International Journal for Research Trends in Social Science & Humanities
ISSN: 2584-2455
Volume 4, Issue 5
Sep-Oct- 2026, PP 1-21

Mobile Learning Applications and the Development of Undergraduate Students' English Vocabulary in Nigerian Southwestern Universities: A Quantitative Cross-Sectional Study

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Abstract- Mobile learning applications provide flexible opportunities for English vocabulary learning beyond the classroom. This study examined the relationship between mobile learning applications and English vocabulary development among undergraduate students in Southwestern Nigerian universities. The study was anchored on Mobile-Assisted Language Learning (MALL) and adopted a positivist philosophy, deductive approach and quantitative cross-sectional design. Using multistage sampling, the study selected 280 undergraduate students from four public universities namely: Ekiti State University, Obafemi Awolowo University, University of Ibadan; University of Lagos. Data were collected through a structured questionnaire and analysed using descriptive statistics and simple linear regression at 0.05 significance level. Findings showed substantial awareness but less consistent use of mobile learning applications, while students generally perceived positive effects on vocabulary development. Internet

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connectivity and data costs were major challenges. Regression analysis revealed a significant positive relationship between mobile learning applications and vocabulary development ($R = 0.624$, $R^2 = 0.389$, $\beta = 0.624$, $F = 177.02$, $p < 0.001$). The study concludes that mobile learning applications can support vocabulary development when sustained use is enabled by favourable learning conditions.

Keywords- mobile learning applications, English vocabulary development, undergraduate students, Mobile-Assisted Language Learning, Southwestern Nigeria

I. Introduction

The increasing integration of mobile technologies into higher education has expanded opportunities for language learning beyond conventional classroom settings. Mobile learning applications provide learners with portable and flexible access to vocabulary resources, interactive exercises, pronunciation support and repeated exposure to English. However, the educational value of these applications depends not simply on their availability but on students' awareness, patterns of use and capacity to engage with them meaningfully. Studies have consequently shifted from viewing mobile devices merely as technological tools to examining how their pedagogical affordances can support language development (Kim & Kwon, 2012; Gafni et al., 2017; Chen, 2023).

Vocabulary is particularly amenable to mobile-assisted learning because vocabulary development requires repeated encounters, retrieval and contextualised use. Empirical studies have reported positive vocabulary outcomes from mobile applications, including improved vocabulary acquisition and enhancement among English learners (Rezaei et al., 2014; Govindasamy et al., 2019; Hao et al., 2019). More recent evidence similarly suggests that mobile applications can facilitate vocabulary learning and broader English proficiency, although the effectiveness of such applications varies according to application design, learner engagement and instructional context (Poláková & Klímová, 2022; Alqarni, 2024; Kayra, 2024). Thus, the presence of a mobile application should not be equated automatically with vocabulary development.

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The Nigerian context presents a further dimension to this issue. Mobile technologies are increasingly incorporated into university learning, but evidence indicates that students' use of mobile devices does not necessarily translate uniformly into educational engagement or achievement (Esechie et al., 2022; Olalere & Soyemi, 2022). In Southwestern Nigeria, recent studies have examined mobile technology in areas such as academic engagement and phonology learning, demonstrating growing interest in mobile-assisted language education (Okoh et al., 2025). However, evidence specifically concerning undergraduate students' awareness and use of mobile learning applications for English vocabulary development remains limited. This gap is important because students may have access to mobile technologies while differing considerably in their awareness, usage patterns, perceptions of learning benefits and experiences of technological or pedagogical constraints. Therefore, examining these dimensions together can provide a more nuanced understanding of the relationship between mobile learning applications and English vocabulary development among undergraduates in Nigerian Southwestern universities.

1. Statement of the Problem

Despite the growing availability of mobile technologies in higher education, undergraduate students may not consistently exploit mobile learning applications for developing English vocabulary. This is significant because inadequate vocabulary can constrain students' ability to comprehend academic materials, communicate effectively and participate fully in university learning. Previous studies have demonstrated that mobile applications can support vocabulary acquisition through repeated exposure, interactive activities and flexible learning opportunities (Rezaei et al., 2014; Govindasamy et al., 2019; Poláková & Klímová, 2022). Other studies have examined mobile learning in relation to academic engagement, English proficiency and language learning in different contexts (Gafni et al., 2017; Olalere & Soyemi, 2022; Alqarni, 2024). However, existing evidence provides limited empirical understanding of undergraduate students' awareness and extent of use of mobile learning applications, their perceived vocabulary-development benefits and the challenges affecting their use in Nigerian Southwestern universities. This study therefore addresses this gap by examining these dimensions and statistically determining the relationship between mobile learning application use and English vocabulary development among undergraduate students in the region.

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2. Objectives of the Study

The primary objective of this study is to examine the relationship between mobile learning applications and the development of English vocabulary among undergraduate students in Nigerian Southwestern universities. The specific objectives of this study are to:

- examine the level of awareness of mobile learning applications among undergraduate students in Nigerian Southwestern universities.
- examine the extent of use of mobile learning applications among undergraduate students in Nigerian Southwestern universities.
- examine undergraduate students' perceptions of the impact of mobile learning applications on the development of their English vocabulary.
- identify the challenges encountered by undergraduate students in using mobile learning applications for English vocabulary development.

3. Hypothesis

- **H01:** There is no significant relationship between mobile learning applications and English vocabulary development among undergraduate students in Southwestern University.
- **H11:** There is a significant relationship between mobile learning applications and English vocabulary development among undergraduate students in Southwestern University.

II. Literature Review

1. The Concept of Vocabulary Development

Vocabulary development extends beyond the accumulation of word meanings to the gradual expansion of learners' ability to recognise, understand, retrieve and appropriately use words in different contexts. Rezaei et al. (2014) demonstrate that vocabulary acquisition involves processes through which repeated interaction with lexical items can strengthen learning, while Govindasamy et al. (2019) emphasise vocabulary enhancement as an outcome of sustained learning engagement. This suggests that vocabulary development is better understood as a cumulative process than as a discrete learning event. Importantly, knowing a word involves more than

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recognising its definition; learners also require knowledge of its form, meaning, usage and contextual relationships. Mobile-assisted vocabulary studies further indicate that repeated exposure and interactive learning can support this development (Hao et al., 2019; Poláková & Klímová, 2022). However, the reported benefits should not be interpreted as automatic, since vocabulary growth depends on the quality and frequency of learner engagement. Thus, vocabulary development represents both the expansion of lexical knowledge and the increasing ability to deploy that knowledge meaningfully in communication and academic contexts.

2. Mobile Learning Applications and Types

Mobile learning applications are software-based tools accessed through smartphones and other portable devices to facilitate learning through interactive, flexible and often personalised activities. In language education, their value lies not merely in portability but in their capacity to provide repeated practice, multimedia input, immediate feedback and learner-controlled access to language resources (Kim & Kwon, 2012; Gafni et al., 2017). Several types are relevant to English language learning:

Vocabulary learning applications: These focus specifically on learning and practising words through definitions, flashcards, pronunciation, quizzes and spaced repetition. Examples include Quizlet, Memrise and WordUp. Such applications are particularly relevant to vocabulary development because they facilitate repeated exposure and retrieval of lexical items (Rezaei et al., 2014; Govindasamy et al., 2019).

Dictionary and reference applications: These provide definitions, pronunciation, synonyms, antonyms, usage examples and other lexical information. Examples include Oxford Learner's Dictionaries, Cambridge Dictionary and Merriam-Webster. They support learners when encountering unfamiliar words and investigating their meanings and appropriate usage.

Comprehensive language-learning applications: These integrate vocabulary with grammar, reading, listening and speaking activities. Duolingo, Babbel and Busuu are examples. Their value lies in presenting vocabulary within broader language-learning activities rather than treating words entirely as isolated items (Cavus & Ibrahim, 2017).

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Game-based learning applications: These use game-like features such as points, levels, challenges, quizzes and rewards to encourage repeated learning activities. Kahoot!, Quizlet and Wordwall can be used in this way for English vocabulary practice. Their interactive design may increase learner engagement and encourage repeated encounters with vocabulary.

Communication and collaborative applications: These facilitate communication and interaction through text, audio or video. Examples include WhatsApp, Telegram and Microsoft Teams. Although they are not exclusively language-learning applications, they can provide opportunities for students to encounter, discuss and use English vocabulary in authentic communication.

Multimedia-based learning applications: These combine text, audio, images and video to provide multiple forms of language input. YouTube, TED and ELSA Speak are examples that can expose learners to vocabulary through audiovisual and spoken contexts. Such multimodal exposure can complement conventional vocabulary learning by connecting words with pronunciation, visual information and contextual usage.

Importantly, these categories are not mutually exclusive. For example, Quizlet can function as both a vocabulary-learning and game-based application, while Duolingo combines vocabulary, grammar, listening and speaking activities. The distinction is therefore based primarily on the dominant learning function of the application rather than rigid technological boundaries.

3. Mobile Learning Applications and English Vocabulary Development

Mobile learning applications can support vocabulary development by making lexical learning more accessible, repetitive and interactive. Evidence from vocabulary-focused applications indicates that mobile exposure can improve vocabulary acquisition and enhancement (Rezaei et al., 2014; Govindasamy et al., 2019). Similarly, Hao et al. (2019) found that a mobile application could support learners struggling with English vocabulary, while Poláková and Klímová (2022) reported positive learner experiences with mobile vocabulary learning. However, these benefits should not be interpreted as an inherent property of mobile technology. Alqarni (2024) indicates that mobile-assisted learning can contribute to vocabulary and grammar development, but outcomes

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remain dependent on how learners engage with the technology. Likewise, Gafni et al. (2017) suggest that mobile applications create useful opportunities for language learning, rather than guaranteeing learning gains. The critical issue, therefore, is not simply whether students possess vocabulary applications, but whether they use them frequently, purposefully and sufficiently to support retention and productive use of new vocabulary.

4. Theoretical Framework: Mobile-Assisted Language Learning (MALL)

Mobile-Assisted Language Learning (MALL) provides a useful framework for explaining how mobile technologies can facilitate language learning beyond conventional classroom settings. Kukulska-Hulme and Shield (2008) conceptualise MALL as an extension of computer-assisted language learning that emphasises mobility, interaction and collaboration.

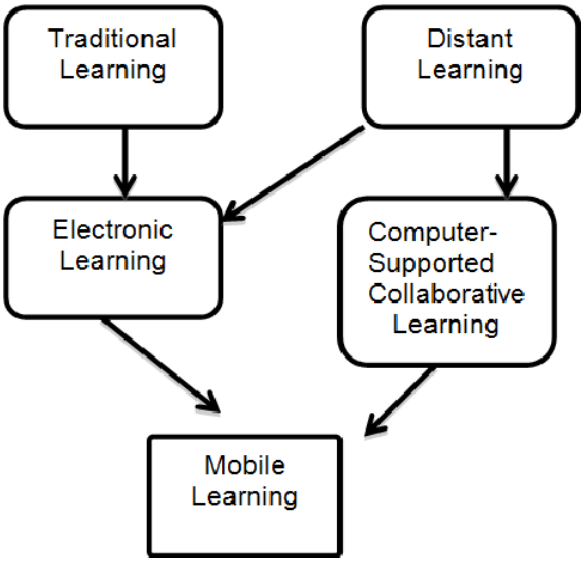


Figure 1: Evolution of the Learning Models

Source: Osifo and Radwan (2014).

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Similarly, Kukulska-Hulme (2009) argues that mobile technologies alter the conditions under which language learning occurs by enabling learners to access resources across different locations and times. The evolution from traditional learning through E-learning and computer-supported collaborative learning to mobile learning further illustrates this technological progression (Osifo & Radwan, 2014).

The MALL perspective extends beyond technological access to consider how learners engage with mobile technologies. Stockwell (2007) demonstrates that convenience, accessibility and learning preferences influence actual mobile use, suggesting that availability alone does not ensure sustained engagement. This distinction is relevant to the present study because students may be aware of mobile learning applications without using them consistently for vocabulary development. Viberg et al. (2020) further associate mobile language learning with self-regulated learning, highlighting learners' responsibility for managing their learning activities independently.

MALL also recognises the social and contextual dimensions of language learning. Kukulska-Hulme and Shield (2008) emphasise interaction and collaboration, while situated learning explains how learning can develop through meaningful contexts and social participation (Lave & Wenger, 1991). Burston (2013) similarly argues that MALL effectiveness depends on how mobile technologies are integrated into learning activities rather than their technological capabilities alone. Kukulska-Hulme (2021) therefore advocates attention to learners' practices and contexts. MALL consequently provides a relevant lens for examining students' awareness, use, perceived benefits and challenges in mobile vocabulary learning.

III. Methodology

Research Philosophy: The study adopted a positivist philosophy because it examined measurable variables and tested the relationship between mobile learning applications and English vocabulary development using statistical methods. Positivism was appropriate for the objective measurement of the study variables (Saunders et al., 2019).

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Research Approach: A deductive approach was adopted because the study tested a hypothesis derived from the theoretical framework. The approach enabled the researchers to examine whether the proposed relationship was supported by the collected data (Saunders et al., 2019).

Research Design: The study employed a quantitative cross-sectional design. The quantitative design enabled numerical measurement and statistical analysis, while the cross-sectional design was appropriate because data were collected from participants at a single point in time.

Population of the Study: The population comprised undergraduate students studying English Language in either Arts or Education across four public universities in Southwestern Nigeria: Ekiti State University, Ado-Ekiti; University of Ibadan, Oyo State; Obafemi Awolowo University, Ile-Ife; and University of Lagos, Lagos State. These students were selected because their programmes directly related to English language learning.

Sampling Procedure and Sample Size: A multistage sampling procedure was used. The four universities were first selected to provide institutional representation across Southwestern Nigeria. Eligible undergraduate English Language students in Arts and Education were then identified, after which 70 students were selected from each university, giving a total sample of 280 respondents. Equal allocation ensured that each selected university was adequately represented.

Research Instrument: A structured questionnaire was used because it enabled standardised collection of quantitative data from a relatively large sample. The items measured students' awareness, use, perceptions of vocabulary development and challenges associated with mobile learning applications.

Method of Data Collection: The questionnaires were physically administered to the selected students. Direct administration facilitated access to participants, clarification of instructions and retrieval of completed questionnaires.

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Method of Data Analysis: Data were analysed using descriptive and inferential statistics. Frequencies and percentages summarised categorical responses, while mean and standard deviation summarised scaled responses and addressed the objectives. Regression analysis was used to test the hypothesis on the relationship between mobile learning applications and English vocabulary development at the 0.05 significance level.

Ethical Considerations: Participation was voluntary and based on informed consent. Participants were informed about the study's purpose and their right to withdraw. Confidentiality and anonymity were maintained, and the data were used solely for academic purposes. Necessary institutional permission was obtained before data collection.

IV. Results

Data were obtained through the physical administration of structured questionnaires to 280 undergraduate students selected from the four participating public universities. Following retrieval and screening of the completed questionnaires, the responses were coded and analysed using descriptive statistics. The analysis first established the respondents' demographic characteristics to provide context for interpreting subsequent findings on mobile learning applications and vocabulary development. The demographic profile considered age, gender, university, programme, level of study and duration of smartphone use. These characteristics are presented in Table 1. The distribution also confirms that the study achieved the planned equal representation of the four universities, while variation across the other characteristics provides a useful basis for understanding the composition of the sample before examining the substantive study variables.

Table 1: Demographic Characteristics of the Respondents

Category	Frequency	Percentage (%)
Age		
16–20 years	63	22.5

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21–25 years	107	38.2
26–30 years	72	25.7
31 years and above	38	13.6
Total	280	100.0
Gender		
Male	121	43.2
Female	159	56.8
Total	280	100.0
University		
Ekiti State University, Ado-Ekiti	70	25.0
Obafemi Awolowo University, Ile-Ife	70	25.0
University of Ibadan	70	25.0
University of Lagos	70	25.0
Total	280	100.0
Programme		
English Language	134	47.9
English Education	146	52.1
Total	280	100.0
Level of Study		
100 Level	51	18.2
200 Level	62	22.1
300 Level	58	20.7
400 Level	57	20.4
500 Level	52	18.6
Total	280	100.0

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Duration of Using a Smartphone		
Less than 1 year	43	15.4
1–3 years	76	27.1
4–6 years	89	31.8
More than 6 years	72	25.7
Total	280	100.0

1. Level of Awareness of Mobile Learning Applications

Table 2: Awareness

Mobile Learning Applications	Yes	No
Duolingo	217 (77.5%)	63 (22.5%)
Quizlet	194 (69.3%)	86 (30.7%)
Memrise	173 (61.8%)	107 (38.2%)
WordUp	149 (53.2%)	131 (46.8%)
Oxford Learner's Dictionaries	231 (82.5%)	49 (17.5%)
Cambridge Dictionary	238 (85.0%)	42 (15.0%)
Merriam-Webster	181 (64.6%)	99 (35.4%)
Busuu	156 (55.7%)	124 (44.3%)
Babbel	137 (48.9%)	143 (51.1%)
ELSA Speak	164 (58.6%)	116 (41.4%)
Other relevant English learning applications	119 (42.5%)	161 (57.5%)

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The findings indicate a generally substantial awareness of mobile learning applications, particularly applications providing dictionary and direct language-learning functions. This pattern suggests that students were more familiar with tools whose purposes were immediately recognisable within their English language studies. The relatively lower awareness of some specialised applications may reflect differences in visibility and students' exposure to particular platforms rather than limited access to mobile technology. This finding is consistent with Kim and Kwon (2012), who observed that the availability of smartphone applications had expanded opportunities for mobile-assisted language learning. Similarly, Gafni et al. (2017) reported that mobile applications provided accessible opportunities for foreign language learning, although learners' familiarity with individual applications varied.

From the perspective of Mobile-Assisted Language Learning (MALL), awareness represents an important preliminary condition for meaningful mobile learning. Kukulska-Hulme and Shield (2008) emphasised that MALL extends language learning through accessible mobile resources, while Stockwell (2007) showed that learners' engagement with mobile language tools depends partly on their awareness and perceptions of their usefulness. The findings therefore suggest that the technological environment for MALL existed among the students, although awareness was not uniformly distributed across applications.

2. Extent of Use of Mobile Learning Applications

Table 3: Extent of Use

Mobile Learning Applications	Always	Often	Sometimes	Never
Duolingo	48 (17.1%)	72 (25.7%)	97 (34.6%)	63 (22.5%)
Quizlet	41 (14.6%)	63 (22.5%)	90 (32.1%)	86 (30.7%)
Memrise	36 (12.9%)	57 (20.4%)	80 (28.6%)	107 (38.2%)

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WordUp	31 (11.1%)	49 (17.5%)	69 (24.6%)	131 (46.8%)
Oxford Learner's Dictionaries	67 (23.9%)	82 (29.3%)	82 (29.3%)	49 (17.5%)
Cambridge Dictionary	73 (26.1%)	86 (30.7%)	79 (28.2%)	42 (15.0%)
Merriam-Webster	39 (13.9%)	58 (20.7%)	84 (30.0%)	99 (35.4%)
Busuu	34 (12.1%)	51 (18.2%)	71 (25.4%)	124 (44.3%)
Babbel	29 (10.4%)	43 (15.4%)	65 (23.2%)	143 (51.1%)
ELSA Speak	38 (13.6%)	55 (19.6%)	71 (25.4%)	116 (41.4%)
Other relevant English learning applications	27 (9.6%)	39 (13.9%)	53 (18.9%)	161 (57.5%)

The findings reveal an important distinction between awareness and sustained use of mobile learning applications. Although several applications were widely recognised, regular use was comparatively less consistent, with students tending to use applications occasionally rather than continuously. Dictionary applications appeared to have stronger practical integration into students' learning routines, whereas some dedicated language-learning applications recorded substantial non-use. This pattern suggests that knowing about an application does not necessarily translate into habitual educational use. Stockwell (2007) similarly found that mobile language learning was shaped by learners' usage choices and practical considerations, while Gafni et al. (2017) noted that access to mobile applications does not automatically ensure sustained language-learning engagement.

This finding supports the MALL perspective that mobility creates opportunities rather than guaranteed learning outcomes. Kukulska-Hulme (2021) argues that MALL

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research should focus on how learners actually use mobile technologies within their particular contexts. Viberg et al. (2020) further associate effective mobile language learning with self-regulated learning. Thus, the present pattern suggests that the educational value of mobile applications depended not merely on their availability or students' awareness, but on the extent to which students incorporated them into regular vocabulary-learning practices.

3. Perceptions of the Impact of Mobile Learning Applications on English Vocabulary Development

Table 4: Perception of the Impact of Mobile Learning Applications

S/N	ITEMS	SA	A	D	SD
1	Mobile learning applications have improved my knowledge of English vocabulary.	119 (42.5%)	103 (36.8%)	38 (13.6%)	20 (7.1%)
2	Mobile learning applications have helped me learn new English words more easily.	126 (45.0%)	98 (35.0%)	37 (13.2%)	19 (6.8%)
3	Mobile learning applications have improved my ability to remember English vocabulary.	111 (39.6%)	107 (38.2%)	42 (15.0%)	20 (7.1%)
4	Mobile learning applications have improved my ability to use new English words correctly.	104 (37.1%)	112 (40.0%)	43 (15.4%)	21 (7.5%)
5	Mobile learning applications have increased my confidence in using English vocabulary.	108 (38.6%)	105 (37.5%)	45 (16.1%)	22 (7.9%)

The findings indicate a broadly positive perception of mobile learning applications as tools for English vocabulary development. The strongest pattern concerned students' perceived ease of learning new words, followed closely by improvements in vocabulary knowledge and retention. This suggests that students primarily valued mobile applications for facilitating repeated exposure and accessible practice, while their

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perceived influence extended to the practical use of vocabulary and confidence. The findings support Rezaei et al. (2014) and Govindasamy et al. (2019), who found that mobile applications could enhance vocabulary acquisition through accessible and repeated learning activities. Similarly, Poláková and Klímová (2022) reported positive experiences with mobile vocabulary learning.

Within the Mobile-Assisted Language Learning (MALL) framework, these perceptions illustrate how mobility can extend vocabulary learning beyond formal classroom settings. Kukulska-Hulme and Shield (2008) emphasised the accessibility and interactive possibilities of mobile language learning, while Stockwell (2007) demonstrated the value of mobile technologies for vocabulary practice. However, the positive perceptions should be interpreted as evidence of perceived benefit rather than direct proof of vocabulary gains, which reinforces the need for the study's inferential analysis.

4. Challenges in Using Mobile Learning Applications on English Vocabulary Development

Table 5: Challenges

S/N	ITEMS	SA	A	D	SD
1	Poor internet connectivity makes it difficult for me to use mobile learning applications.	113 (40.4%)	101 (36.1%)	43 (15.4%)	23 (8.2%)
2	The cost of internet data limits my use of mobile learning applications.	128 (45.7%)	96 (34.3%)	37 (13.2%)	19 (6.8%)
3	Limited access to suitable mobile devices affects my use of mobile learning applications.	87 (31.1%)	94 (33.6%)	67 (23.9%)	32 (11.4%)
4	Technical problems with mobile learning applications make vocabulary learning difficult.	76 (27.1%)	103 (36.8%)	69 (24.6%)	32 (11.4%)

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5	Lack of sufficient time makes it difficult for me to use mobile learning applications regularly.	91 (32.5%)	106 (37.9%)	56 (20.0%)	27 (9.6%)

The findings show that students' use of mobile learning applications was constrained principally by infrastructural and economic conditions. Internet connectivity and the cost of mobile data emerged as particularly important barriers, suggesting that access to mobile learning was shaped not only by students' willingness to use applications but also by the affordability and reliability of the digital environment. Device access, technical difficulties and limited time constituted additional constraints, indicating that mobile learning requires supportive conditions for sustained engagement. These findings correspond with Esechie et al. (2022), who identified contextual and technological factors affecting students' effective use of smartphones for learning in Nigerian public universities. They also complement Burston's (2013) argument that the educational effectiveness of MALL depends on implementation conditions rather than technological availability alone.

From the MALL perspective, the findings reinforce the distinction between technological potential and actual learning practice. Kukulska-Hulme (2021) argues that MALL research must consider learners' contexts and practices, while Viberg et al. (2020) highlight the importance of self-regulation in mobile learning. Thus, the barriers identified suggest that sustained vocabulary learning through mobile applications depended on both learner engagement and the availability of enabling technological and economic conditions.

5. Research Hypotheses

- **H01:** There is no significant relationship between mobile learning applications and English vocabulary development among undergraduate students in Southwestern University.
- **H11:** There is a significant relationship between mobile learning applications and English vocabulary development among undergraduate students in Southwestern University.

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A simple linear regression analysis was conducted to determine whether mobile learning applications significantly predicted English vocabulary development among the respondents.

Table 5: Simple Linear Regression Analysis of Mobile Learning Applications and English Vocabulary Development

Model	R	R^2	Adjusted R^2	F	Sig.
1	0.624	0.389	0.387	177.02	<0.001

Coefficients

Predictor	B	Std. Error	Beta (β)	t	Sig.
Constant	1.184	0.176		6.73	<0.001
Mobile learning applications	0.681	0.051	0.624	13.31	<0.001

Dependent variable: *English vocabulary development.*

The regression result indicates a positive and statistically significant relationship between mobile learning applications and English vocabulary development, $\beta = 0.624$, $p < 0.001$. The model explained approximately 38.9% of the variation in vocabulary development, indicating a meaningful contribution of mobile learning applications. Since the significance value was below 0.05, the null hypothesis was rejected and the alternative hypothesis was supported.

The finding is consistent with Rezaei et al. (2014), Govindasamy et al. (2019) and Poláková and Klímová (2022), who reported positive associations between mobile-assisted learning and vocabulary development. From the MALL perspective, the result supports the view that mobile technologies can extend opportunities for language practice beyond conventional classroom settings (Kukulska-Hulme & Shield, 2008). However, the explained variance also indicates that vocabulary development was influenced by factors beyond mobile learning applications, consistent with Stockwell's (2007) emphasis on learner engagement and usage patterns.

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V. Conclusion

This study concludes that mobile learning applications constituted a relevant resource for English vocabulary development among undergraduate students in Nigerian Southwestern universities. Students demonstrated substantial awareness of several mobile learning applications, although awareness did not consistently translate into regular use. Their perceptions were generally positive, particularly regarding learning new words, vocabulary retention and confidence in using English. However, infrastructural, economic and practical challenges, especially internet connectivity, data costs and limited time, constrained sustained engagement. The regression analysis further indicated a significant positive relationship between mobile learning applications and English vocabulary development, suggesting that greater engagement with mobile learning applications was associated with better perceived vocabulary development. Overall, the findings reinforce the relevance of Mobile-Assisted Language Learning as a framework for understanding technology-supported vocabulary learning, while highlighting the importance of learner engagement and supportive technological conditions.

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