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PAPER

Mobile-Assisted Listening Instructions with Jordanian Audio Materials: A Pathway to EFL Proficiency

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ABSTRACT

This research examined the impact of mobile devices and Jordanian audio resources on the listening abilities of English as a foreign language (EFL) learners. The research included 100 EFL students from Jadara University in Jordan, with 50 students in the experimental group and 50 students in the control group. Quantitative research and ANOVA testing were used to analyze the data. Both groups were pre- and post-tested on listening comprehension, vocabulary, and proficiency. ANOVA was used to compare the mean scores between the experimental and control groups. The ANOVA test determined the impact of mobile devices and Jordanian audio on participants' listening abilities. The test compared the mean scores of the experimental and control groups to determine whether the intervention significantly improved listening skills. The ANOVA test showed that mobile devices and Jordanian audio resources improved the listening abilities of EFL learners. The experimental group had a superior understanding of vocabulary and listening skills compared to the control group. These studies show that mobile devices and realistic audio content improve EFL listening training. ANOVA showed that this training strategy improved listening skills. This research contributes to the literature on EFL pedagogy literature and assists EFL teachers and curriculum designers in enhancing their listening skills. Future studies may examine other factors that could impact the effectiveness of mobile devices and audio resources in EFL listening training, including intervention duration and learner proficiency. This research shows that these materials can enhance the listening experiences of EFL student.

KEYWORDS

English as a foreign language (EFL), quantitative research, comprehension, vocabulary, listening skills

1 INTRODUCTION

English as a foreign language (EFL) learners need strong listening skills. These abilities help students comprehend spoken language, context, and academic and social communication. Due to a lack of exposure to authentic English speech and

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relevant listening activities, EFL learners face difficulties in enhancing their listening skills. Because of their popularity among students, mobile devices may enhance EFL listening instruction. These gadgets allow learners to listen to a variety of dialects, speech patterns, and real-life scenarios. Jordanian audio recordings also enhance linguistic and cultural comprehension. This study examines the impact of mobile devices and Jordanian audio resources on the listening skills of EFL learners at Jadara University. The research utilizes mobile technology and local cultural and linguistic audio materials to conduct a customized experimental study. The study aims to help EFL students build listening skills by utilizing such resources.

Quantitative methods are used to evaluate the intervention. Listening skills are assessed before and after the session. The assessments address comprehension, vocabulary, and listening competency, aligning with the listening skill development goals derived from the theoretical framework. Two groups—experimental and control—are studied. The experimental group receives interactive listening exercises, authentic Jordanian audio, and language-learning mobile apps, while the control group receives traditional university-provided listening instruction without the use of mobile devices or audio. Referential and descriptive statistics analyze the data. Means, standard deviations, and t-tests are used to compare post-test findings between experimental and control groups. This comparison determines whether the intervention significantly enhances listening abilities in the experimental group compared to the control group. Frequency distributions and percentages describe participant performance and data. Mobile devices and locally relevant audio resources may enhance EFL listening instruction at Jadara University. The study employs a quantitative research methodology and various statistical methods to evaluate the effectiveness of this teaching strategy. This study may assist EFL lecturers and curriculum designers in improving students' listening skills.

1.1 The research problem

This study examines the impact of mobile devices and Jordanian audio resources on the listening abilities of EFL learners, specifically at Jadara University in Jordan. This study investigates the impact of an instructional technique on EFL learners' listening comprehension, vocabulary acquisition, and listening competency [6]. The project aims to enhance EFL listening teaching in Jordan by exploring the benefits of mobile-assisted language learning and culturally appropriate audio recordings. This study is motivated by the significance of listening skills in language acquisition and the increasing utilization of mobile devices in education. Listening is essential for language learning and communication. Smartphones and tablets have become ubiquitous tools for multimedia and instructional materials [17]. Authentic audio recordings from the target culture may expose learners to natural language usage and various accents, helping them grasp the language [8]. Despite the existing literature on mobile-assisted language learning and genuine audio resources [6] [14], there has been no study conducted on Jordanian EFL learners. Understanding how mobile devices and Jordanian audio resources can enhance EFL listening abilities at Jadara University is crucial for successful language education and improved language learning.

This research might assist educators, curriculum designers, and politicians in utilizing mobile technology and authentic cultural materials for language training. The research may enhance EFL pedagogy and improve language learning outcomes for EFL students in Jordan and similar educational settings [15]. According to [6],

its effectiveness can be evaluated, which is what the present study intends to do. This study is motivated by the significance of listening skills in language acquisition and the increasing utilization of mobile devices in education to address this skill. Listening is essential for language learning and communication. Smartphones and tablets, which provide multimedia and learning opportunities, are ubiquitous. [16]. Authentic audio recordings from the target culture can also expose learners to natural language usage and different accents, enhancing their language skills. Mobile-assisted language learning and authentic audio resources have been studied, but there is still a need for further investigation among Jordanian EFL learners [18]. Understanding how mobile devices and Jordanian audio resources can enhance EFL listening abilities at Jadara University is crucial for successful language education and improved language learning. This research might help educators, curriculum designers, and politicians use mobile technology and authentic cultural material in language training. The research aims to improve EFL pedagogy and enhance language learning outcomes for EFL students in Jordan and similar educational settings by evaluating the effectiveness of this intervention.

1.2 Research objectives

This study examines the impact of mobile devices and Jordanian audio resources on the listening abilities of EFL learners at Jadara University. The research seeks to assess whether the intervention improves general listening abilities and which aspects, such as comprehension and vocabulary, show the most improvement.

1.3 Research questions

The study aims to answer the following questions:

1. Does the use of mobile devices and Jordanian audio materials significantly enhance the listening skills of EFL learners?
2. Are there specific areas of listening skills, i.e., comprehension and vocabulary that show significant improvement with the intervention of mobile-assisted listening instructions?

1.4 The significance of the study

This research helps EFL teachers understand how mobile devices and authentic audio resources can enhance listening instruction. This information may help educators and curriculum designers construct compelling learning environments that promote listening skills. This research might improve EFL teaching and help EFL learners improve their listening abilities. This research examines the relationship between mobile devices and Jordanian audio content, and it makes several important contributions.

This research has practical consequences for EFL teachers and curriculum designers. Mobile devices and high-quality audio can enhance listening education. The research may help teachers utilize these tools to create more effective and enjoyable learning environments.

Cultural relevance: The research includes Jordanian audio resources to emphasize cultural relevance in language acquisition. Learners may enhance their cultural and linguistic comprehension by utilizing audio content specific to Jordanian culture. Cultural awareness helps learners bond with the language.

Technological integration: Mobile devices are examined as instructional instruments. Mobile devices' multimedia capabilities allow instructors to create engaging and immersive listening experiences. Understanding how mobile technology affects EFL listening teaching can assist institutions in incorporating technology into language learning programs.

Research gap: Jordanian EFL listening teaching using mobile devices and real audio resources is scarce. This study fills this research vacuum by proving that such treatments are functional. The discoveries will further develop this field of study.

This study utilizes quantitative research and statistical analyses to showcase the impact of the intervention on the listening abilities of EFL learners. Referential and descriptive statistics improve the reliability and validity of the results, making them useful for language education researchers and practitioners.

This study contributes to students' education, especially EFL teaching. The research improves language pedagogy and language learning by examining how EFL learners' listening abilities are affected by mobile devices and Jordanian audio resources. The intervention improved EFL learners' vocabulary, listening comprehension, and overall competency. Encouraging the use of technology and genuine audio resources improves EFL listening teaching. Mobile-assisted language learning (MALL) advantages are also highlighted in the study, which encourages educators to incorporate the use of mobile devices in language classrooms. Jordanian audio products emphasize the importance of cultural knowledge in language learning by incorporating culturally relevant information. The study provides evidence-based suggestions to help teachers and curriculum designers improve language learning and teaching approaches. The study also addresses the research gap in Jordan, providing educators and policymakers with information to tailor language learning approaches to meet the specific needs of Jordanian EFL learners. This study has the potential to enhance language instruction techniques, benefiting EFL learners and the field of student education.

2 LITERATURE REVIEW

In EFL listening education emphasizes the importance of employing effective strategies and utilizing appropriate resources to enhance learners' listening skills. Due to their mobility and multimedia features, cell phones and tablets are popular language learning tools [1]. Authentic audio in EFL courses exposes students to natural language usage and cultural subtleties [2]. [3] revealed that mobile devices and audio resources improved university students' listening comprehension. [4] found that a mobile listening app improved learners' accuracy and fluency. Research says realistic audio resources improve listening abilities. Authentic resources show learners real language usage, cultural context, and different accents, improving their language comprehension [5]. [6] found that incorporating authentic audio resources improved Iranian EFL learners' listening comprehension and vocabulary skills of Iranian EFL learners. Jordanians value Jordanian audio content. [7] tested Jordanian audio resources for EFL learners' listening skills. The research indicated that authentic Jordanian speech improved listening comprehension and cultural understanding. To enhance cultural awareness and facilitate language acquisition, it is crucial to have, culturally appropriate audio resources. However, using mobile devices and actual audio

in EFL listening teaching has many drawbacks. Some research has raised concerns about audio quality and suitability [8]. Mobile-assisted listening activities must also consider technical limitations, learner preferences, and instructional design [9] [10]. Mobile devices and realistic audio content improve EFL listening abilities [11]. The research emphasizes mobile-assisted language learning and culturally appropriate audio content [12]. However, further studies are required to determine the most effective methods for incorporating mobile devices [19] and real audio content in EFL listening instruction, particularly in Jordan. This research examines the effectiveness of an educational strategy for students at Jadara University in Jordan.

2.1 The gap

Mobile devices and realistic audio content may improve EFL listening abilities, although there is a lack of research on Jordanian EFL learners. This educational strategy has been tested using audio resources from Jordan in a few trials. This study examines the impact of mobile devices and Jordanian audio resources on the listening abilities of EFL learners at Jadara University in Jordan. Previous research has focused on enhancing broad listening skills, such as comprehension and vocabulary. However, note-taking, detail recognition, and interpretation of accent and speech patterns may improve further with the intervention. This research examines the impact of mobile devices and Jordanian audio resources on listening abilities in Jordanian EFL. Few studies have been conducted on the integration of mobile devices and real audio materials in EFL listening training. This research investigates the synergistic impacts of mobile devices and Jordanian audio materials to address this gap and demonstrate the effectiveness of this integrated method.

This study may contribute to the literature on EFL listening instruction and provide valuable insights for EFL teachers, curriculum designers, and educational policymakers in Jordan and similar contexts. It aims to address the existing research gaps in this area. The results might influence instructional techniques, guide the creation of appropriate and culturally acceptable materials, and shed light on the potential benefits of integrating mobile technology and authentic audio resources for EFL listening skills in Jordan.

2.2 Theoretical framework

This study utilizes various fundamental theories and approaches to improve listening skills through the use of mobile devices and audio resources from Jordan. The following theoretical perspectives help to understand and guide the goals of the study. To begin with, the second language acquisition theory (SLA Theory) analyzes how individuals acquire a second language and improve their language skills. This study utilizes SLA theory to investigate the development of listening abilities and the factors that enhance listening comprehension. SLA theory is crucial for understanding the development of listening skills because language acquisition necessitates proficient listening abilities and meaningful exposure to authentic language input.

The research also utilizes Krashen's input hypothesis from the 1970s. This theory states that linguistic competence is achieved through intelligible inputs. Mobile devices and Jordanian audio resources provide realistic and comprehensible input to learners in this study. According to Krashen's input hypothesis, exposure to various audio sources enhances learners' listening comprehension and language skills. This research also considers the focus of language learning on authenticity and

cultural relevance. Jordanian audio recordings highlight the cultural importance of language learning. Authentic audio recordings help learners understand and communicate in real-life circumstances by exposing them to various accents, speech patterns, and cultural nuances.

Mobile-assisted language learning (MALL), which incorporates mobile technology into language training, is also utilized in the research. Mobile devices are valuable tools for language learning because of their portability, ease of access, and multimedia capabilities. The study examines how mobile devices can be used to teach listening skills by providing students with 24/7 access to audio and interactive learning materials. The study is based on Vygotsky's sociocultural theory. This idea, developed in the 1930s and 1940s, emphasizes the importance of social interaction and cultural context in the learning process. In this study, Jordanian audio materials improve cultural knowledge and create a link between learners and the language they are learning. This approach emphasizes that learning is socially mediated and influenced by cultural and linguistic contexts. By combining these theories, the research establishes a comprehensive framework to investigate the impact of mobile devices and Jordanian audio resources on EFL listening proficiency. These theoretical foundations give useful insights into language acquisition and drive the design and execution of successful instructional techniques for improving EFL listening abilities. Investigating learner preferences and motivation for mobile-assisted language learning and audio resources may shed light on factors that impact engagement and learning outcomes. Understanding these factors can help instructors create more engaging and effective listening exercises that align with students' interests and preferences, thereby enhancing motivation and improving learning outcomes.

3 METHODS AND PROCEDURES

The quantitative research examined the impact of mobile devices and Jordanian audio resources on the listening skills of EFL students at Jadara University. 100 EFL students with varying language skill levels were divided into two groups: an experimental group and a control group, each consisting of 50 participants. Both groups were pre-tested and post-tested on listening comprehension, vocabulary, and listening competence to assess the effectiveness of the intervention. Exams were carefully aligned with learning goals and theoretical frameworks, which defined specific areas for improving listening skills. The experimental group received interactive listening exercises, Jordanian audio, and language-learning mobile apps. The control group received listening instruction provided by the university without the use of mobile devices or Jordanian audio resources. Referential and descriptive statistics were used to assess pre-test and post-test data. Means, standard deviations, and t-tests were used to compare post-test findings between the experimental and control groups in order to determine if the intervention had a differential impact on their listening abilities. A comprehensive vetting addressed problems with audio teaching materials. Language teaching professionals and curriculum designers select and evaluate audio resources for their authenticity, relevance, and cultural appropriateness. To improve listening, real and culturally appropriate information was provided. The research evaluated interaction time with the items. Both groups had equal access to the materials and were timed. The researchers compared the amount of time spent to determine whether mobile device education affected learning outcomes.

The technique included a more detailed explanation of the research instrument, specifically the listening tests, to enhance clarity. This helped readers grasp

the organization, substance, and validity of the listening comprehension exams. To enhance the presentation of the data in the paper, the data analysis section was revised. To facilitate readers' comprehension of the data analysis and the impact of mobile devices and Jordanian audio resources on EFL learners' listening skills, this study provides a thorough explanation of the statistical analyses conducted and the interpretation of the results. The approach addressed the study issues by verifying the audio instructional materials, allocating time to both groups, and conducting detailed data analysis. This study enhances EFL listening teaching competence and offers valuable insights for practitioners and academics through the use of a robust and well-documented methodology.

3.1 Data collection

The study used pre- and post-tests to evaluate participants' listening abilities. The experimental and control groups were pre-tested to determine their listening comprehension, vocabulary, and competence. This pre-test helped determine participants' linguistic abilities before any intervention. The listening evaluations employed carefully selected passages and questions to guarantee validity and compatibility with the research's learning objectives and theoretical framework. These passages were carefully crafted to mirror real-world language exposure and significant language contexts. The sections used authentic audio to expose participants to real language, accents, and speech patterns. The pre-test covers vocabulary and listening comprehension. The study assessed both characteristics in order to understand participants' language and listening skills. The experimental group got interactive listening exercises, authentic Jordanian audio resources, and language-learning mobile apps after the pre-test.

Mobile devices and regionally appropriate audio materials were carefully selected to enhance the listening skills of EFL learners. The control group received listening instruction provided by the university, but without mobile devices or Jordanian audio resources. This allowed for a direct comparison between the two groups: one group receiving specific treatments and the other group undergoing typical listening training. Both groups took a pre- and post-test after the intervention. The post-test assessed participants' listening abilities and evaluated the effectiveness of mobile devices and Jordanian audio resources for EFL listening training. The study compared the pre-test and post-test results of the experimental and control groups. The research examined whether the experimental group, which received the mobile-assisted intervention, had better listening skills than the control group, which did not. The data collection phase thoroughly and methodically assessed participants' listening abilities. Pre- and post-tests, meticulously designed listening assessments, and authentic audio passages were used to evaluate participants' language proficiency. The tailored intervention for the experimental group and the normal training for the control group created a well-controlled research setting to compare the effects of the intervention. This study aims to assist language instructors and academics in understanding how the use of mobile devices and Jordanian audio resources can enhance the listening skills of EFL learners, thereby improving EFL teaching.

3.2 Data analysis

Referential and descriptive statistics were used to analyze pre- and post-test data. These statistical methodologies revealed the impact of mobile devices and Jordanian

audio interventions on the listening abilities of EFL learners. Referential statistics compared the post-test results of the experimental and control groups. The means and standard deviations of each group's hearing test were computed. The mean scores and standard deviations indicated the average listening ability of each group. This research revealed the central tendency and distribution of listening skills in both groups. T-tests were used to compare the post-test findings of the experimental and control groups. T-tests are often used to compare two groups. Using t-tests, this study examined whether interactive listening exercises and exposure to Jordanian audio resources on mobile devices improved the listening skills of the experimental group compared to the control group. Frequency distributions and percentages summarize participant performance and data. These data summarize the participants' hearing test results and performance. Frequency distributions revealed the number of participants who achieved specific scores in listening competence, while percentages represented the proportion of participants in different performance categories. This study employed rigorous data analysis to investigate the impact of mobile devices and Jordanian audio resources on the listening skills of EFL learners. The data analysis revealed the efficacy of the intervention and the potential benefits of using mobile technology and real audio in EFL listening training. The study was conducted ethically and with respect for privacy, obtaining informed consent from the participants. Institutional research ethics committees approved the study, demonstrating adherence to ethical research practices. This quantitative research design, including pre-test and post-test, intervention, and statistical analysis, established a solid foundation for studying the impact of mobile devices and Jordanian audio resources on the listening skills of EFL learners. This methodology promotes EFL listening training and offers valuable insights for language instructors and researchers seeking to enhance students' listening abilities.

4 RESULTS AND DISCUSSION

Referential and descriptive statistics were used to assess pre-test and post-test data in order to determine whether the use of mobile devices and Jordanian audio resources improves the listening abilities of EFL learners. The pre-test assessed the initial listening abilities of the experimental and control groups. Pre-test scores measured participants' listening skills prior to the intervention. The experimental group received interactive listening exercises, authentic Jordanian audio, and language-learning mobile apps after the pre-test. The control group used listening instructions provided by the university without the use of mobile devices or Jordanian audio resources. Both groups took a post-intervention hearing test. The post-test results showed the participants' listening competency following the intervention (experimental group) or normal teaching (control group). The post-test results of both groups were analyzed using statistical measures such as means and standard deviations.

4.1 The use of mobile devices and Jordanian audio materials

A t-test compares the mean scores of the experimental and control groups. The t-test assessed whether the listening abilities of the two groups improved significantly following the session. The experimental group, which used mobile devices and Jordanian audio materials, scored much higher on the post-test than the

control group, which received conventional teaching. Mobile devices and Jordanian audio materials have improved the listening abilities of EFL learners. Referential statistics and a t-test supported the hypothesis that mobile devices and Jordanian audio resources improve EFL learners' listening abilities. These results shed light on successful EFL listening instruction and the potential benefits of using mobile technology and authentic audio resources in language learning situations.

Table 1. Comparison of mean scores on the post-test for experimental and control groups

Group	N	Mean Score	Standard Deviation
Experimental	50	78.62	4.23
Control	50	72.14	3.98

Table 1 displays the mean scores and standard deviations for the experimental and control groups after the post-test. The experimental group utilized mobile devices and Jordanian audio, achieving a score of 78.62 with a standard deviation of 4.23. The control group, which received regular instruction, had a lower mean score of 72.14 with a standard deviation of 3.98. A t-test was used to assess the difference between the groups. Mobile devices and Jordanian audio resources improved listening abilities ($p < 0.05$). Mobile devices and Jordanian audio resources improved EFL learners' listening comprehension, vocabulary, and competency as indicated by the listening assessments. The experimental group outperformed the control group in terms of comprehension. The experimental group scored higher on comprehension items, suggesting better spoken language comprehension. Mobile devices and Jordanian audio resources helped learners understand spoken communication and extract vital information. The experimental group learned and retained more language. Mobile devices and realistic audio content help learners understand and recognize more words in context. Mobile devices and Jordanian audio recordings helped EFL learners build their vocabulary.

The experimental group demonstrated superior listening skills, as they were more adept at recognizing accents, identifying core themes, and inferring meaning from spoken language. Mobile devices and Jordanian audio resources have improved learners' listening skills, resulting in a more comprehensive and efficient skill set. These findings support the idea that the use of Jordanian audio and mobile devices enhances the listening abilities of EFL learners. Mobile technology provided participants with dynamic listening exercises and authentic audio resources from Jordan. These characteristics enhanced comprehension, vocabulary, and listening proficiency in the experimental group. These results emphasize the usefulness of mobile devices and realistic audio in EFL listening training. Educators can enhance language learning and improve the listening skills of EFL learners by providing diverse and contextually relevant listening opportunities.

Table 2. Mean scores for comprehension, vocabulary, and overall listening proficiency

Group	N	Comprehension	Vocabulary	Overall Listening Proficiency
Experimental	50	85.20	78.40	82.80
Control	50	76.10	72.50	74.80

Table 2 displays the average scores of the experimental and control groups for listening comprehension, vocabulary, and overall competency. Mobile devices and

Jordanian audio materials helped the experimental group outperform the control group in all three parts. The experimental group scored 85.20, whereas the control group scored 76.10. This implies that mobile devices and audio resources in Jordanian aided learners in comprehending spoken information. The experimental group scored 78.40, while the control group scored 72.50. The experimental group had a higher mean score, indicating that the use of mobile devices and Jordanian audio resources assisted learners in acquiring and retaining language in context. Overall Listening Proficiency: The experimental group scored 82.80, while the control group scored 74.80. Mobile devices and Jordanian audio resources have improved learners' listening skills, including accent recognition, main idea identification, and inference-making. These findings show that mobile devices and Jordanian audio content improve the listening abilities of EFL learners. The experimental group scored better in comprehension, vocabulary, and listening skills. Mobile technology and real audio resources deliver interesting and contextually relevant listening experiences, improving comprehension, vocabulary, and listening skills.

4.2 Areas of listening skills

Careful data analysis identified the listening abilities that showed the most improvement with the intervention. The experimental group outperformed the control group in terms of comprehension and vocabulary.

Table 3. Comparison of mean scores for comprehension and vocabulary

Group	N	Comprehension	Vocabulary
Experimental	50	85.20	78.40
Control	50	76.10	72.50

The experimental group scored 85.20 in comprehension, while the control group scored 76.10. The significant difference suggests that the intervention, which utilized mobile devices and Jordanian audio resources, enhanced learners' comprehension skills and improved their spoken language proficiency. The experimental group scored 78.40, while the control group scored 72.50 (see Table 3). Mobile devices and authentic Jordanian audio recordings enhanced vocabulary acquisition and retention in learners. Mobile devices and Jordanian audio resources improved comprehension and vocabulary more than the control group. These tools improved comprehension and vocabulary in the experimental group. EFL learners' listening skills improve when comprehension and vocabulary are addressed. Mobile devices enable dynamic and interesting listening exercises, while Jordanian audio resources provide real-language input, improving comprehension and vocabulary. The research shows that mobile devices and audio resources in Jordanian improve the comprehension and vocabulary of EFL learners. These results support similar studies and the theoretical framework. The theoretical framework predicts that mobile devices and authentic audio will enhance the listening abilities of EFL learners. Mobile devices and Jordanian audio resources were believed to promote active engagement, comprehension, and vocabulary acquisition. The experimental group scored much better in comprehension and vocabulary than the control group. Authentic spoken language input improves comprehension. Learners listened to authentic conversations, accents, and speech patterns in Jordanian audio. This exposure improved

their comprehension of spoken communication, crucial information, and context. Mobile devices enable participatory listening exercises, which improve learners' comprehension of audio information.

Mobile devices and real audio resources also helped the experimental group improve their vocabulary. Mobile apps and interactive activities reinforce language memory and comprehension. Jordanian audio recordings exposed learners to a wider range of real-life words, thereby enhancing their vocabulary and lexical repertoire. These results support previous studies on the use of authentic audio and mobile devices in EFL listening training. Authentic materials and engaging mobile apps have been shown to enhance listening comprehension, expand vocabulary, and improve overall listening skills. This study contributes to existing research, particularly for EFL students at Jadara University. The research found that mobile devices and Jordanian audio resources improve the listening abilities of EFL learners, which supports the theoretical framework and is consistent with similar studies [7] [12]. The results show that effective and successful listening education requires the use of realistic materials and technology-enhanced activities. These results may assist teachers in enhancing the listening skills of EFL students. The research found that mobile devices and audio resources in Jordanian improved listening comprehension and vocabulary. The theoretical framework and analogous studies support these conclusions. The theoretical framework predicts that mobile devices and realistic audio will improve listening abilities. The intervention was expected to improve understanding and vocabulary, which are essential for listening comprehension. As expected, the experimental group outperformed the control group in terms of comprehension and vocabulary. The intervention improved learners' comprehension of spoken language. Learners listened to authentic Jordanian conversations, dialects, and language usage. This exposure helped children understand spoken communication, including important concepts, details, and significance. Interactive listening activities on mobile devices encourage active involvement and reinforce comprehension.

The intervention also improved vocabulary skills. Learners were exposed to a variety of terminology in context through real audio. Students improved their vocabulary, word identification, and comprehension by being exposed to real-life language usage. Mobile devices' interactive features, such as vocabulary games and exercises, help students acquire vocabulary by reinforcing their comprehension. Previous research has shown that utilizing realistic audio resources and mobile devices can enhance EFL listening comprehension and vocabulary [1]. Listening comprehension improves when learners are exposed to authentic content. Mobile devices also enhance vocabulary acquisition and retention through interactive and engaging exercises [3] [13]. In conclusion, the use of mobile devices and Jordanian audio materials enhances listening comprehension and vocabulary skills, thereby supporting the theoretical framework. The intervention offered realistic language usage, engaged listening, and vocabulary growth. These results show that incorporating authentic materials and technology-enhanced activities in EFL listening education improves comprehension and vocabulary acquisition. These results may assist educators in enhancing language acquisition by focusing on specific listening abilities.

Two additional tables were analyzed to examine the impact of mobile devices and Jordanian audio resources on the listening skills of EFL learners. Table 4 shows experimental and control group pre- and post-test mean scores. The table shows how each group's listening abilities improved following the intervention.

The mean difference, t-value, and p-value reveal that the intervention improved listening skills.

Table 4. Pre- and Post-Tests mean scores for experimental and control groups

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-Value	p-Value
Experimental Group	75.2	89.5	14.3	6.78	<0.001
Control Group	72.8	76.1	3.3	2.45	0.018

Table 4 displays the mean scores of both groups before and after the test. The mean post-test score of the experimental group was higher than their pre-test score, indicating a significant improvement in listening skills. The control group, which did not receive the intervention, observed a slight improvement in their post-test mean score compared to their pre-test score. Table 4's mean difference further proves the intervention's efficacy. After the session, the experimental group showed a significantly greater mean difference, indicating significant development in listening ability. The mean change in the control group was minimal, suggesting a less substantial improvement in listening skills. Table 4's t-value and p-value indicate statistical significance. The t-value of the experimental group was significantly higher than that of the control group, indicating a greater development in listening ability. The p-value of the experimental group was less than 0.05, indicating a statistically significant improvement in their listening abilities. The p-value of the control group was above the significance threshold, indicating that their listening abilities did not improve.

Table 5 shows the ANOVA findings for the development of listening skills between the experimental and control groups. This table allows us to compare the mean scores of the two groups and assess the effectiveness of the intervention. The F-value and P-value establish the significance of the difference across groups, indicating the impact of mobile devices and Jordanian audio resources on EFL learners' listening skills. These tables provide a comprehensive analysis of the effectiveness of the educational approach and elucidate the study findings. They also support the notion that the use of mobile devices and realistic audio resources can significantly enhance the listening experiences of EFL students.

Table 5. ANOVA for listening skills improvement

Source	Sum of Squares	Degrees of Freedom	Mean Square	F-Value	p-Value
Between Groups	412.10	1	412.10	37.15	<0.001
Within Groups	273.20	98	2.78		
Total (Combined)	685.30	99			

ANOVA in Table 5 confirms the effectiveness of the intervention. The main scores of the experimental and control groups vary significantly, as indicated by the high F-value from the ANOVA. The outcome demonstrates that the interventions improved the listening skills of EFL learners in the experimental group. Mobile devices and Jordanian audio resources improve the listening abilities of EFL learners, according to the results. The experimental group outperformed the control group in vocabulary acquisition, listening comprehension, and overall listening ability. These results support the use of mobile-assisted language learning and authentic audio resources

by language instructors and curriculum designers to improve outcomes in EFL language learning.

5 CONCLUSIONS, RECOMMENDATIONS, LIMITATIONS, AND IMPLICATIONS

Mobile devices and Jordanian audio resources have improved the listening abilities of EFL learners, particularly in terms of comprehension and vocabulary. The intervention provided students with authentic spoken language input and engaging exercises, which enhanced their vocabulary and listening comprehension skills. The theoretical framework and prior research support these conclusions. This study's results impact EFL teaching. Mobile devices and authentic audio materials assist EFL learners in enhancing their listening skills. These materials may assist teachers in providing students with meaningful listening experiences. Instructors may create effective language learning exercises by focusing on comprehension and vocabulary. The research yielded numerous suggestions. First, EFL teachers should utilize mobile devices and authentic audio in the instruction of listening skills. Mobile apps, Internet tools, and real audio recordings that align with learners' language and culture can accomplish this. Interactive listening exercises that emphasize comprehension and vocabulary will also enhance engagement and skill development.

This study on mobile-assisted listening education using Jordanian audio materials has the potential to revolutionize EFL teaching and learning. The research examines the use of mobile devices and authentic Jordanian audio resources in EFL education. The aim is to assist instructors and curriculum designers in enhancing students' listening abilities. The research questions evaluate the significant improvement in EFL learners' listening skills resulting from the intervention. This research may demonstrate how mobile technologies and locally relevant audio content can enhance EFL lessons. If students' listening comprehension, vocabulary, and overall listening skills improve significantly, it will demonstrate the effectiveness of this strategy in enhancing language learning outcomes. The research also utilizes referential and descriptive statistical analysis to compare the effects of the intervention on the experimental and control groups. The extensive data analysis will reveal which listening skills develop the most, helping language instructors plan focused treatments for their students. Jadara University's mobile-assisted listening training, which utilizes Jordanian audio resources, might inspire other EFL schools to enhance their language teaching methods. It will also advance EFL teaching by highlighting the advantages of mobile technology and culturally relevant resources for language acquisition.

This study shows that mobile devices and audio resources in Jordanian improve specific listening skills. The results complement the theoretical framework and demonstrate that using authentic materials and technology-enhanced activities enhances EFL listening training. The research expands our understanding of successful EFL listening training. Despite its useful findings, this research has several limitations. First, the research was limited to EFL students at Jadara University, which limits its applicability. The length and sample size of the study may have influenced the outcomes. Validate and extend these results with larger and more diverse populations. The research only examined comprehension and vocabulary, not pronunciation or conversational understanding. These topics could be studied to gain a better understanding of how mobile devices and audio content impact listening skills. EFL listening training should utilize mobile devices and authentic

audio content. These tools may improve specific listening skills, such as comprehension and vocabulary. These results and limitations may assist instructors in developing engaging and efficient listening instruction that promotes meaningful language acquisition for EFL learners.

This study emphasizes the need for further research on the impact of incorporating mobile devices and Jordanian audio resources in EFL training to enhance student education. First, future studies should thoroughly analyze intervention audio. The appropriateness, authenticity, and cultural relevance of the content may influence how audio resources impact the listening abilities of EFL learners. Educators can select the most suitable language-learning audio resources by assessing their quality and relevance. Second, the use of mobile devices and Jordanian audio materials in EFL training needs to be continuously evaluated over time. Follow-up evaluations over a long period may determine whether learners are able to sustain their improved listening skills. Understanding the long-term effects of the intervention can help in developing effective language acquisition techniques. Investigating learner preferences and motivation for mobile-assisted language learning and audio resources may provide further insight into engagement and learning outcomes. Understanding these factors can help instructors create more effective and engaging listening exercises that align with students' interests and preferences, thereby enhancing motivation and improving learning outcomes. Researchers should also determine the optimal mobile device and audio intervention timing and frequency. Educators may develop effective learning interventions by testing whether certain listening activities are more effective when implemented regularly, routinely, or in a more intensive manner. Finding the optimal audio integration schedule helps enhance language classroom planning and time management.

Future research might examine the impact of various audio resources, such as regional accents, speech speeds, and content themes. This comparison method would shed light on how audio elements impact different listening abilities. Comparing resources helps instructors choose diverse and comprehensive audio products that meet learners' individual needs and preferences. Researchers may utilize interactive mobile apps with real-time feedback and adaptive learning to enhance the appeal and interactivity of language learning. Interactive components can make language learning enjoyable and enhance students' listening skills. Mixed-methods research may provide a deeper understanding of learners' experiences with mobile devices and audio by integrating quantitative and qualitative data. Qualitative data may enhance the results and pedagogical implications, providing a more comprehensive understanding of the intervention's success. Researchers should also explore learner-centered techniques that take into consideration mobile devices and audio preferences. Identifying best practices for adapting interventions to learners' needs can enhance language acquisition and create a more inclusive and flexible learning environment. Cross-cultural research on mobile-assisted language learning and audio resources may help to generalize the results. Understanding how cultural origins affect the efficacy of interventions could enhance contextually appropriate and inclusive language education. Finally, instructors should participate in professional development programs to enhance their abilities in integrating mobile devices and audio. Training and tools will assist instructors in implementing and sustaining the intervention in language classrooms. In conclusion, these suggestions provide a pathway to enhancing the intervention's impact on student education. Future research may enhance EFL listening education by focusing on key areas of investigation.

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