deeper cognitive activation. Teachers as facilitators have an important role in designing, selecting, and directing the media used so that they are truly able to optimize students' mental potential in the process of listening to Arabic.

Synthesis and Implications of Audiovisual-Based Arabic Language Learning

Arabic language learning at secondary education level requires an approach that is able to balance academic achievement, emotional involvement, and the formation of active learning habits. The synthesis of the results of this study shows that the use of audiovisual media in learning listening skills (*Maharah Istima'*) not only has an effect on improving learning outcomes, but also forms a more contextual, enjoyable, and cognitively effective learning experience.

Based on the results of quantitative analysis, there is a significant increase in students' academic achievement, as indicated by an increase in the average value and the number of students who exceed the Minimum Completion Criteria threshold. The calculation of the gain score which shows moderate results approaching high indicates that audiovisual media is able to encourage an increase in students' understanding as a whole. However, the effectiveness of learning is not solely determined by numbers, but also by the involvement and perception of students during the learning process.

From the qualitative data side, it was found that audiovisual media successfully sparked student involvement both affectively and cognitively. Students were more enthusiastic, focused, and active in participating in learning. The use of contextual displays that display visualizations of real situations encourage students to build meaning through associations of personal experiences with the material being studied. This indicates that the learning process is no longer mechanical, but has touched a deeper layer of understanding.

This synthesis between quantitative and qualitative data strengthens the position of the dual coding and multimedia learning theories proposed (Mayer, 2024), which states that integration between visual and auditory channels accelerates understanding, deepens memory, and activates more cognitive centers of the brain. Students not only memorize vocabulary, but also build contexts of meaning that are relevant to their lives. This process encourages constructive and communicative learning.

In addition, the effectiveness of audiovisual media in a behavioristic context has been proven to be able to form positive learning behavior through the provision of enjoyable visual-auditory stimuli. Videos that are played consistently become a kind of reinforcer that strengthens student involvement in listening. They show increasingly active responses along with the reinforcement given by the teacher, either in the form of praise, questions and answers, or further exercises. This is in line with the principle of operant learning which emphasizes the importance of reinforcement in forming learning behavior (Nawi & Nordin, 2025).

On the other hand, from a cognitive perspective, learning through audiovisuals shows that students engage in a series of mental activities such as selective perception, semantic

comprehension, inference, and memory reinforcement. They form a complete mental representation through the integration of narrative and visuals, and develop listening skills as an active and structured process. This finding strengthens the findings (Bahari, 2023) that reducing cognitive load through multiple presentations of information can improve the quality of foreign language learning.

The practical implication of this synthesis is the need to develop audiovisual teaching materials that are not only visually appealing, but also structured based on strong pedagogical principles. The videos used should not be too long, have a clear narrative structure, and present situations that are appropriate to the linguistic level of the students. The content should be developed locally, so that the cultural context, vocabulary, and communication style are not too far from the students' everyday experiences.

In addition, teachers play an important role as facilitators who not only play videos, but also direct, guide, and evaluate students' listening process. Strategies such as pause and discuss, retell after watching, or matching activities based on video content can help students evaluate their understanding and develop active listening skills. Teachers must also be able to design post-show follow-up tasks that require students to process, reveal, and reuse the information they have listened to.

In the long term, audiovisual-based learning can also help foster students' learning autonomy or independence in learning. Students can be invited to explore Arabic video sources available on the internet, such as YouTube, Islamic podcasts, or documentaries in Arabic. Good listening skills will be an important foundation in developing other language skills, especially speaking and reading.

Institutionally, schools need to support this strategy by providing adequate equipment such as projectors, quality speakers, comfortable audio rooms, and training for teachers to design effective audiovisual learning media. Collaboration between Arabic teachers, ICT teachers, and educational content developers will accelerate this transformation process towards a more adaptive and interactive 21st century learning model.

The theoretical implications of these findings confirm that an integrative approach which combines behaviorism and cognitivism can be applied synergistically in language learning practices. Audiovisual media, which were previously considered only as aids, are in fact able to bridge the process of behavioral reinforcement and cognitive activation simultaneously. This shows that language learning is not enough with just a structural approach, but must include multisensory and reflective learning experiences.

The results of this study also encourage the importance of reviewing the design of the Arabic language curriculum, especially in the aspect of listening skills which have so far received less attention. The curriculum should contain indicators that are not only based on linguistic knowledge, but also include information processing through authentic Arabic language displays or sources. This will bring Arabic language learning closer to its communicative and practical use.

Regarding learning evaluation, teachers can develop a listening assessment instrument based on the display. For example, by assessing the speed of comprehension, the ability to summarize the contents of the video, the accuracy in responding to questions, or the creativity in re-conveying the contents of the narrative. This evaluation must be formative, support the learning process, and avoid assessments that are solely based on numerical scores.

Taking into account all the findings and theoretical reflections that have been discussed,

this synthesis shows that audiovisual-based Arabic language learning is an innovation that is worthy of being expanded in its implementation. Not only because of its empirical effectiveness, but also because of its suitability to the learning style of the digital generation that prioritizes visualization, interactivity, and speed of access to information.

CONCLUSIONS | خاتمة | SIMPULAN

This study has demonstrated that the integration of audiovisual media into the teaching of Mahārah Istimāʿ Arabic listening skills using behaviorist and cognitivist approaches significantly enhances both student engagement and comprehension. The approach bridges theoretical learning with practical communication by stimulating both external responses and internal processing. The findings support the assertion that audiovisual materials do more than merely supplement traditional teaching they transform the learning environment into an interactive, multisensory space that caters to diverse cognitive pathways. This work contributes to the field of Arabic language instruction by offering empirical support for blended pedagogical strategies that are grounded in established learning theories yet tailored to modern digital classrooms. It provides a valuable framework for educators aiming to improve listening instruction through technology without compromising foundational language acquisition principles. The observed alignment between behaviorist reinforcement techniques and cognitive processing mechanisms suggests a powerful synergy when both approaches are deliberately applied. In light of the outcomes, future research could focus on the long-term impact of sustained audiovisual integration on language fluency and retention. Experimental comparisons between types of audiovisual content such as narrative vs. non-narrative formats may also uncover deeper insights into learner preferences and processing styles. Moreover, implementing this model across different proficiency levels and age groups could help generalize its applicability and further refine best practices in Arabic language pedagogy

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