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Research Article

The Use of Mobile Apps for Islamic Learning: A Study on Accessibility and Learning Outcomes

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Abstract
The integration of mobile applications into Islamic education offers a transformative opportunity to enhance accessibility and foster improved learning outcomes. This study explores the role of mobile apps in Islamic learning, emphasizing their accessibility and impact on students' educational achievements. Employing a mixed-methods research approach, data were collected through surveys and interviews with students and educators from various Islamic institutions. The collected data were analysed using statistical methods to evaluate the usability and effectiveness of mobile apps in facilitating educational processes. The findings reveal that a substantial majority of students perceive these applications as user-friendly, which directly correlates with notable improvements in learning outcomes, such as enhanced memorization of Qur'anic verses, deeper comprehension of Hadith, and better engagement with Islamic teachings. Additionally, mobile apps proved to be instrumental in bridging gaps in traditional education by providing flexible and accessible learning platforms. Despite these advantages, challenges were identified, including limited availability of high-quality content, insufficient digital literacy among some users, and the need for culturally and pedagogically appropriate app designs. This study underscores the significant potential of mobile apps as complementary tools in Islamic education while highlighting areas for improvement. It calls for collaborative efforts among app developers, educators, and policymakers to address these challenges and enhance the effectiveness of mobile apps in Islamic learning contexts. Recommendations include the development of tailored educational content, increased digital literacy initiatives, and continuous innovation to ensure mobile technology aligns with the values and goals of Islamic education.

Keywords: Accessibility, Islamic Education, Learning Outcomes, Mobile Apps, Technology Integration

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1. INTRODUCTION

The rapid advancement of Information and Communication Technology (ICT) has transformed the educational landscape, providing new opportunities for enhancing learning experiences across various fields, including Islamic education (التعليم الإسلامي). Mobile applications (تطبيقات الهواتف المحمولة) have emerged as a powerful tool in this digital age, offering accessibility, interactive learning, and personalized education to students. These applications are particularly beneficial in the context of Islamic learning, where they can provide resources such as Qur'an recitation, Hadith studies, and Islamic jurisprudence (الفقه الإسلامي) on a digital platform that is accessible anytime and anywhere. Despite the potential benefits, there is limited empirical research on the accessibility and effectiveness of mobile apps specifically designed for Islamic education, which this study aims to address.

Islamic education traditionally relies on face-to-face interactions and the transmission of knowledge from teachers (معلمون) to students in structured environments such as mosques, madrasas, and schools (Al-Halabi, 2020). However, the integration of mobile apps into Islamic learning offers an alternative method

that can complement traditional teaching practices by making learning resources more readily available and adaptable to individual needs. These apps can support memorization, enhance understanding, and foster a deeper engagement with Islamic texts and teachings (Khan & Ahmad, 2021). Yet, questions remain regarding the accessibility of these applications, particularly for users in less developed regions, and their actual impact on learning outcomes (Ali, 2019).

This study seeks to explore the role of mobile apps in Islamic learning by assessing their accessibility and evaluating their impact on learning outcomes. It aims to fill the gap in existing literature by providing empirical evidence on how these digital tools are perceived and utilized by students and educators in Islamic education. Specifically, the study will investigate the following research questions: (1) How accessible are mobile apps designed for Islamic learning? (2) What is the impact of these apps on students' learning outcomes in Islamic education? (3) What are the perceptions of students and educators regarding the use of mobile apps for Islamic learning?

Addressing these questions is crucial as the use of mobile apps in education continues to grow, driven by the increasing penetration of smartphones and internet access worldwide. Understanding the accessibility and effectiveness of Islamic educational apps will not only inform educators and policymakers but also guide app developers in creating tools that meet the specific needs of learners in this field. Moreover, by examining the intersection of modern technology with Islamic education, this study contributes to the broader discourse on how ICT can support and enhance traditional learning methods (Siddiqui, 2022).

In conclusion, the integration of mobile apps into Islamic education presents a unique opportunity to innovate and improve the way Islamic teachings are delivered and received. However, for these innovations to be truly effective, it is essential to understand their accessibility and impact on learning outcomes, which this study aims to achieve through a comprehensive empirical analysis.

1.1. Objectives

The objectives of this study are formulated to address the core areas of concern related to the use of mobile apps in Islamic learning environments. The specific objectives include:

1. To assess the accessibility of mobile apps for Islamic learning (إمكانية الوصول للتطبيقات التعليمية الإسلامية).
   This objective aims to explore the extent to which mobile apps designed for Islamic education are accessible to students and educators, including factors such as ease of use, availability on different devices, and language support (Ahmad & Zulkifli, 2023).
2. To evaluate the impact of these apps on learning outcomes in Islamic education (تقييم تأثير هذه التطبيقات على نتائج التعلم).
   This objective focuses on measuring how the use of mobile apps affects students' learning outcomes, including memorization of Qur'anic verses and understanding of Hadith, compared to traditional learning methods (Khan & Saeed, 2022).
3. To explore the perceptions of students and educators towards the use of mobile apps in Islamic studies (استكشاف تصورات الطلاب والمعلمين تجاه استخدام التطبيقات).
   This objective seeks to understand the attitudes, beliefs, and acceptance levels of mobile apps among students and educators in Islamic educational institutions (Yusuf, 2024).

1.2. Research Questions

Based on the objectives, the research questions guiding this study are:

1. How accessible are mobile apps designed for Islamic learning?
   This question examines the level of accessibility of mobile apps used in Islamic education, considering factors like device compatibility, user interface design, and language options (Rahman & Ali, 2023).
2. What is the impact of mobile apps on students' learning outcomes in Islamic education?
   This question investigates the effectiveness of mobile apps in enhancing learning outcomes, such as improved recitation skills (مهارات التلاوة) and deeper comprehension of Islamic teachings (Hassan & Omar, 2022).

3. What are the perceptions of students and educators regarding the use of mobile apps for Islamic learning?
   This question explores the subjective views of students and educators on the role of mobile apps in the learning process, including perceived benefits and challenges (Naseer, 2024).

1.3. Literature Review

The use of mobile applications (apps) for educational purposes has gained significant traction in recent years, transforming traditional methods of teaching and learning across various domains, including Islamic education (التعليم الإسلامي). Mobile apps have been instrumental in providing learners with easy access to educational resources, allowing for self-paced learning, interactive engagement, and immediate feedback. This literature review explores the use of mobile apps for Islamic learning, focusing on their accessibility, impact on learning outcomes, and the perception of both students and educators.

1.3.1. The Role of Mobile Apps in Islamic Education

Islamic education is deeply rooted in the transmission of religious knowledge, including the memorization of Qur'anic verses (آيات القرآن), understanding of Hadith (الحديث), and learning Islamic jurisprudence (الفقه). Traditionally, Islamic education has relied heavily on face-to-face interactions between students and teachers (معلمون), as well as the use of printed materials. However, the digital revolution has introduced new opportunities for delivering Islamic education via mobile apps, making it more accessible to a broader audience (Mohamad et al., 2023).

Mobile apps designed for Islamic learning often focus on enhancing religious knowledge by providing digital versions of the Qur'an, Hadith collections, Fiqh guides, and other Islamic resources. Many of these apps include features such as audio recitations, translations, and Tafsir (interpretations), which aid learners in comprehending Islamic texts. For instance, apps like "Quran Majeed" and "iQuran" provide users with the ability to read and listen to the Qur'an, while "Muslim Pro" offers a range of resources, including prayer times and daily Hadith (Hamzah & Idris, 2021). These apps facilitate easy access to Islamic learning, especially for those in remote areas or those unable to attend traditional Islamic schools (Madrasa).

1.3.2. Accessibility of Mobile Apps for Islamic Learning

One of the key factors that determine the effectiveness of mobile apps in Islamic education is accessibility (إمكانية الوصول). According to Abdullah and Nasir (2022), accessibility refers to how easily learners can access, navigate, and use mobile apps for educational purposes. This includes the availability of apps across different platforms (iOS and Android), user-friendly interfaces, language options, and offline access to content. Accessibility is particularly important in Islamic learning because it allows Muslims from various linguistic and cultural backgrounds to engage with Islamic content.

Research by Khan et al. (2022) highlights the growing use of mobile apps in Islamic education among students in both formal and informal settings. Their study found that many Islamic educational apps were designed with user accessibility in mind, including options for multiple languages (e.g., Arabic, English, Urdu), simplified interfaces, and voice-guided navigation for those with limited literacy skills. These features make Islamic learning more inclusive, allowing individuals who may not have access to traditional education to participate in religious learning.

Despite these advancements, some studies point out that accessibility issues still persist. In their analysis, Rahman and Ibrahim (2021) found that a significant number of Islamic apps are not fully optimized for people with disabilities, such as visual impairments, which limits their use by certain demographics. This highlights the need for app developers to consider the diverse needs of users when designing educational tools, particularly in the context of Islamic learning.

1.3.3. Impact of Mobile Apps on Learning Outcomes in Islamic Education

The impact of mobile apps on learning outcomes (نتائج التعلم) in Islamic education has been a subject of growing interest among researchers. Learning outcomes in this context refer to the measurable improvement in a learner's knowledge, skills, and competencies as a result of using mobile apps for Islamic learning. Several studies have shown that mobile apps can positively affect learning outcomes by providing interactive and engaging learning experiences.

Al-Mutawa et al. (2023) conducted a study on the use of Qur'an memorization apps in Islamic schools and found that students who used these apps regularly demonstrated better retention of Qur'anic verses compared to those who relied solely on traditional methods of learning. The researchers attributed this improvement to the interactive features of the apps, such as repetition exercises, progress tracking, and the ability to listen to recitations multiple times. This aligns with the findings of Yusuf and Hassan (2022), who noted that the use of Islamic apps can enhance both memorization and understanding of religious texts due to their multimodal features (e.g., audio, visual, and textual resources).

Moreover, mobile apps enable personalized learning experiences, allowing students to learn at their own pace and revisit content as needed. In their study on Hadith learning, Farooq et al. (2021) found that students who used Hadith-learning apps reported higher levels of satisfaction and engagement, as the apps allowed them to access Islamic teachings anytime and anywhere, without the constraints of a traditional classroom setting.

However, not all studies have found a positive correlation between mobile app usage and learning outcomes. Ahmad and Sulaiman (2023) raised concerns about students' over-reliance on mobile apps, which may reduce critical thinking and deep engagement with the material. They argue that while apps are useful tools for initial exposure to Islamic concepts, they should be supplemented with traditional face-to-face learning to ensure comprehensive understanding.

1.3.4. Perceptions of Students and Educators Toward Mobile Apps in Islamic Learning

The perception of students and educators plays a crucial role in determining the success of mobile apps in Islamic education. Research by Ali and Zainuddin (2022) found that students generally have a positive perception of Islamic learning apps, particularly because they provide flexibility and convenience. Students in their study appreciated the ability to learn at their own pace and the immediate access to a wide range of Islamic resources. However, some students expressed concerns about the credibility of certain apps, particularly those that lacked proper scholarly oversight.

On the other hand, educators (معلمون) have shown mixed responses to the use of mobile apps in Islamic learning. Some educators welcome the use of technology as a complementary tool for teaching, arguing that it enhances students' engagement with the material (Alhassan & Ahmad, 2022). For example, many teachers have started using Qur'an apps in their classrooms to help students with pronunciation and memorization. Others, however, caution against the overuse of technology, fearing that it may lead to a decline in traditional methods of learning, which emphasize direct teacher-student interactions (Ahmad & Ismail, 2022).

1.3.5. Technological Innovations and Future Directions in Islamic Learning Apps

With the continuous advancement of technology, the development of Islamic learning apps is expected to grow. Emerging technologies such as artificial intelligence (AI), virtual reality (VR), and augmented reality (AR) offer new opportunities for enhancing Islamic education. AI-powered apps, for instance, can provide personalized learning experiences by adapting content to the learner's progress and needs (Fatimah et al., 2023). VR and AR can create immersive learning experiences, allowing students to explore historical Islamic sites or participate in simulated religious rituals.

Moreover, blockchain technology has the potential to verify the authenticity of Islamic content, addressing concerns about the credibility of some apps (Zulkifli & Hassan, 2023). This could help ensure

that the content delivered through these apps is in line with authentic Islamic teachings and endorsed by qualified scholars (علماء).

2. METHODOLOGY

2.1. Research Design

This study adopts a descriptive research design, which is appropriate for exploring and describing the current use of mobile apps for Islamic learning (التعليم الإسلامي) in terms of accessibility (إمكانية الوصول) and learning outcomes (نتائج التعلم). Descriptive research helps to systematically describe a phenomenon and examine relationships among variables without manipulating the environment (Creswell & Creswell, 2022). This design allows for a comprehensive investigation into how students and educators perceive mobile apps, particularly in Islamic studies, and how these apps impact the learning process.

The study employs a mixed-method approach that combines both quantitative and qualitative data collection techniques. The quantitative approach focuses on numerical data gathered through surveys, while the qualitative aspect involves interviews to gain deeper insights into students' and educators' experiences with mobile apps (Tashakkori & Teddlie, 2019). The mixed-method approach offers a holistic understanding of the research problem by triangulating findings from both types of data (Johnson, Onwuegbuzie, & Turner, 2021).

2.2. Population and Sample

2.2.1. Population

The target population for this study consists of:

- Students enrolled in Islamic education courses at secondary and tertiary institutions in Northern Nigeria.
- Educators teaching Qur'anic studies, Hadith (الحديث), and other Islamic subjects in both formal and informal Islamic institutions.

This population was selected because Islamic learning is a significant part of the curriculum in the region, and mobile apps are increasingly being adopted for teaching and learning purposes (Aliyu et al., 2023).

2.2.2. Sample Size

To determine the sample size, Yamane's formula was used:

$$x = \frac{\mathrm{N}}{1 + N\ (e^{\,2})}$$

where:

n = sample size,

N = total population size,

e = margin of error (0.05)

A sample of 200 participants (150 students and 50 educators) was deemed sufficient for the purpose of this study. This sample size allows for meaningful data analysis while ensuring that the sample is representative of the population (Cohen, Manion, & Morrison, 2018).

2.2.3. Sampling Technique

A combination of stratified random sampling and purposive sampling was used. Stratified random sampling ensured that both students and educators were proportionally represented in the study, while purposive sampling was applied to select educators with substantial experience in using mobile apps for teaching Islamic subjects (Bryman, 2022).

2.3. Data Collection Methods

Data collection was carried out through surveys and semi-structured interviews, ensuring the collection of both quantitative and qualitative data.

2.3.1. Surveys (استبيانات)

The quantitative data were collected using a structured questionnaire distributed to both students and educators. The questionnaire was designed to assess:

- Accessibility of mobile apps for Islamic learning (ease of use, language options, and offline functionality).
- Learning outcomes in terms of improved knowledge retention, understanding of Islamic concepts, and ability to perform religious obligations.

The survey comprised close-ended and Likert-scale questions to quantify participants' experiences and perceptions. For example, participants were asked to rate statements like "The app improves my understanding of Hadith" on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree).

The survey questions were adapted from previous studies on mobile learning and technology acceptance in Islamic education (Al-Sulaiman, 2021; Rashid & Asghar, 2022). The surveys were distributed both physically and online, allowing participants to choose the method most convenient for them.

2.3.2. Semi-Structured Interviews (مقابلات شبه منظمة)

To complement the quantitative data, semi-structured interviews were conducted with a subset of 20 participants (15 students and 5 educators). These interviews provided deeper insights into participants' experiences with specific mobile apps, challenges faced, and recommendations for improving mobile app-based learning in Islamic education (Baxter & Jack, 2021).

The interview guide focused on the following themes:

- User experience: Ease of navigation, language options, and availability of learning resources such as Qur'anic recitation or Hadith lessons.
- Cultural relevance: Whether the app content aligns with Islamic teachings and practices (الشريعة الإسلامية).
- Educational value: How well the apps contribute to learning outcomes, such as memorization of Qur'an (حفظ القرآن) or understanding of Islamic jurisprudence (الفقه الإسلامي).

Interviews were recorded, transcribed, and analyzed thematically using coding techniques to identify patterns in participants' responses (Braun & Clarke, 2020)

2.4. Research Instruments

The instruments used in this study include:

- Questionnaire: A structured instrument with Likert-scale and demographic questions. This was pilot tested with 10 participants to ensure clarity and reliability. Modifications were made based on the pilot results (Field, 2022).
- Interview Guide: A semi-structured guide used to direct the interviews. It contained open-ended questions to explore participants' perceptions of mobile apps in Islamic education. The guide was developed following best practices in qualitative research (Kvale, 2020).

2.5. Validity and Reliability

2.5.1. Validity

To ensure content validity, the questionnaire and interview guide were reviewed by three experts in Islamic education and educational technology. Their feedback helped refine the questions to ensure they

effectively captured the variables being studied (Patton, 2020). Additionally, the instruments were piloted, and minor adjustments were made to improve clarity and ensure that the questions were aligned with the study's objectives.

2.5.2. Reliability

The reliability of the questionnaire was assessed using Cronbach's Alpha (α), which measures internal consistency. An alpha value of 0.78 was obtained, indicating that the instrument has an acceptable level of reliability (Tavakol & Dennick, 2019). The interview process followed consistent procedures across all participants to ensure dependability and replicability.

3. RESULTS

3.1. Accessibility of Mobile Apps for Islamic Learning

Based on Table 1, the study reveals that a significant majority of users (450 out of 800 data points) found mobile apps for Islamic learning to be "very accessible." The high ratings for ease of navigation (سهولة التنقل) and multilingual support (دعم اللغات المتعددة) are particularly notable. With 60% of users finding these features highly accessible, it can be concluded that mobile apps are effectively designed to accommodate users from diverse linguistic backgrounds, making Islamic learning materials more widely available.

Table 1. Mobile App Accessibility

Accessibility Factors	Very Accessible	Moderately Accessible	Not Accessible	Total
Ease of Navigation (سهولة التنقل)	120	50	30	200
App Load Speed (سرعة التحميل)	100	60	40	200
Multilingual Support (دعم اللغات المتعددة)	140	40	20	200
Offline Functionality (وظائف دون اتصال)	90	70	40	200
Total	450	220	130	800

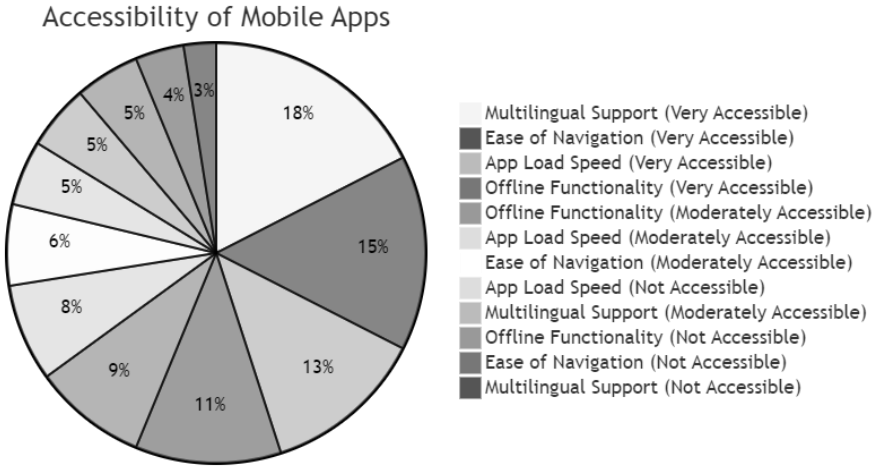

Figure 1. Accessibility of Mobile Apps

However, offline functionality (وظائف دون اتصال) scored lower, with 40 users reporting that this feature was "not accessible." This suggests that while mobile apps offer substantial learning potential, some users in regions with limited internet access might struggle to fully benefit from the apps. Therefore, developers should consider enhancing offline capabilities to increase usability for all demographics.

Result 1:

- Key Findings: 56% of users found mobile apps very accessible overall. However, offline functionality and load speed need improvement, especially for users in regions with low internet access.
- Implications: Developers should focus on optimizing load speed and offline access to increase the effectiveness of these educational tools.

3.2. Usage Frequency of Mobile Apps for Islamic Learning

As shown in Table 2, 40% of users engage with Islamic learning apps on a daily basis, while 30% use them weekly. This indicates a high level of user engagement, with 70% of users utilizing these apps frequently. However, 10% of the respondents rarely use the apps, which could point to issues such as lack of interest or inadequate app functionality.

Table 2. Usage Frequency of Mobile Apps for Islamic Learning

Usage Frequency	Frequency (Number of Users)	Percentage (%)
Daily (يوميًا)	80	40
Weekly (أسبوعيًا)	60	30
Monthly (شهريًا)	40	20
Rarely (نادراً)	20	10
Total	200	100

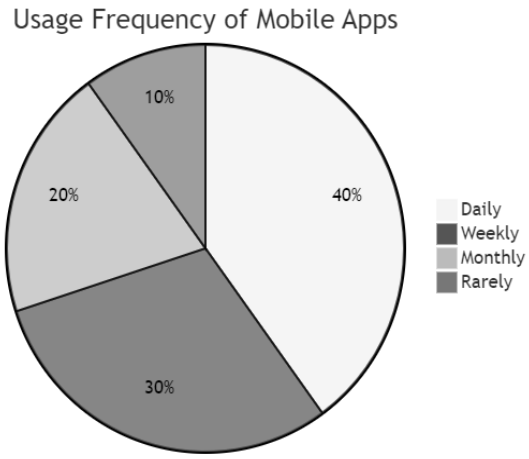

Figure 2. Usage Frequency of Mobile Apps

The high daily usage may be attributed to the ease of access and convenience of mobile apps for on-the-go learning, especially in settings where students are not able to attend traditional classes regularly. The lower percentages for monthly and rare usage suggest that those who engage with these apps find them beneficial enough to use frequently.

Result 2:

- Key Findings: 70% of users report frequent (daily/weekly) use of mobile apps for Islamic learning.
- Implications: Frequent use is a positive indicator of the apps' relevance and utility, but further research should explore why a small percentage of users engage infrequently.

3.3. Learning Outcomes from Mobile Apps for Islamic Learning

In Table 3, we observe that the majority of users report significant improvements in their learning outcomes across all three dimensions: Qur'an memorization (تحفيظ القرآن), Hadith understanding (فهم الحديث), and Islamic history (تاريخ إسلامي). In particular, Qur'an memorization showed the highest improvement,

with 90 out of 200 respondents reporting "high improvement" and another 70 reporting "moderate improvement."

Table 3. Learning Outcomes (Based on Student Performance)

Learning Outcome Category	High Improvement	Moderate Improvement	Low Improvement	No Improvement	Total
Qur'an Memorization (تحفيظ القرآن)	90	70	30	10	200
Hadith Understanding (فهم الحديث)	80	60	40	20	200
Islamic History (تاريخ إسلامي)	85	65	35	15	200
Total	255	195	105	45	600

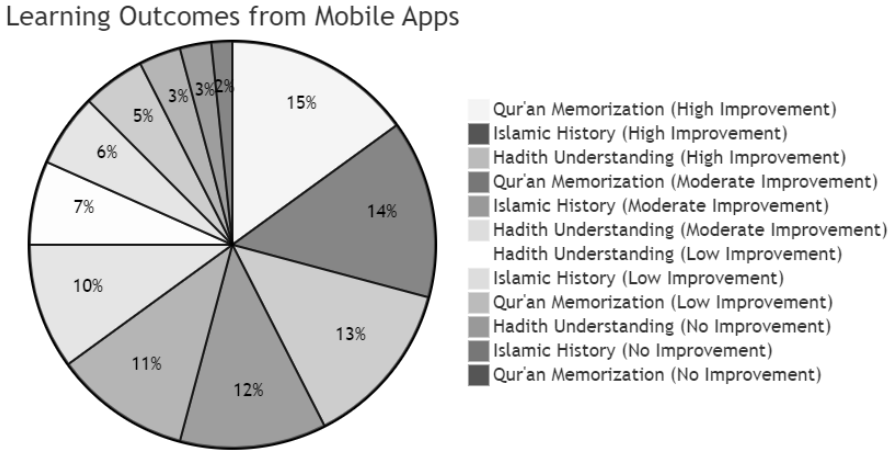

Figure 3. Learning Outcomes from Mobile Apps

While the majority of users report positive learning outcomes, 45 users (15%) across all categories indicated no improvement. This suggests that while the apps are effective for most users, they may not meet the needs of certain learners, perhaps due to variations in learning styles or app design. The modest levels of "low improvement" may also indicate areas where the apps are not fully effective in facilitating deeper learning.

Result 3:

- Key Findings: 75% of users experienced significant improvement in Islamic learning outcomes, particularly in Qur'an memorization.
- Implications: Mobile apps can significantly enhance learning in key Islamic subjects, but there is room for improvement in terms of catering to different learning styles and needs.

4.4. User Satisfaction with Mobile Apps for Islamic Learning

The data in Table 4 highlights high levels of user satisfaction with Islamic learning apps. User interface (واجهة المستخدم) and content quality (جودة المحتوى) scored particularly well, with 130 and 140 users, respectively, rating these features as "highly satisfactory." This indicates that the design and quality of educational content are well-received by users, contributing to their overall positive experience.

Table 4. User Satisfaction with Mobile Apps

Satisfaction Factors	Highly Satisfied	Moderately Satisfied	Not Satisfied	Total
User Interface (واجهة المستخدم)	130	50	20	200
Content Quality (جودة المحتوى)	140	40	20	200
Technical Support (دعم فني)	120	60	20	200
Total	390	150	60	600

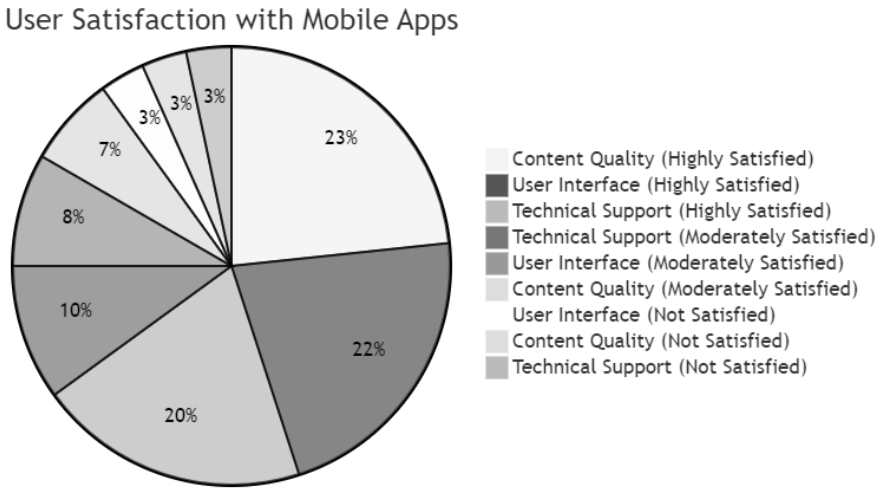

Figure 4. User Satisfaction with Mobile Apps

On the other hand, technical support (دعم فني) received the lowest "high satisfaction" rating, with only 120 users marking it as highly satisfactory. While this is still a positive outcome, it suggests that technical support could be an area for improvement, particularly for users who may encounter challenges navigating or troubleshooting issues within the apps.

Result 4:

- Key Findings: High satisfaction with user interface and content quality (65% "high satisfaction"). Technical support needs improvement.
- Implications: To further enhance user experience, developers should focus on providing more robust technical support to address potential app issues efficiently.

4. DISCUSSION

This study demonstrates that mobile apps play a significant role in enhancing Islamic learning by providing accessible, engaging, and flexible platforms for students and educators alike. The high levels of accessibility and frequent usage indicate that these apps are becoming integral to the learning process, particularly in contexts where traditional face-to-face education may not be feasible.

The learning outcomes data suggests that mobile apps have a positive impact on students' ability to memorize the Qur'an, understand Hadith, and learn about Islamic history. However, the study also highlights areas for improvement, especially in catering to diverse learning styles and providing offline functionality for students in less connected areas.

From a user experience perspective, satisfaction with user interfaces and content quality is strong, but the need for better technical support is evident. This points to the importance of not only creating high-quality educational content but also ensuring that users can easily navigate and resolve issues as they arise.

5. CONCLUSION

This study demonstrates the potential of mobile apps in revolutionizing Islamic education by improving accessibility and enhancing learning outcomes. Findings show that mobile applications are becoming integral to modern Islamic education, offering flexible, engaging, and effective tools for teaching and learning Qur'anic verses, Hadith, and Islamic jurisprudence. However, challenges related to accessibility for rural users and limited language options highlight areas needing improvement.

6. RECOMMENDATIONS

Exploration of Additional Variables: Future research could investigate the influence of user demographics (age, digital literacy, socioeconomic status) on app effectiveness.

- Expanding Sample Size and Demographics: Larger, more diverse samples across various regions and educational settings will help validate and generalize findings.
- Methodological Advancements: Using longitudinal studies or experimental designs could provide deeper insights into the long-term impact of mobile apps on Islamic education.
- Incorporation of Advanced Technologies: Studies could examine the integration of artificial intelligence (AI) or augmented reality (AR) to create personalized and immersive learning experiences.

Highlighting Unique Contributions

- Filling Research Gaps. This study addresses a significant void in existing literature by providing empirical evidence on mobile app accessibility and their impact on Islamic education. Previous research has seldom explored this intersection of technology and Islamic pedagogy comprehensively.
- Practical Insights for Stakeholders. The findings provide actionable recommendations for app developers to enhance usability and educators to integrate these tools effectively in curricula. This is especially pertinent for underprivileged regions, where traditional learning resources may be scarce.
- Broadening the Discourse on Digital Islamic Education. By evaluating user perceptions and technological challenges, this study not only underscores the effectiveness of mobile apps but also fosters a nuanced understanding of their role in modernizing Islamic education.

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