



## **Islamic Banking Students' Experiences with Mobile-Based Vocabulary Applications in Learning English for Sharia Finance**

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### **ABSTRACT**

The increasing globalization of the Islamic finance industry has intensified the need for Islamic banking graduates to possess adequate English proficiency, particularly in mastering specialized sharia banking vocabulary. This study aims to investigate students' perceptions and learning experiences regarding the use of mobile-based vocabulary applications in the English for Sharia Banking course. To address this aim, a sequential explanatory mixed-method design was employed to obtain both numerical trends and in-depth experiential insights. The quantitative phase involved 58 students from the Islamic Banking Study Program at STIES Mitra Karya, Bekasi, selected through purposive sampling. Data were collected using a Likert-scale questionnaire consisting of six indicators: ease of use, learning flexibility, motivation, vocabulary mastery, learner autonomy, and relevance to Islamic banking contexts. Descriptive statistical analysis revealed that learning flexibility obtained the highest mean score ( $M = 4.32$ ), followed by vocabulary mastery ( $M = 4.28$ ) and learner autonomy ( $M = 4.21$ ), indicating strong student agreement on the benefits of mobile-based vocabulary learning. Ease of use ( $M = 4.15$ ), motivation ( $M = 4.18$ ), and relevance to sharia banking ( $M = 4.24$ ) also received positive evaluations. The qualitative phase involved semi-structured interviews with six participants and was analyzed thematically. The findings indicate that mobile applications, particularly Quizlet and Wordwall, support vocabulary retention through repetitive quizzes and interactive features, increasing students' motivation and independent learning. However, qualitative data also reveal limitations in contextual and productive vocabulary use, as students reported difficulties applying Islamic banking terms in sentences and professional communication. In conclusion, mobile-based vocabulary applications are effective supplementary tools for enhancing vocabulary recognition and retention in English for Sharia Banking courses. Nevertheless, these tools should be integrated with contextualized learning activities to support communicative competence in sharia banking contexts.

**Keywords:** English for Sharia Banking, mobile learning, vocabulary acquisition, Islamic banking students, ESP learning

### **INTRODUCTION**

The globalization of the financial sector has significantly transformed the professional demands placed on graduates of Islamic banking programs. Islamic finance institutions are increasingly involved in international transactions, cross-border investments, and global regulatory frameworks that predominantly use English as the main medium of communication (Basit, 2023; Kok et al., 2022; Selim et al., 2023). As a result, Islamic banking professionals are required not only to master sharia principles but also to demonstrate adequate English proficiency in professional contexts. English competence enables practitioners to interpret international financial documents, understand global Islamic finance standards, and communicate effectively with multinational stakeholders (Al-Zaqeba & Basheti, 2024; Morshed, 2024; Morshed et al., 2024). This reality positions English as a strategic skill rather than a supplementary subject. In higher education, this shift demands a reconsideration of how English is taught to students in sharia-based financial disciplines. Consequently, English for Sharia Banking has emerged as an essential component of Islamic higher education curricula.

In the context of Indonesian Islamic higher education, English courses within Islamic Banking study programs are typically categorized as supporting or general courses. Although the curriculum acknowledges the importance of English, its instructional implementation often receives less emphasis compared to core sharia and finance subjects (Bandu et al., 2021; "English Language Skills for Islamic Economic Students: Expectation versus Reality," 2023). Many

students perceive English as a difficult and peripheral subject that does not directly contribute to their professional identity as future Islamic bankers. This perception is reinforced by learning approaches that prioritize grammatical knowledge over practical language use. Furthermore, limited instructional time and large class sizes constrain opportunities for meaningful practice. As a result, students often fail to see the relevance of English to their future careers. This condition contributes to low engagement and minimal learning outcomes.

One of the most prominent challenges faced by Islamic banking students is limited mastery of English financial and sharia-related vocabulary. Vocabulary plays a central role in English for Specific Purposes (ESP), as it functions as the foundation for comprehension and communication in professional contexts (Bakr et al., 2021; Noviarini, 2017; Warsame, 2017). Students may understand sharia banking concepts in Indonesian or Arabic but struggle to express them accurately in English. This lexical gap hinders students' ability to read English references, follow international case studies, and engage in professional discourse. Previous studies have shown that inadequate vocabulary knowledge negatively affects students' confidence and participation in English learning (Aravind & Rajasekaran, 2022; Morsi & Sivakami, 2025; Noviarini, 2025). The issue becomes more complex when students encounter unfamiliar English terminology related to contracts, financing schemes, and customer services. Consequently, vocabulary limitations remain a persistent barrier in English for Sharia Banking learning.

These challenges are particularly pronounced in regional higher education institutions, where students' educational backgrounds and English exposure vary significantly. Many students come from secondary schools with limited English instruction, resulting in heterogeneous proficiency levels within the same classroom (Casale & Olsson, 2025; Tai & Zhao, 2024). Lecturers are therefore faced with the difficulty of addressing diverse learning needs using uniform instructional strategies. Additionally, institutional constraints such as limited access to authentic English learning resources further exacerbate the problem. In such contexts, conventional classroom-based instruction often fails to accommodate individual learning differences. Students who struggle with English may become passive learners, while more proficient students receive insufficient challenges. This situation highlights the need for adaptive learning approaches. Thus, innovative instructional solutions are required to support equitable learning opportunities.

The rapid advancement of digital technology has introduced new possibilities for addressing these challenges in higher education. Students today are increasingly familiar with smartphones and mobile applications as part of their daily lives (Abdallah & Nassour, 2025; Khrisat & Fakhouri, 2024; Sahni, 2018). This familiarity creates opportunities to integrate technology into learning in ways that align with students' habits and preferences. Digital learning tools can provide flexible access to learning materials beyond classroom boundaries. They also enable students to control their learning pace according to their individual needs. In the context of language learning, technology has been shown to enhance learner motivation and autonomy (Pham & Huynh, 2025; Weinberg, 2017; Zolfaghari et al., 2025). Therefore, technology-based learning holds potential as a supportive strategy in ESP instruction.

Among various technological approaches, Mobile-Assisted Language Learning (MALL) has gained increasing attention in recent years. MALL emphasizes the use of mobile devices to facilitate language learning anytime and anywhere (Kacetyl & Klímová, 2019; Sherine et al., 2020; Wen et al., 2019). Mobile applications such as Quizlet and Wordwall offer features including spaced repetition, gamification, and instant feedback. These features are particularly beneficial for vocabulary learning, which requires frequent exposure and practice. Research has demonstrated that mobile vocabulary applications can improve retention and learner engagement (Alisoy & Sadigzade, 2025; Pichugin et al., 2023; Teymouri, 2024). Moreover, MALL supports self-directed learning, allowing students to take responsibility for their learning outcomes. As such, MALL aligns well with contemporary learner-centered pedagogical approaches.

Previous studies on mobile-based vocabulary learning have reported positive outcomes in general English and ESP contexts. For example, studies have shown that mobile applications can enhance students' motivation and reduce learning anxiety (Boroughani et al., 2023; Hsu & Chao, 2024; Sintya Dewi et al., 2020). In ESP settings, mobile tools have been found effective in helping

learners acquire discipline-specific terminology (Chen, 2025; Chi, 2019; Tian & Umar, 2025). However, most existing studies focus on fields such as engineering, nursing, or general business English. Research specifically addressing English for Sharia Banking remains scarce. This gap suggests that the unique linguistic and conceptual characteristics of Islamic finance have not been sufficiently explored in mobile-assisted learning research. Consequently, the applicability of existing findings to Islamic banking contexts remains uncertain.

The limited focus on English for Sharia Banking represents a significant research gap in ESP and MALL studies. Islamic banking terminology often involves complex concepts derived from Arabic, which may not have direct equivalents in English. This linguistic complexity requires learning strategies that go beyond memorization. Additionally, the ethical and contractual dimensions of sharia finance demand contextual understanding rather than surface-level vocabulary knowledge. Existing studies rarely examine how mobile applications support such specialized learning needs. Therefore, there is a need to investigate whether mobile vocabulary tools can effectively support Islamic banking students' learning experiences. Addressing this gap is essential for developing context-sensitive instructional practices.

In response to these challenges, mobile-based vocabulary learning applications are proposed as a potential instructional solution. These tools can serve as supplementary learning media that complement classroom instruction. By enabling repetitive practice and individualized learning, mobile applications may help students overcome vocabulary-related difficulties. Furthermore, the gamified nature of these applications may increase students' motivation and engagement. When integrated thoughtfully, mobile tools can support both cognitive and affective aspects of language learning. However, their effectiveness depends on how well they align with students' academic and professional needs. Therefore, empirical investigation is necessary to evaluate their role in English for Sharia Banking learning.

From a state-of-the-art perspective, recent ESP research emphasizes the importance of contextualized and learner-centered technology integration. Scholars argue that technology should not merely digitize traditional practices but transform learning experiences (Ali et al., 2024; Nugroho, 2020). In line with this view, mobile vocabulary learning should be examined not only in terms of usability but also in relation to learning relevance and professional applicability. Contemporary studies also highlight the importance of students' perceptions as indicators of instructional effectiveness (Boghiu-Balaur & Girón-García, 2024; Kočović Pajević, 2025). Understanding learners' experiences can inform more responsive curriculum design. Thus, investigating students' perceptions contributes to both theoretical and practical advancements in ESP pedagogy.

The novelty of this study lies in its focus on mobile-based vocabulary learning in the context of English for Sharia Banking at a regional Islamic higher education institution. Unlike previous studies that emphasize synchronous platforms or general English learning, this research specifically explores mobile applications designed for vocabulary acquisition. It also addresses the underrepresented population of Islamic banking students in ESP research. By examining students' experiences, this study provides insight into how mobile tools support specialized vocabulary learning. Additionally, it highlights the strengths and limitations of mobile applications in addressing professional language needs. This focus distinguishes the study from existing research.

Based on the issues discussed above, this study seeks to answer the following research questions: How do Islamic banking students perceive the use of mobile-based vocabulary learning applications in learning English for Sharia Banking? What benefits and challenges do students experience when using mobile vocabulary applications? How do these tools support students' vocabulary mastery and learning autonomy in a sharia finance context? Addressing these questions is expected to contribute to the development of more effective and contextual English instruction for Islamic banking students. The findings may also inform lecturers and curriculum developers in integrating mobile learning tools strategically. Ultimately, this study aims to support the preparation of Islamic banking graduates for global professional engagement.

## METHOD

This study employed a sequential explanatory mixed-method design, in which quantitative data collection and analysis were conducted in the first phase, followed by qualitative data collection to explain and deepen the quantitative findings. This design was selected to obtain both a general overview of students' perceptions and an in-depth understanding of their learning experiences when using mobile-based vocabulary applications in English for Sharia Banking. The quantitative phase aimed to identify dominant perception trends, while the qualitative phase focused on exploring students' perspectives regarding benefits and challenges. The integration of both data types allowed for triangulation and strengthened the validity of the findings. This approach is considered appropriate for educational research that examines both measurable outcomes and subjective experiences.

The study was conducted at the Islamic Banking Study Program, STIES Mitra Karya, Bekasi, during the 2023/2024 academic year. The participants consisted of 58 undergraduate students enrolled in the English for Sharia Banking course. Participants were selected using purposive sampling, with the main criterion being active participation in learning activities that utilized mobile-based vocabulary applications. During the course, students used Quizlet and Wordwall to learn Islamic banking vocabulary related to sharia contracts (e.g., murabaha, mudaraba, musharaka), financial services, and customer interaction. Quantitative data were collected through a Likert-scale questionnaire consisting of six indicators: ease of use, learning flexibility, learning motivation, vocabulary mastery, learning autonomy, and relevance to Islamic banking contexts. To support the quantitative findings, semi-structured interviews were conducted with six students, selected voluntarily to represent diverse levels of English proficiency.

The data collection procedures were carried out in several stages, as illustrated in Figure 1. First, students participated in mobile-based vocabulary learning activities throughout the semester. Second, a questionnaire was administered at the end of the course to gather quantitative data on students' perceptions. Third, interview participants were selected, and in-depth interviews were conducted to explore students' experiences more comprehensively. Quantitative data were analyzed using descriptive statistics, including mean scores and percentages, to identify overall perception tendencies. Qualitative data were analyzed using thematic analysis, involving data transcription, coding, theme categorization, and interpretation. The integration of quantitative and qualitative findings was conducted during the discussion stage to provide a comprehensive understanding of the effectiveness of mobile-based vocabulary applications in English for Sharia Banking learning.

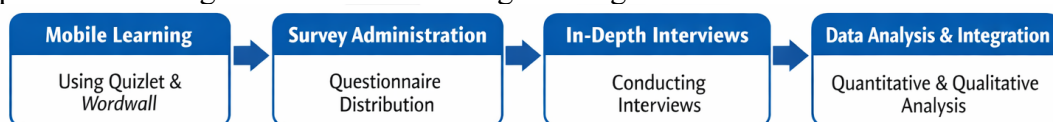


Figure 1. Research Design and Data Collection Procedures

## FINDINGS AND DISCUSSION

### Findings

**RQ1: How do Islamic banking students perceive the use of mobile-based vocabulary learning applications in learning English for Sharia Banking?**

To address the first research question, quantitative data were collected through a Likert-scale questionnaire administered to 58 students. The questionnaire measured students'

perceptions across six indicators related to the use of Quizlet and Wordwall. The results of the descriptive statistical analysis are presented in Table 1.

**Table 1. Students' Perceptions of Mobile-Based Vocabulary Learning Applications**

No.	Perception Indicators	Mean	SD	Interpretation
1	Ease of use	04.25	0,04236111	Very Positive
2	Learning flexibility	04.32	00.58	Very Positive
3	Learning motivation	04.18	0,04444444	Positive
4	Vocabulary mastery	04.28	0,04166667	Very Positive
5	Learning autonomy	04.20	0,04305556	Positive
6	Relevance to Islamic banking context	04.15	0,04583333	Positive
<b>Overall Mean</b>		<b>04.23</b>	<b>0,04305556</b>	<b>Very Positive</b>

As shown in Table 1, the overall mean score of 4.23 indicates that students have a very positive perception of mobile-based vocabulary learning applications. The highest mean score was obtained for learning flexibility ( $M = 4.32$ ), suggesting that students highly value the ability to access vocabulary exercises anytime and anywhere. The second-highest score was found in vocabulary mastery ( $M = 4.28$ ), indicating that students perceive mobile applications as effective tools for learning Islamic banking terminology.

Indicators related to learning autonomy and motivation also received positive evaluations, reflecting students' increased responsibility for managing their own learning processes. Although the relevance to Islamic banking context received a slightly lower mean score compared to other indicators, it remained within the positive category, suggesting that students generally perceive the vocabulary materials as aligned with their academic discipline.

### **RQ2: What benefits do students experience when using mobile-based vocabulary applications in English for Sharia Banking?**

Qualitative data from semi-structured interviews further explain the quantitative findings related to the perceived benefits of mobile-based vocabulary learning. Thematic analysis revealed two dominant sub-themes: enhanced vocabulary retention and support for independent learning.

First, students reported that mobile applications such as Quizlet and Wordwall were highly effective for memorizing Islamic banking vocabulary. Repetitive quizzes, flashcards, and game-based activities helped students remember complex Arabic-English terms commonly used in sharia finance. One student stated:

“Using Quizlet makes it easier to remember terms like murabaha and mudaraba because I can repeat them many times until I remember.”

This qualitative finding supports the high mean score for vocabulary mastery in the quantitative results. Students emphasized that repetition and immediate feedback allowed them to identify mistakes quickly and reinforce correct answers.

Second, students highlighted that mobile-based learning supported learning autonomy. They appreciated being able to practice vocabulary independently outside classroom hours without relying solely on lecturers. Another student explained:

“I can study by myself when I have free time, even at night. I don't feel pressured like in class.”

This finding aligns with the positive quantitative score for learning autonomy ( $M = 4.20$ ), indicating that mobile applications foster self-directed learning behaviors among Islamic banking students.

### **RQ3: What challenges do students face when using mobile-based vocabulary learning applications?**

Despite the predominantly positive perceptions, both quantitative and qualitative findings indicate several challenges in using mobile-based vocabulary applications. From the questionnaire results, the indicator related to contextual relevance received the lowest mean score,

suggesting that students perceived certain limitations in applying vocabulary knowledge to real communication contexts.

Interview data revealed that the main challenge lies in limited contextual usage of vocabulary. Students reported that although they could recognize and memorize Islamic banking terms, they struggled to use them in sentences, discussions, or professional communication scenarios. One student expressed:

“I know the meaning of the words, but when I have to use them in a sentence or explain something, it is still difficult.”

Another challenge mentioned by students was the lack of integrated speaking and writing practice within mobile applications. Students felt that vocabulary learning through games and quizzes was effective at the recognition level but insufficient for developing productive language skills. This finding explains why, despite high scores in vocabulary mastery, the perceived relevance to professional communication did not reach the highest level.

Overall, the mixed-method findings indicate that mobile-based vocabulary learning applications are perceived positively by Islamic banking students, particularly in terms of flexibility, vocabulary retention, and learner autonomy. Quantitative data provide evidence of strong positive perceptions, while qualitative data offer deeper insights into how and why these tools support learning. However, the findings also highlight the need for pedagogical integration, as mobile applications alone are insufficient to develop contextual and communicative competence in English for Sharia Banking.

## **Discussion**

The findings of this study demonstrate that mobile-based vocabulary learning applications play a significant role in supporting English vocabulary acquisition among Islamic banking students. Quantitative results indicate strong positive perceptions, particularly in learning flexibility, vocabulary mastery, and learner autonomy. These findings suggest that digital vocabulary tools such as Quizlet and Wordwall effectively address the needs of higher education students who require flexible and accessible learning resources. The qualitative data further reinforce this conclusion by showing that students perceive these applications as practical and engaging tools for learning specialized Islamic banking terminology.

The high score for learning flexibility confirms previous studies that emphasize the advantages of mobile-assisted language learning (MALL) in enabling learners to access instructional materials beyond classroom boundaries. Research by Kukulka-Hulme and Shield (2008) found that mobile learning environments promote anytime-anywhere learning, which enhances students' exposure to target language input. Similarly, (Klímová, 2021) reported that mobile applications significantly improve learners' engagement and frequency of practice. In the context of this study, flexibility allowed students to repeatedly review complex Islamic banking terms, contributing to more effective vocabulary retention.

Another prominent finding relates to students' perceived improvement in vocabulary mastery. Both quantitative and qualitative data indicate that repetitive exercises, flashcards, and game-based quizzes facilitate memorization of Arabic-English financial terms such as murabaha, mudaraba, and musharaka. This finding aligns with (Mohamed, 2018) theory of vocabulary learning, which emphasizes the importance of repetition and multiple encounters with lexical items. Previous empirical studies, such as those conducted by (Hajja & Hunt, 2021), also reported that mobile vocabulary applications significantly enhance learners' receptive vocabulary knowledge through spaced repetition and immediate feedback.

Learning autonomy emerged as another key theme in this study. Students reported increased responsibility for managing their own learning processes, which was reflected in the positive quantitative scores for autonomy. This finding supports (Gocić & Janković, 2021) concept of learner autonomy, which highlights learners' ability to take control of their own learning. In line with this, a study by (Zaragoza et al., 2019) revealed that mobile learning tools encourage self-directed learning by allowing students to choose when and how they engage with learning materials. For Islamic banking students, this autonomy is particularly valuable, as it enables them to tailor vocabulary learning to their individual academic and professional needs.

Despite these benefits, the findings also reveal notable limitations, particularly regarding the contextual use of vocabulary. While students were able to recognize and recall Islamic banking terms, they reported difficulties in using them in sentences or professional communication. This challenge is consistent with earlier studies by Laufer and Goldstein (2004), who noted that receptive vocabulary knowledge does not automatically translate into productive language use. Similarly, (Sadan et al., 2024a) found that vocabulary learning through digital tools often emphasizes form and meaning recognition rather than contextualized language production.

These findings suggest that mobile-based vocabulary applications should not be used as stand-alone instructional tools. Instead, they need to be pedagogically integrated with classroom activities that promote contextualized language use, such as role-plays, case studies, and simulated professional communication tasks. Previous research by (Sadan et al., 2024b) supports this recommendation, showing that blended learning models combining mobile applications with communicative classroom practices result in more balanced development of receptive and productive language skills. Therefore, in English for Sharia Banking contexts, lecturers are encouraged to complement mobile vocabulary learning with task-based activities that reflect real-world Islamic banking communication.

Overall, this study contributes to the growing body of research on mobile-assisted language learning by providing empirical evidence from a discipline-specific context, namely Islamic banking education. Unlike previous studies that focused on general EFL learners, this research highlights the effectiveness and limitations of mobile vocabulary applications in teaching specialized terminology. The integration of quantitative and qualitative findings offers a more comprehensive understanding of how mobile learning supports vocabulary acquisition while also identifying pedagogical gaps that need to be addressed in future instructional designs.

## CONCLUSION

This study concludes that mobile-based vocabulary applications, particularly Quizlet and Wordwall, provide meaningful support for English vocabulary learning in the English for Sharia Banking course. The integration of quantitative and qualitative findings indicates that students generally hold positive perceptions toward the use of these applications, especially in terms of learning flexibility, vocabulary mastery, and learner autonomy. Mobile applications enable students to repeatedly practice Islamic banking terminology in a flexible and engaging manner, thereby facilitating vocabulary retention and increasing learners' responsibility for their own learning. These findings confirm the potential of mobile-assisted language learning as an effective supplementary tool in English for Specific Purposes (ESP), particularly in sharia finance education.

However, this study also reveals that mobile-based vocabulary learning has limitations, particularly in supporting the productive and contextual use of specialized vocabulary. Although students demonstrated improved recognition and memorization of Islamic banking terms, many still experienced difficulties applying these terms in sentences and professional communication contexts. Therefore, mobile vocabulary applications should be integrated with contextualized classroom activities, such as discussions, simulations, and task-based learning, to strengthen productive language skills. Future research is recommended to involve larger and more diverse participant groups, incorporate experimental designs, and explore the long-term impact of mobile-assisted vocabulary learning on students' communicative competence in Islamic banking contexts.

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