



ALSUNIYAT
JURNAL PENELITIAN BAHASA, SASTRA, DAN BUDAYA ARAB

Journal homepage: <https://ejournal.upi.edu/index.php/alsuniyat>



Enhancing Arabic Listening Skills through Spotify Podcasts: A Behaviorist Approach

Manisha Aulia^{1*}, Abdul Muid², Marisya Putri Diana³, Budi Santoso⁴, Muhammad Hasyim⁵

^{1,3,5} Universitas Islam Negeri Maulana Malik Ibrahim Malang, Indonesia

² Universitas Jambi, Indonesia

⁴ Sekolah Tinggi Agama Islam Ali bin Abi Thalib Surabaya, Indonesia

Correspondence: E-mail: manishaauliaa1@gmail.com

ARTICLE INFO

Article History:

Submitted/Received 05 Jul 2025

First Revised 10 Sep 2025

Accepted 28 2025

Publication Date 31 Oct 2025

Keywords:

Arabic Listening Skills

Behaviorist Approach

Enhancing Skills

Spotify Podcasts

ABSTRACT

The transformation of Arabic language learning in the digital era requires innovative media suited to modern university students. One crucial yet underdeveloped skill is mahārah istīmā' (listening), which needs appropriate methods and technology-based media. This study explores the use of Spotify podcasts as a learning tool for mahārah istīmā', based on behaviorism principles, and analyzes its effectiveness in improving listening skills among students in the Arabic Language Education Program at Universitas Hasyim Asy'ari Tebuireng Jombang. Using the Research and Development (R&D) method with the ADDIE model (Analysis, Design, Development, Implementation, Evaluation), the study finds that the media follows behavioristic steps: pre-listening (introducing vocabulary), while listening (reinforcement through repetition), and post-listening (exercises for reinforcement). Evaluation through pretests, posttests, and validation questionnaires showed a significance value of 0.000 (< 0.05), with media validation at 87.66%. The results confirm that Spotify podcasts are effective, valid, and adaptive tools for enhancing Arabic listening skills.

1. INTRODUCTION

Listening skills (mahārah istimā') are a fundamental aspect of acquiring the Arabic language. In the language acquisition process, listening serves as the initial gateway to other skills such as speaking, reading, and writing. Listening skill is a person's ability to understand and interpret words or sentences spoken by a speaker or delivered through a medium (Ni'mah et al., 2024). Comprehending spoken utterances not only requires the ability to recognize sounds and vocabulary but also demands sensitivity to structure and meaning within context. The learning of mahārah istimā' not only focuses on the ability to understand language sounds but also trains learners to grasp the meaning, context, and intent of the speaker comprehensively through various structured listening activities (Audina & Mubarak, 2021). However, in practice, listening skills are often neglected in Arabic language instruction at multiple universities. Listening activities tend to be conducted in a conventional, passive manner with minimal media variety, making them less engaging and ineffective for students in the digital generation (Gwo-Jen Hwang, 2025).

Today's students live in an environment that is closely intertwined with technology. They are more responsive to mobile, interactive, and flexible learning media that are time- and place-independent (El Galad et al., 2024). Therefore, there is a need for learning innovations that not only connect the material with real-world contexts but also align with modern learning styles (Petrucchio, 2020). One relevant and potentially useful alternative medium is the podcast, particularly on the Spotify platform, which is popular and easily accessible to students.

A podcast is an audio medium considered suitable for educational purposes due to its ability to increase students' interest in learning. Despite its great potential, the use of podcasts in learning activities is still relatively rare, especially in the context of foreign language learning (Hernandez & Mendoza, 2025). One popular and familiar digital platform for students to access podcasts is Spotify (Özel, 2022). Spotify is an audio streaming service that offers a variety of content, including music, educational podcasts, and other audio programs (Paisana et al., 2024). Using Spotify as a learning medium opens new opportunities to deliver material in a flexible, engaging way that aligns with the learning styles of the digital generation (Almqvist, 2019). Podcasts uploaded to Spotify can serve as an innovative learning medium that supports independent and repeated learning while providing an alternative solution to the limited availability of audio media in the classroom. In a pedagogical context, the use of podcasts in learning cannot be separated from the underlying learning theory framework. One relevant approach is behaviorism theory, which views learning as the result of interactions between stimulus and response (Saari, 2019).

The behaviorism theory views learning as a process of changing students' behavior from not knowing to knowing and from being unskilled to skilled, which occurs as a result of the interaction between stimulus and response (Ritonga et al., 2024). In this theory, learning occurs through the reinforcement of stimuli (such as audio from podcasts) delivered repeatedly to produce the desired response (understanding or action). Repetition and reinforcement are the core principles of behaviorism, which can be effectively applied in

listening instruction (Zhang, 2022). When students listen to podcasts repeatedly, they become familiar with the sounds of the language, sentence structures, and specific meanings. Positive responses can be enhanced through practice, comprehension questions, and tiered evaluations that strengthen their absorption of the material they have listened to. Thus, podcasts serve not only as supporting tools but also as an integral part of behaviorism-based learning strategies.

Several studies on the use of podcasts as learning tools have demonstrated their effectiveness in enhancing listening skills. For example, Kelly et al. (2022) found that developed podcasts improved students' Mandarin listening skills, while Marshall (2024) showed that podcasts are feasible as audio-based resources for teaching folklore. Also confirmed that podcasts positively impact students' *istimā'* (listening) skills (Mirza Suzani, 2021). Further research highlighted the role of digital media in teaching Arabic listening skills, noting that well-integrated technology enhances both motivation and listening abilities (Mualimah, 2023). Additionally, demonstrated that Spotify podcasts are valid, practical, and engaging tools for improving listening skills at the higher education level. These findings underscore the relevance of using podcast-based media as a technology-driven learning innovation in the digital era. (Bozorgian & Shamsi, 2022) (Caoilte et al., 2023).

Although these studies have shown positive results, most remain limited to general podcast use or to the context of Arabic language learning at universities and have not specifically examined the use of Spotify podcasts for *mahārah istimā'* instruction in higher education. Therefore, this study aims to fill this gap by developing and reviewing the use of Spotify podcasts as a behaviorism-based learning medium for *mahārah istimā'* at the university level.

In addition, the use of Spotify podcasts in *mahārah istimā'* instruction with a behaviorist approach has not yet been extensively studied. Most studies focus on the practical aspects of media use without discussing the theoretical implications in depth, particularly in the context of students in the Arabic Language Education Program at Universitas Hasyim Asy'ari Tebuireng Jombang. Therefore, there is a significant research gap: the absence of studies that explicitly integrate Spotify podcasts with the behaviorist approach in *mahārah istimā'* instruction. This is crucial for designing learning models that are not only innovative but also grounded in strong pedagogical principles and aligned with the characteristics of today's digital-native students.

Accordingly, this study aims to describe the use of Spotify podcasts as a learning medium for *mahārah istimā'* designed based on the principles of behaviorism theory after the press has been developed, and to analyze its effectiveness in improving the listening skills of students in the Arabic Language Education Program at Universitas Hasyim Asy'ari Tebuireng Jombang. This research does not merely offer an innovation in digital media that aligns with the characteristics of the digital generation, but also supports the implementation of a systematic, measurable, and theory-based learning approach. It is expected that this study will contribute both practically, by supporting the development of effective learning media, and theoretically, by enriching the body of knowledge in Arabic language instruction that is

adaptive, applicable, and relevant to current educational demands.

2. METHODS

This study employs a Research and Development (R&D) approach using the ADDIE development model (Analysis, Design, Development, Implementation, and Evaluation) (Branch & Varank, 2009) to develop a learning medium in the form of Spotify podcasts for listening skills (*mahārah istimā'*) instruction based on behaviorism theory. The analysis stage was conducted through observations and interviews to identify needs and barriers related to accessing audio media. The results indicated the need for an innovation in podcast-based learning. In the design stage, the podcast structure was developed based on the principles of behaviorism—repetition, response, and reinforcement—across three phases: pre-listening, while-listening, and post-listening. The development stage involved producing 12 podcast episodes on the theme *Hiwar al-Yaumiyyah al-'Arabiyyah* (Daily Arabic Conversations) using Narakeet (AI voice), BandLa, and Canva, which were then published on Spotify for Podcasters. The implementation involved 12 students who listened to the podcasts and completed exercises via Google Forms. Evaluation was carried out both formatively and summatively using a multiple-choice test (25 questions) and a validation questionnaire. The results of the paired-samples t-test in SPSS showed a p-value of 0.000 (< 0.05), indicating a significant improvement in students' listening skills after using the podcasts.

Table 1. ADDIE's research stages

Stage (ADDIE)	Activities	Instruments	Data Analysis Procedure
Analysis	Conduct observations and interviews to identify needs and barriers related to audio media access.	Observation, Interview	Identify needs and barriers in accessing audio media.
Design	Develop a podcast structure based on behaviorist principles: pre-listening, while-listening, and post-listening.	Podcast structure (behaviorism-based design)	Develop a structured podcast that adheres to the principles of behaviorism.
Development	Produce 12 podcast episodes on 'Hiwar al-Yaumiyyah al-'Arabiyyah' using Narakeet, BandLab, Canva, and publish via Spotify.	Narakeet (AI voice), BandLab, Canva, Spotify	Produce and distribute the podcasts through Spotify for student use.
Implementation	12 students access podcasts and complete exercises through Google Forms.	Google Forms for exercises	Monitor student engagement with podcasts and exercises.

Evaluation	Use pretests, posttests, and validation questionnaires. Perform statistical analysis with paired sample t-test (SPSS).	Multiple-choice test (25 questions), Validation questionnaire, SPSS	Analyze the pretest and posttest results using a paired sample t-test (SPSS).
------------	--	---	---

3. RESULTS AND DISCUSSION

3.1 Results

In this study, the researcher used the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation.

Analysis stage

Based on preliminary observations and interviews with lecturers and students of the Arabic Language Education Study Program at Hasyim Asy'ari University, it was found that podcasts had never been used in learning. The media used so far were cartoon videos by Nuroh and Fawwaz on YouTube, which were more audiovisual.

Design stage

At this stage, the researcher compiled Maharah Istima' learning materials consisting of twelve Arabic podcast episodes organized into themes of daily life. The maharah istima' material was compiled with 12 different materials with the theme "hiwaar al-yaumiyyah al-lughoh al-araabiyyah". The titles are as follows:

Table 2. Listening Skill Materials

حوار اليومية اللغة العربية			
الرقم	العنوان	الرقم	العنوان
1	اللُّبَّةُ عَلَى الْإِنْتَرْنَتِ	7	شِرَاءُ الْخَضِرَوَاتِ فِي السُّوقِ
2	كَمْ السَّاعَةِ الْآنَ؟	8	صَلَاةُ الْجَمَاعَةِ فِي الْمَسْجِدِ
3	زِيَارَةُ الْمَرْضَى	9	عَمَلِيَّةُ الْمُسْلِمِينَ فِي شَهْرِ ذِي الْحِجَّةِ
4	مُشَاهَدَةُ الْأَفْلامِ جَمَاعَةً	10	الرِّيَاضَةُ لِصِحَّةِ الْبَدَنِ
5	الْإِسْتِذَانُ لِلرُّجُوعِ إِلَى الْبَيْتِ	11	الْخَطَأُ فِي نَظَرِ الْجَدُولِ
6	يَوْمُ الْعُطْلَةِ السَّعِيدَةِ	12	مَنْ الَّذِي يَرْتَدِّي نَعَالِي؟

Development stage

At this stage, researchers began producing podcasts by recording podcast audio using AI voices from Arab countries on the Narakeet application website. Second, they edited the podcast audio in BandLab. Third, they designed icons for each material title and

profile using the Canva application. Fourth, they uploaded the podcast to the Spotify application using the Spotify for Podcasters application.

Implementation Stage

At this stage, the first step is to ask students to download the Spotify app on their devices, whether they use a phone, laptop, or tablet. After the app is installed, students are directed to search for and follow the podcast account created by the researcher and course instructor. The podcast used in this learning activity is named HIWAR PODCAST, which can be easily accessed through the search feature in the Spotify app or via the direct link shared by the instructor: <https://shorturl.at/z1xoS>.

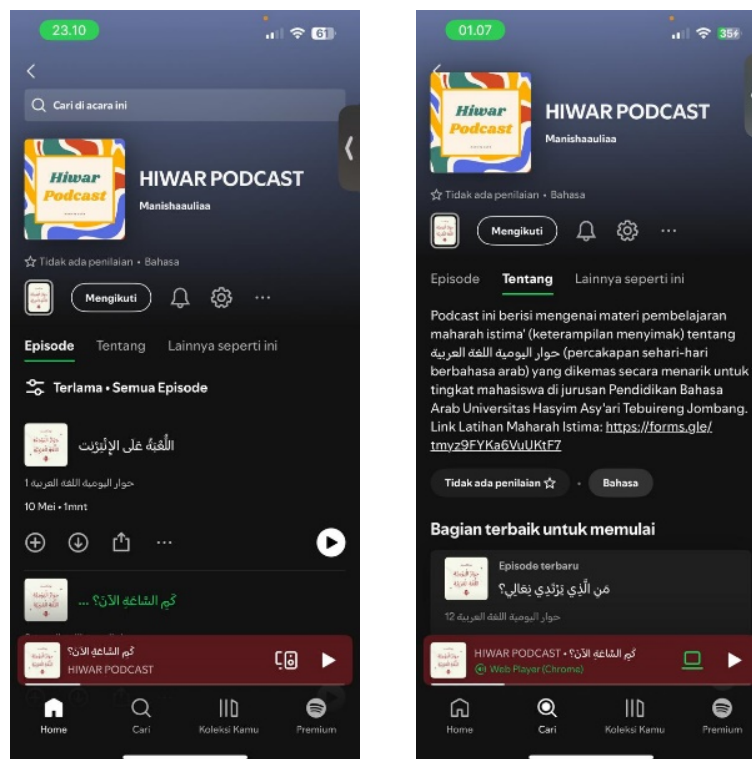


Figure 1. Spotify Application

Students listen to each podcast episode two or three times. After listening to the Spotify podcast, students complete the exercises. The exercises can be completed via Google Forms, accessible via the link in the Spotify podcast profile. <https://forms.gle/tmyz9FYKa6VuUKtF7>

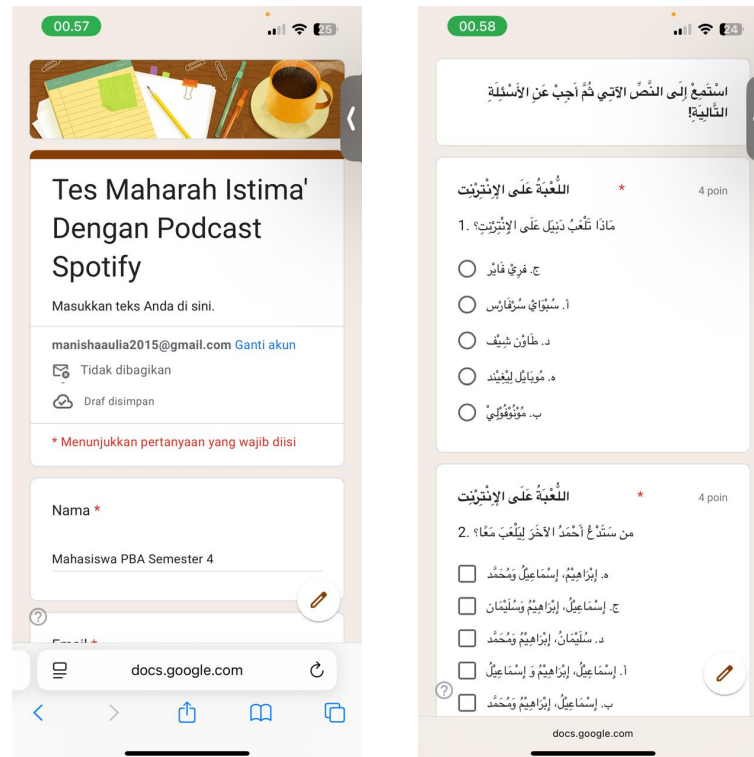


Figure 2. Exercise Using Google Forms

Evaluation stage

To measure the effectiveness of the mahārah istimā' material using podcasts on the Spotify application, a test needs to be conducted to determine whether there is a difference in student learning outcomes before and after working on the mahārah istimā' material using podcasts on the Spotify application. A pretest and posttest consisting of 25 questions were given.

The following are the results of the students' pretest and posttest in table form:

Table 3. Students' pretest and posttest results

No	Name	Value	
		Pretest	Posttest
1	Syu'latul Jannah	80	96
2	Siti Rahma	92	96
3	Dian Fitriah	76	80
4	Kholifatur	84	96
5	Harisma	84	92
6	Fifa Lutfiana	92	100
7	Saskia Sasi	96	100
8	Siti Huzaimah	96	100
9	M Fatih Setiyo	88	92
10	Wisnu Aji	92	96
11	Ahmad Kurniawan	48	80
12	M Ilham	92	96

Total	1.020	1.131
Average	85	94,25

After collecting the pretest and posttest data, a t-test can be performed using SPSS 29.0 on the students' scores. Based on the SPSS 29.0 paired sample test output above, a sig value (2-tailed) of 0.000 was obtained. This means that the sig value (0.004) is rejected, so it can be concluded that there is a difference in student results after studying the mahārah istimā material using podcasts on the Spotify application. Therefore, it can be concluded that the mahārah istimā' material delivered via podcasts on the Spotify application is effective in developing Arabic language education students at Hasyim University.

3.2 Discussion

Teaching *Mahārah Istimā'* Using Spotify Podcasts Based on Behaviorism Theory

Mahārah istimā', or listening skills in Arabic, represent an initial and fundamental stage in language acquisition. The listening skills form the foundation for understanding a language before progressing to speaking, reading, and writing (Şendağ et al., 2024). Listening skill is an individual's ability to comprehend words or expressions spoken by an interlocutor or through certain media, encompassing the processes of hearing, understanding, and responding to the messages implied in the language (Nurmala et al., 2024). Students with good listening skills are better able to comprehend language structures, expand their vocabulary, and improve their speaking and writing abilities (Fernandes et al., 2024). However, in practice, listening instruction is often still delivered conventionally, making it less engaging and less suited to today's digital-native students (Dong & Wang, 2024). Therefore, an adaptive and innovative approach is needed, such as using Spotify podcasts. As an internet-based audio medium, podcasts offer flexibility, diverse content, and can be tailored to learners' needs and interests (Khan & Khan, 2024). In the context of Arabic language learning, Spotify offers a variety of Arabic-language podcasts with authentic, context-rich themes.

The use of Spotify podcasts in *mahārah istimā'* instruction becomes more targeted and systematic when linked to behaviorism theory. This theory emphasizes that learning occurs through associations between stimulus and response, reinforced by repetition and reinforcement (Addaeroby & Febriani, 2024). In this context, the stimulus takes the form of podcast audio material presented repeatedly to students to build listening habits. Students' responses are manifested through activities such as mimicking pronunciation, answering questions, or rewriting information obtained from the podcast (López-Martín et al., 2025). Reinforcement is provided in the form of praise, scores, or feedback from the lecturer, all of which serve as positive reinforcement for the desired behavior (Düreth et al., 2025). Thus, the learning process becomes structured and outcome-oriented with results that can be directly observed.

The application of behaviorism principles in Spotify podcast-based learning has proven effective in enhancing *mahārah istīmā'* skills. Albano (1997) emphasizes that repetition, reinforcement, and habituation are at the core of behaviorism theory and have been shown to improve language retention and comprehension accuracy. Similar findings were presented by Dunham et al. (2025), who found that audio media supported by positive reinforcement can significantly enhance listening skills among second-language learners. This indicates that podcast-based learning is highly relevant both theoretically and empirically.

Repetition (*drill*), which is a key principle in behaviorism, can be optimally applied through podcasts (Vázquez-Abad & LaFleur, 1990). Each episode can be listened to repeatedly, helping students strengthen their understanding of Arabic vocabulary, sentence patterns, and intonation. State that repetition in language learning is crucial for improving linguistic competence and automating comprehension. Students also report that repeated exposure to podcasts helps them improve pronunciation, recognize sentence structure, and remember vocabulary more efficiently (Inceoglu et al., 2024).

Reinforcement is also an essential aspect of podcast-based learning. Stress the importance of reinforcement in maintaining learners' motivation and engagement. In practice, positive reinforcement in the form of feedback, assessment, or praise is provided in several podcast episodes to strengthen comprehension (Kohnke et al., 2025). explains that reinforcement given immediately after a correct response increases the likelihood of similar behavior occurring in the future. Consequently, students become more motivated to repeat listening activities and answer related questions.

In addition to repetition and reinforcement, habituation (habit formation) also plays an essential role in this learning process. (Gulec & Durmus, 2015) argue that listening skills can significantly improve through the habit of regularly listening to authentic materials. By listening to podcasts daily, students become more accustomed to Arabic intonation, accent, and sentence structure, allowing them to understand conversations more naturally. A study by Yue et al (2025) also shows that habit formation through audio media is effective in increasing self-confidence and reducing anxiety in foreign language listening.

Overall, the application of behaviorist theory in this Spotify podcast-based learning model has a positive impact on the development of *mahārah istīmā'* skills. The integrated elements of repetition, reinforcement, and habituation through podcasts not only enhance students' listening abilities but also support independent and flexible learning aligned with the characteristics of digital natives. This demonstrates that a behavioristic approach applied through modern technology, such as podcasts, can be an effective strategy for designing Arabic language learning that is more engaging and efficient.

The Use of Spotify Podcasts in *Mahārah Istīmā'* Instruction Based on Behaviorism Theory

The use of Spotify podcasts in *mahārah istīmā'* (listening skills) instruction is carried out through a series of planned steps grounded in the core principles of

behaviorist theory. This theory states that learning occurs through the association between stimulus and response, reinforced through repetition and reinforcement (Patel et al., 2000). In this context, Spotify podcasts serve as the stimulus in the form of Arabic audio input that students listen to repeatedly to build the habit of active listening. Students' responses are elicited through activities such as answering questions related to the podcast content, writing summaries, or mimicking the pronunciation of phrases and vocabulary. According to Whitehead and Li (1995), repeated practice combined with positive reinforcement can gradually and systematically enhance receptive skills, especially in foreign language learning.

Mahārah istimā' instruction using Spotify podcasts is an innovative approach that has not previously been implemented at Universitas Hasyim Asy'ari Tebuireng Jombang. The use of the Spotify application functions not only as a supplementary learning medium but also as a strategy to promote self-directed learning. In line with (Whitehead & Lin, 1995), self-directed learning greatly depends on students' ability to access and manage learning resources autonomously. Students who have previously faced obstacles in accessing listening materials due to limited audio equipment in classrooms can benefit from podcasts, a flexible medium available anytime.

In this study, the researcher employed the ADDIE development model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation. This model is widely used in instructional design because it is systematic and responsive to learners' needs. The ADDIE approach aligns well with the objective of this study, which is to develop a podcast-based learning medium grounded in behaviorist theory. Each stage is designed to ensure that the final product effectively addresses students' needs in improving their Arabic listening skills while reflecting the behaviorist stimulus-response principle.

The first stage is analysis, which aims to understand the conditions, challenges, and needs of students in *mahārah istimā'* instruction. Through initial observations and interviews with lecturers and students in the Arabic Language Education Program at Universitas Hasyim Asy'ari, it was found that podcasts had never been used as a learning medium. The media so far have been *Nuroh* and *Fawwaz* cartoon videos on YouTube, which are audiovisual. This indicates a gap for innovation in learning media that focuses specifically on audio aspects. According to Eboah & Zogli (2025), differences in learning media can influence both the learning process and outcomes, making it essential to examine the effectiveness of podcasts compared to visual media in improving *istimā'* skills.

The second stage, design, serves as a bridge between learning needs and product planning. At this stage, the researcher developed an initial design for the learning podcast based on behaviorist principles (Dashti & Abdulsalam, 2025). The audio content design emphasizes repetition of phrases, the presentation of contextual vocabulary, and the use of simple, clear instructions in Arabic. This aligns with those who stated that effective teaching begins with systematic stimuli focused on behavior. Each podcast episode was designed with a consistent structure: introduction, delivery of core material, practice

exercises, and a closing to help students develop a habit of structured learning.

Before entering the development stage, the researcher formulated the learning objectives for *mahārah istimā'* as the foundation for the podcast content. According to Ahmad Rusydi Thu'aimah's perspective, listening skills are classified as receptive skills, meaning the ability to understand spoken language messages without necessarily responding actively (Thuaimah, 1985). In behaviorism, listening instruction aims to shape responsive behavior through audio stimuli that are reinforced through repetition, habituation, and other forms of reinforcement. Therefore, the instructional design focuses on presenting material that enables students to undergo a consistent, intensive, and measurable learning process with clear, targeted responses.

The specific objectives of *mahārah istimā'* instruction using Spotify podcasts are as follows:

- (1) To understand the general meaning of what is heard. Students can grasp the main idea or core message of the podcast as a whole. This response is reinforced through repeated exposure to the material and practice exercises that stimulate comprehension of global information.
- (2) To accurately comprehend detailed information. Students can answer questions based on facts, characters, places, times, and other details mentioned in the podcast. The audio stimulus, played repeatedly, embeds precise information, and the response is reinforced through feedback or assessment.
- (3) To distinguish main ideas from supporting ideas. Students can identify which information is primary and which is supplementary within the spoken text. This analytical response is gradually trained through structured practice, in line with the conditioning principle in behaviorism.
- (4) To understand vocabulary and structures in context. Students can answer questions that test their understanding of the meanings of words or phrases in specific contexts. Correct responses are reinforced through repeated exercises and formative assessments.

All of these objectives not only support the development of students' receptive listening skills but also align with the core principles of behaviorism theory: clear stimulus, targeted response, consistent repetition, and appropriate reinforcement. Through this approach, effective listening behavior will be gradually formed and can be directly observed in the evaluation results.

The *mahārah istimā'* learning material consists of twelve Arabic-language podcast episodes organized around everyday life themes. The content is designed to help students understand context, grasp both general and detailed meanings, and practice Arabic phonology. The *mahārah istimā'* material is structured into twelve different topics under the theme "*Hiwaar al-Yaumiyyah al-Lughah al-'Arabiyyah*."

The third stage is development, which is the process of realizing the designed plan into a tangible learning medium. In this stage, the researcher began producing podcasts by recording audio with AI-generated voices and native Arabic accents using the Narakeet

application. Second, the podcast audio was edited in BandLab. Third, icons for each episode title and the podcast profile were designed using Canva. Fourth, the podcasts were uploaded to Spotify using the Spotify for Podcasters application.

The fourth stage is implementation, which involves the practical use of Spotify podcasts as a learning medium for *mahārah istimā’*. In this stage, students must be provided with technical guidelines and systematic learning steps to ensure that the listening process runs optimally, purposefully, and in line with the learning objectives. According to Ahmed (2025), effective implementation must consider learners’ readiness, the completeness of the media, and the clarity of instructions for using the learning media.

The first step in the implementation process is to instruct students to download the Spotify application on their devices, whether on smartphones, laptops, or tablets. Once the application is installed, students are directed to search for and follow the podcast account created by the researcher and course instructor. The podcast used in this learning activity is Hiwar Podcast, which can be easily accessed via the Spotify app’s search feature or via a direct link shared by the lecturer: <https://shorturl.at/z1xoS>.

Providing students with independent access aligns with the principles of technology-based digital learning, which emphasize flexibility, learning autonomy, and ease of access (Gao et al., 2025). Through this approach, students can listen to the material repeatedly at a time and place of their choosing, in line with the behaviorism principle that prioritizes repetition and reinforcement to strengthen learning responses.

Students listen to each podcast episode two to three times, both during class sessions and independently outside the classroom, to enhance comprehension and build a continuous listening habit. To support this process, students are encouraged to use headphones or earphones to ensure clearer audio quality. After listening to the Spotify podcast, students complete practice exercises. These exercises can be completed via Google Forms, accessible via the link on the podcast’s Spotify profile. <https://forms.gle/tmyz9FYKa6VuUKtF7>

The learning steps are carried out in three main phases. The first phase is pre-listening, in which the lecturer provides an introduction to the topic to be studied and distributes a list of new vocabulary or situational context related to the podcast to be listened to. The second phase is while-listening, where students listen to the podcast. Finally, the evaluation phase is conducted by assigning reinforcement tasks such as practice exercises, which also serve as a means to measure the effectiveness of using podcasts as a learning medium.

The learning steps are organized into these three core stages, adopting the behaviorist conditioning mechanism:

Table 4. Steps in learning listening skills based on the behavioristic approach

Learning Stage	Activity Description	Behavioristic Function
Pre-Listening	The lecturer introduces the topic and key vocabulary from the podcast.	Cueing stimulus to prepare appropriate responses.

While-Listening	Students listen to the podcast 2–3 times, take notes on important information, and focus on pronunciation.	Stimulus–response through the formation of sound–meaning associations.
Post-Listening	Students answer questions, write summaries, and perform pronunciation drills to reinforce learning outcomes.	Repetition and reinforcement for consolidation and evaluation of results.

The fifth stage is evaluation, which includes both formative and summative assessments to ensure the learning process and outcomes are carried out effectively and in accordance with the principles of behaviorism. Formative evaluation is conducted during the learning process to monitor the achievement of short-term objectives. In contrast, summative evaluation is carried out after the entire learning process is completed to assess the overall achievement of goals (Shafii & Berger, 2025). The implementation of assessment in *mahārah istimā'* learning is critical as it serves as a means to measure learners' understanding of the material taught and to determine the extent to which the learning objectives have been achieved (Chalista et al., 2024). This evaluation serves as a benchmark for the effectiveness of the Spotify podcast as a medium for improving students' *mahārah istimā'* skills.

To determine students' level of understanding of the *mahārah istimā'* material delivered through the Spotify podcast, the researcher used a listening test instrument. This test was specifically designed to measure improvements in students' listening skills before and after the learning process using the podcast medium, employing a pretest-posttest design. The evaluation instrument consisted of 25 multiple-choice questions, developed based on the characteristics of spoken texts and the audio podcast content. According to Chen and Schunn (2025), multiple-choice formats are practical for measuring receptive skills such as listening because they offer structured and objective response options. This format also allows for large-scale testing within an efficient timeframe.

Each test item was designed to evaluate key components of *istimā'* skills, including: (1) understanding the general meaning of the podcast, (2) identifying detailed information, (3) recognizing key vocabulary in context, and (4) understanding sentence structures in everyday conversations. These aspects aligned with the behaviorist approach, which emphasizes the formation of correct responses through repetition, habituation, and reinforcement. The maximum attainable score was 100, with each correct answer worth 4 points (Cozzucoli, 2024).

Evaluation was conducted not only through tests but also through questionnaires and interviews to collect qualitative data on students' responses to podcast use. Students provided their assessments of the learning media through a questionnaire designed based on indicators of learning media feasibility. The questionnaire results showed a total score

of 526 out of 600. In percentage terms, this result reached 87.66%, placing it in the “highly valid” and “feasible to use” categories (Harahap et al., 2022).

In evaluating the effectiveness of learning media, Devega et al. (2022) state that there are three leading indicators: effectiveness, efficiency, and attractiveness. Effectiveness is seen in improvements in learning outcomes, efficiency in the accessibility and usability of the media, and attractiveness in students’ interest and enthusiasm. Based on the field trial results, students’ posttest scores averaged 94.25, while their pretest scores averaged 85, indicating an increase of 9.25 points. This suggests that using Spotify podcasts significantly improved students’ listening skills.

Furthermore, a paired-samples t-test in SPSS version 29.0 was used to determine the significance of the difference between pretest and posttest scores. Based on the output of the paired sample test, the importance. (2-tailed) The value was 0.000, which is smaller than the significance level of $\alpha = 0.05$. Therefore, H_0 is rejected, and it can be concluded that there is a significant difference between students’ learning outcomes before and after using the Spotify podcast for learning. This result indicates statistically significant learning effectiveness, scientifically accountable.

Based on the entire evaluation process, both quantitative and qualitative, it can be concluded that the use of Spotify podcasts in *mahārah istimā’* instruction has proven to be effective. This medium is feasible for further development and implementation more broadly among students of the Arabic Language Education Program, especially at Universitas Hasyim Asy’ari Tebuireng Jombang. This approach not only improves learning outcomes but also provides a more independent, flexible, and contextually relevant learning experience that aligns with current developments in educational technology.

4. CONCLUSION

The use of Spotify podcasts as a learning medium for *mahārah istimā’* (Arabic listening skills) based on behaviorism theory has proven to be both practical and innovative. The study demonstrated that applying behaviorist principles —repetition, reinforcement, and habituation —through podcasts significantly enhanced students’ listening abilities. The results showed a clear improvement in students’ listening skills, as evidenced by pretest and posttest comparisons, with statistical analysis revealing a significant difference in learning outcomes. The effectiveness of the podcasts as a learning tool was further confirmed by the high media validation score and positive student feedback on their flexibility and accessibility. These findings suggest that behaviorism-based podcast learning can provide a structured, engaging, and adaptable approach to language acquisition that aligns with the needs of digital-native students.

Theoretical implications of this study include its contribution to the development of behaviorist-based teaching methods in Arabic language learning. By integrating modern technology, such as Spotify podcasts, with behaviorism, this research offers valuable insights into the fields of applied linguistics and language education. In practice, the study highlights the potential of podcasts as a flexible, self-directed learning tool that can be easily

implemented in real-world educational settings. This approach not only enhances listening skills but also supports independent and personalized learning, making it a practical solution for educators seeking to innovate language instruction. Furthermore, the successful application of this model at Universitas Hasyim Asy'ari Tebuireng Jombang provides a solid foundation for future adoption of similar methods in other educational contexts.

5. REFERENCES

- Addaeroby, M. F., & Febriani, E. (2024). Application Of Skinner's Behaviorist Learning Theory In Learning Arabic Speaking Proficiency/ Penerapan Teori Belajar Behavioristik Skinner Dalam Pembelajaran Mahārah Kalam. *Jurnal Bahasa Arab*, 1(1), 33–42. <https://doi.org/10.69988/mx5kzs45>
- Ahmed, M. K. (2025). Navigating English as a Medium of Instruction (EMI) in tertiary education: Challenges, opportunities, and pedagogical strategies for EFL learners. *Ampersand*, 15, 1-8. <https://doi.org/10.1016/j.amper.2025.100231>
- Albano, A. M., Miller, P. P., Zarate, R., Côté, G., & Barlow, D. H. (1997). Behavioral assessment and treatment of PTSD in prepubertal children: Attention to developmental factors and innovative strategies in the case study of a family. *Cognitive and Behavioral Practice*, 4(2), 245–262. [https://doi.org/10.1016/S1077-7229\(97\)80003-X](https://doi.org/10.1016/S1077-7229(97)80003-X)
- Almqvist, C. F. (2019). Thinking, being, teaching, and learning with Spotify: Aspects of existential and essential musical bildung through listening in the classroom. *Journal of Music, Technology & Education*, 12(3), 279–296. https://doi.org/10.1386/jmte_00011_1
- Audina, N. A., & Mubarak, M. R. (2021). Madlipz dalam Pembelajaran Daring Mahārah Istimā': Implementasi dan Analisis Persepsi Siswa. *ALSUNİYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab*, 4(1), 72–83. <https://doi.org/10.17509/alsuniyat.v4i1.31279>
- Bozorgian, H., & Shamsi, E. (2022). Autonomous use of podcasts with metacognitive intervention: Foreign language listening development. *International Journal of Applied Linguistics*, 32(3), 442–458. <https://doi.org/10.1111/ijal.12439>
- Branch, R. M., & Varank, İ. (2009). *Instructional design: The ADDIE approach* (Vol. 722). New York: Springer.
- Caoilte, N. Ó., Lambert, S., Murphy, R., & Murphy, G. (2023). Podcasts as a tool for enhancing mental health literacy: An investigation of mental health-related podcasts. *Mental Health & Prevention*, 30, 1-8. <https://doi.org/10.1016/j.mhp.2023.200285>
- Chalista, A., Kesuma, G. C., Amrulloh, M. A., Zuliana, E., & Wahidah, Y. L. (2024). Developing Arabic Language Learning Assessment Tools Using the Competition Application in Secondary School. *ALSUNİYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab*, 7(2), 382–394. <https://doi.org/10.17509/alsuniyat.v7i2.69424>
- Chen, L., & Schunn, C. D. (2025). When student evaluation of teaching is no longer indicative: Psychology students' in-class experience, motivational factors, and future choices. *Studies in Educational Evaluation*, 86, 1-11. <https://doi.org/10.1016/j.stueduc.2025.101475>

- Cozzucoli, P. C. (2024). Simultaneous inference for proportions in multivariate stratified random sampling without replacement for service quality control using multiple choice questions. *Socio-Economic Planning Sciences*, 95, 1-15. <https://doi.org/10.1016/j.seps.2024.101956>
- Dashti, F., & Abdulsalam, H. M. (2025). The influence of social media applications on learning English as a second language. *Heliyon*, 11(2), 1-17. <https://doi.org/10.1016/j.heliyon.2025.e41874>
- Devega, A. T., Ambiyar, A., Panyahuti, P., Adi, N. H., & Riyanda, A. R. (2022). The effectiveness of learning media on the outcome of computer and basic network of vocational students. *Jurnal Pendidikan Teknologi Kejuruan*, 5(2), 47-52. <https://doi.org/10.24036/jptk.v5i2.23123>
- Dong, J., & Wang, C.-H. (2024). From good to great: International faculty's efficacy in teaching and language and teaching philosophy evolution in the United States. *Social Sciences & Humanities Open*, 9, 1-11. <https://doi.org/10.1016/j.ssaho.2023.100761>
- Dunham, K. D., Hingrat, Y., Harris, S. M., Robinson, O. J., Le Nuz, E., Lacroix, F., & Ruiz-Gutierrez, V. (2025). Evaluating the impact of reinforcement efforts on imperiled species: The North African houbara bustard. *Global Ecology and Conservation*, 63, 1-12. <https://doi.org/10.1016/j.gecco.2025.e03882>
- Düreth, C., Condé-Wolter, J., Danczak, M., Tittmann, K., Jaschinski, J., Hornig, A., & Gude, M. (2025). Analysis of the compaction behavior of textile reinforcements in low-resolution in-situ CT scans via machine-learning and descriptor-based methods. *Composites Part C: Open Access*, 18, 1-14. <https://doi.org/10.1016/j.jcomc.2025.100662>
- El Galad, A., Betts, D. H., & Campbell, N. (2024). Flexible learning dimensions in higher education: Aligning students' and educators' perspectives for more inclusive practices. *Frontiers in Education*, 9, 1-13. <https://doi.org/10.3389/feduc.2024.1347432>
- Fernandes, R., Willison, J., & Boyle, C. (2024). Characteristics, prevalence, and tensions of critical thinking in Indonesian high school English language classes resulting from policy-driven teaching. *Thinking Skills and Creativity*, 53, 1-21. <https://doi.org/10.1016/j.tsc.2024.101605>
- Gao, J., Jin, X., Li, T., & Nguyen, T. (2025). The effect of digital technology adoption on managerial myopia: An empirical discovery based on machine Learning. *International Review of Economics & Finance*, 98, 1-21. <https://doi.org/10.1016/j.iref.2025.103849>
- Gulec, S., & Durmus, N. (2015). A Study Aiming to Develop Listening Skills of Elementary Second-Grade Students. *Procedia - Social and Behavioral Sciences*, 191, 103-109. <https://doi.org/10.1016/j.sbspro.2015.04.487>
- Gwo-Jen Hwang. (2025). How Virtual Reality Contributes to Enhancing Listening Comprehension and Listening Motivated Behaviour of EFL Learners: A Focus on the Hypothetical Model of Immersive Cognition. *International Journal of Human-Computer Interaction*, 1-23. <https://doi.org/10.1080/10447318.2025.2534067>
- Harahap, M. R., Silalahi, A., Muchtar, Z., & Nurfajriani, N. (2022). The Development of Lectora

- Inspire Learning Media and Its Effect on Student Learning Outcomes. *Journal of Educational Chemistry (JEC)*, 4(2), 117–124. <https://doi.org/10.21580/jec.2022.4.2.11303>
- Hernandez, M., & Mendoza, J. (2025). Podcasts Created by University Students: A Way to Improve Subject Understanding, Connection with Peers, and Academic Performance. *Education Sciences*, 15(3), 1-22. <https://doi.org/10.3390/educsci15030284>
- Inceoglu, S., Chen, W.-H., & Lim, H. (2024). Monitoring student behavior in autonomous, automatic speech recognition-based pronunciation practice. *System*, 124, 1-12. <https://doi.org/10.1016/j.system.2024.103387>
- Kelly, J. M., Perseghin, A., Dow, A. W., Trivedi, S. P., Rodman, A., & Berk, J. (2022). Learning Through Listening: A Scoping Review of Podcast Use in Medical Education. *Academic Medicine*, 97(7), 1079–1085. <https://doi.org/10.1097/ACM.00000000000004565>
- Khan, M. O., & Khan, S. (2024). Influence of online versus traditional learning on EFL listening skills: A blended mode classroom perspective. *Heliyon*, 10(7), 1-12. <https://doi.org/10.1016/j.heliyon.2024.e28510>
- Kohnke, L., Zou, D., & Su, F. (2025). Exploring the potential of GenAI for personalised English teaching: Learners' experiences and perceptions. *Computers and Education: Artificial Intelligence*, 8, 1-11. <https://doi.org/10.1016/j.caeai.2025.100371>
- López-Martín, O., Baños, M. D. C. Z., & Chaparro, J. D. (2025). Creating podcasts to develop communication and teamwork in nursing and occupational therapy. *Teaching and Learning in Nursing*, 20(4), 1113–1118. <https://doi.org/10.1016/j.teln.2025.05.027>
- Marshall, K. J. (2024). Folklore Training for the Public Humanities: Podcasting. *Journal of American Folklore*, 137(546), 466–473. <https://doi.org/10.5406/15351882.137.546.04>
- Mirza Suzani, S. (2021). Investigating the Effect of Podcasting on Iranian Senior Undergraduate TEFL Students' Listening Comprehension Improvement and Motivation. *The Asia-Pacific Education Researcher*, 30(5), 395–408. <https://doi.org/10.1007/s40299-020-00526-w>
- Mualimah, M. (2023). Penerapan Media Audio Untuk Meningkatkan Ketrampilan Menyimak Bahasa Arab Siswa Kelas Vii B Mts Negeri 2 Kota Semarang. *Language : Jurnal Inovasi Pendidikan Bahasa Dan Sastra*, 3(2), 84–94. <https://doi.org/10.51878/language.v3i2.2324>
- Ni'mah, K., Umroh, I. L., Asrori, I., & Machmudah, U. (2024). Development of Animated Videos Based on the Canva Application as a Learning Media for Arabic Listening Skills Students of Darul 'Ulum Lamongan Islamic University. *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab*, 7(2), 450–464. <https://doi.org/10.17509/alsuniyat.v7i2.72193>
- Nurmala, M., Arifa, Z., Sutaman, S., Supriadi, R., & Azizah, A. (2024). The Role of the Teachers in Arabic Learning as a Third Language for Military Purposes Class. *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab*, 7(2), 324–339. <https://doi.org/10.17509/alsuniyat.v7i2.72781>

- Özel, S. (2022). Spotify effect in new podcast markets. Combined model proposal for analysis of increasing interest in podcasting: The case of Turkey. *El Profesional de La Información*, 1-19. <https://doi.org/10.3145/epi.2022.sep.01>
- Paisana, M., Cardoso, G., & Couraceiro, P. (2024). Platforms as audio discovery ecosystems: What Spotify's podcast rankings tell us about the way platforms appropriate the format. *Communication & Society*, 91–106. <https://doi.org/10.15581/003.37.4.91-106>
- Patel, M. R., Carr, J. E., Kim, C., Robles, A., & Eastridge, D. (2000). Functional analysis of aberrant behavior maintained by automatic reinforcement: Assessments of specific sensory reinforcers. *Research in Developmental Disabilities*, 21(5), 393–407. [https://doi.org/10.1016/S0891-4222\(00\)00051-2](https://doi.org/10.1016/S0891-4222(00)00051-2)
- Petrucchio, C. (2020). Meaningful Learning by Creating Technology-Mediated Knowledge Boundary Objects Between School and the Workplace. In M. Rehm, J. Saldien, & S. Manca (Eds.), *Project and Design Literacy as Cornerstones of Smart Education* (Vol. 158, pp. 181–187). Springer Singapore. https://doi.org/10.1007/978-981-13-9652-6_17
- Ritonga, N., Sahyoni, S., Munthe, B., Wahab, M. A., & Haq, S. (2024). The method of Masrahiyyah is based on local wisdom according to the Behaviorism Theory in Learning Mahārah Kalam. *ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, Dan Budaya Arab*, 7(1), 102–112. <https://doi.org/10.17509/alsuniyat.v7i1.67519>
- Saari, A. (2019). Out of the box: Behaviourism and the mangle of practice. *Discourse: Studies in the Cultural Politics of Education*, 40(1), 109–121. <https://doi.org/10.1080/01596306.2018.1549707>
- Şendağ, S., Caner, M., Gedik, N., & Toker, S. (2024). Enhancing language proficiency through mobile extensive listening and podcasting: A multifaceted approach to metacognition and critical thinking. *Thinking Skills and Creativity*, 54, 1-16. <https://doi.org/10.1016/j.tsc.2024.101656>
- Shafii, R. A., & Berger, J.-L. (2025). Teacher assessment literacy, formative assessment practices, and their perceived efficacy in Tanzania: A scoping review. *Studies in Educational Evaluation*, 86, 1-18. <https://doi.org/10.1016/j.stueduc.2025.101496>
- Thuaimah, R. A. (1985). *Al-Marja' fi Ta'limi al-Lughah al-Arabiyyah*. Makkah: Darul Fikri.
- Vázquez-Abad, J., & LaFleur, M. (1990). Design of a performance-responsive drill and practice algorithm for computer-based training. *Computers & Education*, 14(1), 43–52. [https://doi.org/10.1016/0360-1315\(90\)90021-X](https://doi.org/10.1016/0360-1315(90)90021-X)
- Whitehead, S. D., & Lin, L.-J. (1995). Reinforcement learning of non-Markov decision processes. *Artificial Intelligence*, 73(1–2), 271–306. [https://doi.org/10.1016/0004-3702\(94\)00012-P](https://doi.org/10.1016/0004-3702(94)00012-P)
- Yeboah, J., & Zogli, L.-K. J. (2025). Evaluating the influence of organisational resources and learning capabilities on the performance of small, micro, and medium enterprises (SMMEs) in Ghana. *Scientific African*, 28, 1-13. <https://doi.org/10.1016/j.sciaf.2025.e02740>
- Yue, X., Zhang, Z., Zhang, L., & Schinke, R. (2025). The impact of confidence verse calligraphy practice on self-efficacy in skill-accurate athletes. *Asian Journal of Sport and Exercise*

Psychology, 5(2), 71–80. <https://doi.org/10.1016/j.ajsep.2025.06.003>

Zhang, P. (2022). How does repetition affect vocabulary learning through listening to the teacher's explicit instruction? The moderating role of listening proficiency and preexisting vocabulary knowledge. *Language Teaching Research*, 1-24. <https://doi.org/10.1177/13621688221140521>