

**UNDERGRADUATES' PERSPECTIVES AND ENGAGEMENT WITH
THE USE OF WHATSAPP FOR LEARNING IN KWARA STATE**

BY

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Abstract

This study examined undergraduates' perspectives and engagement with the use of WhatsApp for learning in Kwara State. The increasing adoption of social media in education necessitates understanding how students perceive and utilize WhatsApp as an academic tool. A descriptive survey research design was adopted. The population comprised all undergraduates in Federal and State universities in Kwara State, while a sample of 382 students was selected using stratified random sampling and proportional allocation based on Israel's (2013) model. A researcher-designed questionnaire validated by experts in Educational Technology served as the instrument for data collection. The reliability indices obtained through Cronbach Alpha were 0.74 for perceived usefulness and 0.79 for engagement, indicating high

internal consistency. The study was guided by two research questions and two hypotheses, which were tested using independent t-test statistics at 0.05 significance level, while descriptive statistics (mean, frequency, percentages) were used to answer the research questions. Findings revealed that undergraduates have a positive perception of WhatsApp's usefulness for learning (grand mean = 3.34) and demonstrated high engagement with the platform for academic activities. Results of hypothesis testing showed no significant difference between male and female undergraduates in both their perspectives and engagement with WhatsApp for learning ($p > 0.05$). The study concludes that WhatsApp is a widely accepted and effective learning tool among undergraduates. It is recommended that educators integrate WhatsApp into instructional delivery, provide training for effective use, and ensure students have equitable access to digital resources.

Keywords: *WhatsApp, Perception, Engagement, Undergraduates, Learning.*

Introduction

Information and Communication Technology (ICT) has significantly transformed various sectors, with its impact particularly evident in education. In the 21st century, the integration of ICT into education has become a critical factor in driving educational reforms, reshaping traditional teaching and learning approaches. ICT integration in education involves the use of digital tools, technologies, and resources to enhance both teaching and learning processes, improving the overall quality of education. These technologies encompass a broad range of tools, including computers, tablets, smartphones, interactive whiteboards, educational software, online platforms, and the internet. The primary goal of ICT integration is to create a more engaging, interactive, and personalized learning environment for students, while also increasing teaching efficiency and effectiveness for educators through platforms such as social media (Alieto et al., 2024).

According to Ye et al. (2022), social media serves as a platform for building social networks and connections among individuals with shared interests, activities, or backgrounds. It has become an increasingly important source of information, education, and news, especially among younger generations. Common social media platforms include Facebook, YouTube, blogs, Twitter, Myspace, and LinkedIn (Aliyu & Goyal, 2022). Social media enables interaction, content sharing, and collaboration, forming an essential part of modern life, with features such as comment fields that allow users to engage with content. Kandpal et al. (2023) describe social media as a collection of online communication channels dedicated to community-based input, highlighting its growing role in facilitating social interactions and becoming an integral part of everyday activities.

Traditionally, consumers used the internet primarily for passive content consumption reading, watching, and purchasing products. However, platforms such as content-sharing sites, blogs, and social networking sites have transformed social media into an active space for collaboration (Jamil et al., 2022). Jiang et al. (2023) further highlight that social media has revolutionized communication tools in education, making it a key instrument for teaching and learning. With its wide accessibility through the internet, social media platforms facilitate interactions and support educational processes by enhancing communication between students and educators.

A notable platform within this domain is WhatsApp Messenger, a smartphone and web-based application that allows users to exchange information via text, images, videos, and audio messages (Danjuma et al., 2022). WhatsApp has emerged as a valuable tool for immediate communication, reflection, and coordination of both informal and formal learning activities. It serves as a bridge to access educational resources, promotes peer support, fosters on-task behavior, and facilitates

meaningful, context-free learning (Rambe et al., 2020). Furthermore, WhatsApp enhances students' social interaction with their peers and instructors, promoting collaborative learning. The application, which operates on nearly all modern digital devices and operating systems, was introduced in 2010 to facilitate communication and support students in participating actively in education beyond the classroom.

WhatsApp has brought great improvements in communication and entertainment, information, ideas, expression, and interest, where location is not a barrier because of the global connectivity of fibre optics. Its impact is beyond comprehension, because of the social benefits, especially with the fact that it strengthens ties between people and notably becomes a tool for communication among students of higher learning. The favorite in the realm of internet sites is Facebook and WhatsApp as “they are tools for social change and fast exchange of information” (Odili, 2021). Facebook and WhatsApp have become the most popular means of communication, especially amongst the younger generation and students. Daramola (2021) affirmed that WhatsApp could assist introvert students in learning, particularly in a group because it minimizes or eliminates the anxiety associated with asking questions before other co-learners. Following its introduction, WhatsApp was quickly adopted by a great many people around the globe, but primarily as a platform that facilitates communication in social networks. Since its introduction, the application has rapidly changed the way people communicate with one another. For instance, due to its availability and ease of use, it has now become one of the most useful and influential social media tools used by students in higher learning institutions. Apart from its social function which is to provide a direct medium of communication for people, WhatsApp has a tremendous potential in facilitating learning and interaction in higher education (Mwakapina, *et al.*, 2016). Application that can let you communicate and disseminate information to peers, family, colleagues, mates, as so on. usage of WhatsApp and Facebook can be possible through the use of a smartphone, iPhone, laptop, as so on with a network connection.

The general benefits of using WhatsApp instant messaging in the blended mobile lecture are as follows: WhatsApp instant messaging facilitates online collaboration and cooperation between online students connected from school or home in a blended mobile lecture; WhatsApp is a free application that is easy to use; Groups connected to WhatsApp instant messaging can share learning objects easily through comments, texting and messaging. Discussions are related to the course content taught 100% in-class; WhatsApp provides students with the ability to create a class publication and thereby publish their work in the group, Information and knowledge are easily constructed and shared through WhatsApp instant messaging (Wang, *et al.*, 2022). WhatsApp is a mobile application used for instant messaging

purposes to replace normal phone short messages (SMS) because of its capacity to send a large volume of messages and media files, unlike SMS (Kaufmann, & Peil, 2020). Baro *et al.*, (2010) described undergraduates as students in tertiary institutions pursuing their first-degree program in various disciplines. These undergraduates are mostly newbies in these tertiary institutions which have effects on the habit of wanting to constantly log in to face book and WhatsApp sites which may affect them negatively in their academic pursuit to the extent of finding it difficult to concentrate and study effectively, from another perspective.

Keerio *et al.*, (2022) asserted that some of these students have become smart because of the information they get from these sites, while some have become academically poor, Which is why measuring perception and impact of social media on this Undergraduate is a necessity to understand their various perspectives, in the same vein students equally use WhatsApp to communicate with classmates, friends, lecturers, and family members on daily basis. Users often share various clips such as vodcast, video links and podcast episodes or links via WhatsApp. When someone discovers an interesting podcast that is educational based, they can easily share it with their contacts or in group chats. This helps in the promotion of podcasts and can lead to wider listenership.

The perception of undergraduates on the integration of social media into the teaching and learning process will go a long way in its easy adoption. Perceived usefulness, according to Davis (1989) is the degree to which a person believes that using a particular system would enhance his or her job performance while perceived ease of use is the degree to which a person believes that using a particular system would be free from Information of social media has transformed the way students interact, communicate, and learn. Ultimately, gaining insights into students' attitudes toward social media helps inform strategies for responsible and effective integration of these technologies into education. Ajzen (2005) defines reaction as the accumulation of information about an object, person, situation, or experience a disposition to act positively or negatively toward it. This attitude significantly influences subsequent behaviors. The integration of podcasts into undergraduate experiences has prompted varied reactions among students. WhatsApp, identified by Udenze and Oshionebo (2020), serves as a ubiquitous tool for real-time connectivity and collaboration among peers, aligning with the fast-paced academic environment. WhatsApp, evoke a blend of enthusiasm and skepticism among undergraduates.

Baguma *et al.* (2019) note their value as flexible supplements to traditional learning, enabling students to access educational content conveniently during commutes or downtime. However, concerns, as highlighted by Susilo (2014), center on concentration and the perceived lack of visual aids or interactivity

compared to conventional learning resources. Thus, undergraduates' reactions to podcasts are multifaceted. While WhatsApp, is widely embraced for its practicality in communication and collaboration, podcasts provoke diverse responses, with some students viewing them as beneficial learning tools while others question their efficacy in academic settings. The intersection of technology and education continues to shape the undergraduate experience, reflecting the evolving landscape of how students engage with information and connect with their peers.

The use of WhatsApp in schools can facilitate instant messaging and real-time communication, which can be beneficial for learning. However, without formal policies adhering to the boundaries of personal/workplace communications, there can be issues related to data security and privacy. WhatsApp Communities, a feature introduced in 2022, presents an organized communication system for large organizations, including educational institutions, allowing them to manage their WhatsApp groups in one place. This could potentially enhance the use of WhatsApp for learning in both public and private schools

The influence of gender on the use of podcast and WhatsApp for learning among undergraduates appears to be multifaceted and somewhat inconsistent across different studies. Research on the use of podcasts for learning has shown mixed results. Some studies found no significant gender difference in attitudes towards the use of podcasts (Pal, & Patra, 2021). However, another study reported that females had a more positive attitude towards the use of podcasts than males (Craig *et al.*, 2023). This suggests that while both genders generally have a positive attitude towards using podcasts for learning, females might be more receptive to this form of learning tool. As for the use of WhatsApp for learning, studies have also shown mixed results. One study found that WhatsApp improved writing performance across genders, but more so for female students than their male counterparts (Ebadi, *et al.*, 2023).

Mohammed *et al.*, (2023) reported a significant difference in the mean retention scores of male and female students taught using the WhatsApp platform, but it did not specify which gender had higher scores. Yet another study found no significant difference in the mean achievement scores of male and female students taught using WhatsApp. These findings suggest that while WhatsApp can be an effective tool for learning, its impact may vary between male and female students. It's important to note that these findings are not definitive and may be influenced by various factors, such as the specific context of the study, the subject matter being taught, and the teaching methods used.

Attitudes and behaviors towards technology can be influenced by cultural, social, and individual factors, which can also vary between genders. In conclusion, while there is evidence to suggest that gender can influence the use of podcast and WhatsApp for learning among undergraduates, the nature and extent of this influence can vary and is likely influenced by a range of factors. More research is

needed to fully understand these dynamics and to develop strategies to effectively use these tools to enhance learning for all students, regardless of gender.

Statement of the Problem

The integration of digital tools such as WhatsApp into educational settings has become increasingly prevalent, yet there remains a significant gap in understanding how undergraduate students in Kwara State perceive and utilize this technology for learning purposes. Therefore, this study investigates the Undergraduates' Perspectives and Engagement with the Use of WhatsApp for Learning in Kwara State.

Purpose of the Study

The main purpose of this study is to Undergraduates' Perspectives and Engagement with the Use of WhatsApp for Learning in Kwara state. Specifically, the study;

1. investigated undergraduates' perspectives of the usefulness of WhatsApp for learning;
2. determined the engagement of undergraduates with the use of WhatsApp for learning;
3. Examined the influence of male and female undergraduates on their perspectives on their usefulness of WhatsApp for learning and
4. Examined the influence of male and female undergraduates on their Engagement with the use of WhatsApp for learning

Hypotheses Testing

- H₀₁: There is no significant difference between the responses of male and female undergraduates on their perspectives of WhatsApp for learning.
- H₀₂: There is no significant difference between the responses of male and female undergraduates in their engagement with the use of WhatsApp for learning.

Methodology

This study adopted descriptive research of the survey type. The population for this study consists of undergraduates in all the Universities in Kwara State, Nigeria. The target population includes all Federal and State-owned universities within the state. The Universities were limited to Federal and State institutions. The target sample size was determined from the total number of university students in Nigeria during the 2022/2023 academic session. A stratified random sampling technique were used to select University students, stratified by gender, from the selected Universities to obtain data for the analysis. This approach ensures that both male and female students are adequately represented in the study, thereby providing a comprehensive understanding of gender-based differences. The stratification by gender was implemented across departments within each selected University. Additionally, a proportional sampling technique, using Israel's Model (2013), were employed to determine the appropriate sample size for the study based on the

population of each university. In all, the researcher was administering 382 copies of questionnaire to the Undergraduates in University A and B. The instrument for data collection is a researcher-designed questionnaire. Items were selected based on their relevance to 'perceived usefulness', and reaction towards the use of Podcast for learning'. The response mode for the items were four-point Likert type rating of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

The instrument for this study was validated by five lecturers from the Department of Educational Technology, University of Ilorin, to determine the relevance and suitability of the instrument. They considered its language clarity to the respondents, content coverage in terms of adequacy and its relevance to the stated objectives. Their comments, suggestions and corrections were used to produce a final draft of the instrument. To determine the reliability of the instrument, 50 copies of the instruments were pilot-tested on undergraduates' students from University C which is outside the sample location for the study. Out of the 50 copies of questionnaire administered for the trial testing, 38 were returned as properly filled and thus were used for the reliability analysis. Cronbach Alpha statistical tool was used to establish the reliability coefficient of the instrument section by section at 0.05 levels of significance.

The coefficient was 0.74 on the Perceived usefulness and 0.79 on the reaction of undergraduate towards WhatsApp. All the results showed high internal consistencies of the items in the research instruments since it is the general rule in research that reliability should be at least 0.70.

The analysis of data gathered through the questionnaire were done using descriptive and inferential statistics. Percentages, frequency and charts were used to answer all the research questions. Hypotheses were tested using the t-test to determine significant differences between male and female undergraduates. All hypotheses were tested at 0.05 levels of significance with the aid of Statistical Package for Social Science (SPSS) version 23.0.

Results

Demographic Information

This section presents the summary of the major attributes of the respondents in the study. In order to guarantee the information collected and the accuracy, questionnaire was administered on the respondents. The demographic information of the respondents and the results of the analysis.

Figure 1: Demographic Information by Gender

Gender	Frequency	Percentage
Male	207	54.18%
Female	175	45.81%
Total	382	100.00%

Table 2 presents the demographic information of the participants by gender. Out of a total of 382 respondents, 207 are male, representing 54.18% of the sample. Female participants' number 175, making up 45.81% of the total. This distribution indicates a slightly higher representation of male respondents in the study compared to female respondents.

Demographic Information by Gender

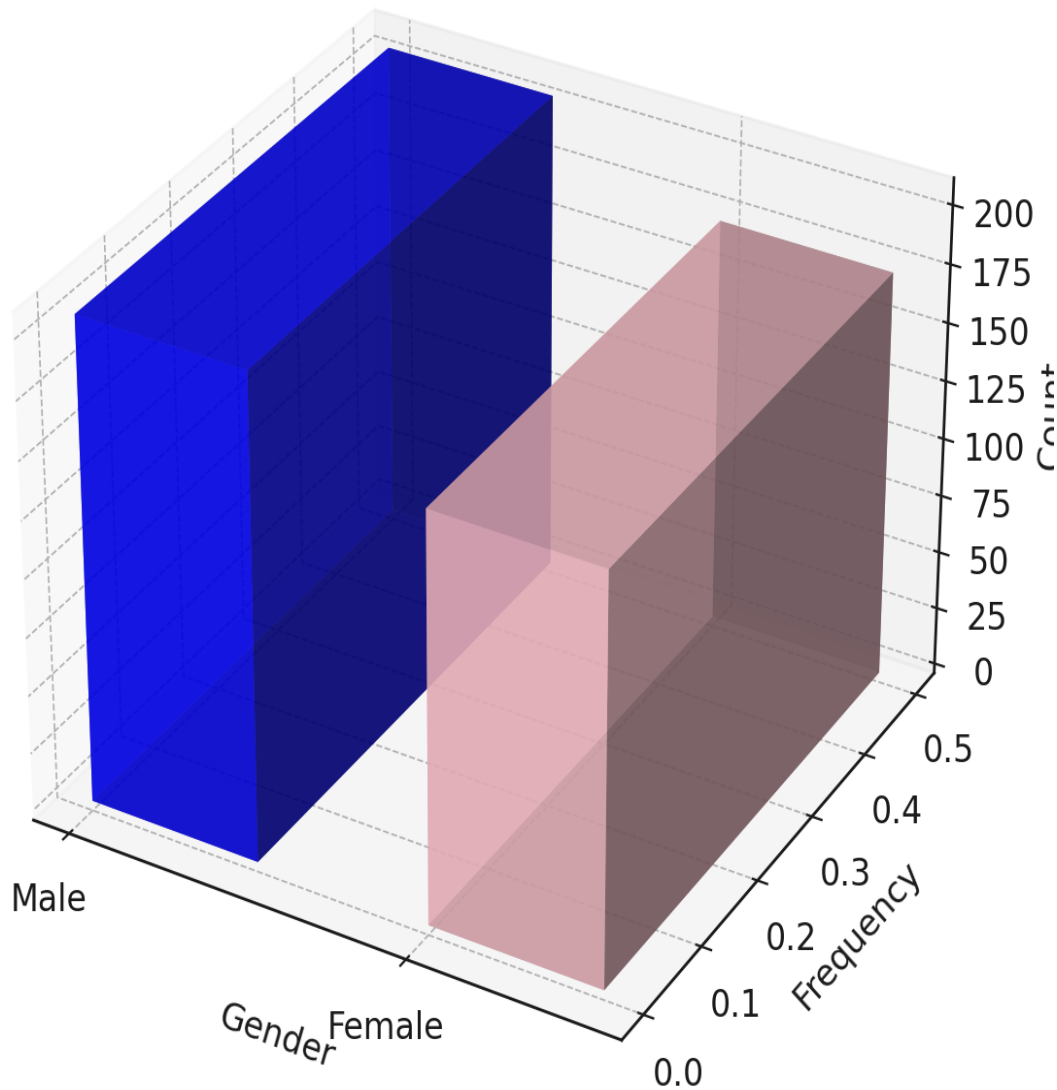


Figure 1: Demographic information of the Respondents by Gender
The 3D bar chart visually represents the gender distribution of the study participants, highlighting the demographic breakdown. According to the data, out of 382 respondents, 207 are male, accounting for 54.18% of the total sample, while 175 are female, making up 45.81%.

Research One: What is the undergraduates' perspectives of the usefulness of WhatsApp for learning?

Table 2: undergraduates' perspectives of the usefulness of WhatsApp for learning

S/N	Perceptions	Mean (\bar{x})	Std. Dev
1	WhatsApp is a useful tool for enhancing my learning experience.	3.51	0.71
2	I regularly use WhatsApp as a learning resource	3.20	0.58
3	WhatsApp helps me communicate and collaborate with classmates for academic purposes	3.23	0.59
4	WhatsApp facilitates quick access to study materials and resources.	3.61	0.93
5	WhatsApp discussions with peers and instructors have a positive impact on my understanding of course content.	3.38	0.56
6	I believe WhatsApp is a valuable tool for enhancing my learning experience.	3.50	0.70
7	WhatsApp helps me stay updated with course announcements and schedules.	2.84	0.43
8	I find WhatsApp useful for clarifying doubts with instructors outside of class hours.	3.40	0.65
9	Using WhatsApp enhances my understanding of course materials.	3.30	0.61
10	WhatsApp is an effective tool for collaboration with classmates for academic purposes	3.43	0.64
Grand mean		3.34	

The results presented in Table 2 reflect undergraduates' perspectives on the usefulness of WhatsApp for learning. With a grand mean of 3.34, it is evident that undergraduates generally perceive WhatsApp as a beneficial tool for their academic activities. Specifically, students view WhatsApp as helpful in enhancing their learning experience (Mean = 3.51), facilitating communication and collaboration with classmates (Mean = 3.23), and providing quick access to study materials (Mean = 3.61). Additionally, WhatsApp is valued for its ability to foster discussions with peers and instructors, which positively impacts students' understanding of course content (Mean = 3.38).

Although WhatsApp is considered effective for various academic purposes, its perceived usefulness in staying updated with course announcements and schedules is lower (Mean = 2.84). Despite this, the overall feedback suggests that undergraduates appreciate WhatsApp as a valuable resource for both communication and academic collaboration, supporting its integration into their learning process.

Research Question Two: What is the engagement of undergraduates with the use of WhatsApp for learning?

Table 2: Engagement of Undergraduates with the Use of Whatsapp for Learning

S/N	Items	Mean	SD
1	Using WhatsApp for learning enhances my understanding of course materials	3.12	.680
2	Podcasts enhance my understanding of course materials.	3.20	.626
3	WhatsApp facilitates timely communication with my classmates and instructors.	3.22	.614
4	I actively participate in group discussions and activities on WhatsApp.	3.25	.576
5	I am satisfied with the use of WhatsApp as a learning tool	3.41	.667
6	I have a positive reaction towards using WhatsApp for educational purposes.	3.20	0.63
7	I have a favourable opinion about integrating WhatsApp into our coursework.	3.18	0.59
8	Using WhatsApp for learning is convenient for me.	3.16	0.52
9	I believe WhatsApp enhances my learning experience.	3.11	0.44
10	I feel positively about using WhatsApp for learning purposes.	3.22	.614

Participation i (Mean = 3.12) and for timely communication with classmates and instructors (Mean = 3.22). for

Table 2 provides insight into the engagement of undergraduates with the use of WhatsApp for learning. The data indicates that students are actively involved in utilizing WhatsApp for academic purposes, with a grand mean reflecting a generally positive engagement. Specifically, undergraduates frequently use WhatsApp to enhance their understanding of course materials

Learning Participation in group discussions and activities on WhatsApp also stands out, with a mean of 3.25, demonstrating students' active involvement in collaborative learning through the platform. Additionally, undergraduates' express

satisfaction with WhatsApp as a learning tool (Mean = 3.41), and they hold a positive reaction towards its integration into their coursework (Mean = 3.20). Convenience is another aspect where WhatsApp is appreciated (Mean = 3.16), highlighting its suitability for academic engagement outside the traditional classroom. Overall, the findings reveal that undergraduates are meaningfully engaged with WhatsApp, viewing it as a convenient and effective platform for enhancing their learning experience and facilitating collaboration with peers and instructors.

Hypotheses Testing

H₀₁: There is no significant influence of male and female undergraduates on their perspectives on the usefulness of WhatsApp for learning

Table 3: Significant Influence of Male and Female Undergraduates on their Perspectives on their Usefulness of WhatsApp for Learning

Gender	No	\bar{X}	SD	df	t	Sig. (2-tailed)
Male	207	1.53	0.15	380	.59	.57
Female	175	4.76	2.93			
Total	382					

The hypothesis H₀₁, which states that

there is no significant influence of male and female undergraduates on their perspectives on the usefulness of WhatsApp for learning, was tested using an independent sample t-test. The results indicated that male undergraduates had a mean score of 1.53 with a standard deviation of 0.15, while female undergraduates had a mean score of 4.76 with a standard deviation of 2.93. The t-value was 0.59, with a degree of freedom of 380, and the p-value was 0.57. Since the p-value is greater than the 0.05 significance level, the null hypothesis cannot be rejected. Therefore, there is no statistically significant difference between male and female undergraduates in their perspectives on the usefulness of WhatsApp for learning. Gender does not appear to significantly influence their views on WhatsApp as a learning tool.

H₀₂: There is no significant difference between male and female undergraduates in their Engagement with WhatsApp for learning.

Table 4: Significant Influence of Male and Female Undergraduates on their Engagement with WhatsApp for Learning

Gender	No	\bar{X}	SD	df	t	Sig. (2-tailed)
Male	207	1.74	0.17	380	.68	.76
Female	175	4.61	3.11			

To test the hypothesis H₀₂,

Total	382
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which states that

there is no significant difference between male and female undergraduates in their engagement with WhatsApp for learning, an independent sample t-test was conducted. The results showed that male undergraduates had a mean engagement score of 1.74 with a standard deviation of 0.17, while female undergraduates had a mean score of 4.61 with a standard deviation of 3.11. The t-value was 0.68, with a degree of freedom of 380, and the p-value was 0.76. Since the p-value of 0.76 is greater than the 0.05 threshold for statistical significance, the null hypothesis is retained. This indicates that there is no statistically significant difference between male and female undergraduates in their engagement with WhatsApp for learning. In other words, gender does not significantly affect how undergraduates engage with WhatsApp as a learning tool.

Discussion

The findings of this study demonstrate that students view WhatsApp as a valuable tool for learning, aligning with previous research that emphasizes its role in enhancing student engagement and communication. For example, Sadaf et al. (2016) discovered that students used WhatsApp for collaborative learning, which promoted a sense of community and improved academic performance. Additionally, this study found a generally positive response among undergraduates towards using WhatsApp for educational purposes. This is consistent with Alharbi and Waleed's (2020) findings, which highlighted students' appreciation of WhatsApp's accessibility and immediacy, allowing for timely discussions and easy sharing of resources. Furthermore, the results show that gender does not significantly influence undergraduates' perceptions of WhatsApp's usefulness for learning. This is in line with the research of Al-Jabri and Al-Busaidi (2018), who also found no significant gender differences in students' perceptions of social media tools in educational settings. Similarly, the study indicates that gender does not significantly affect students' engagement with WhatsApp for learning, suggesting that both male and female students have similar reactions to the technology. These findings support Tufekci et al. (2020), who noted that the educational benefits of WhatsApp are equally recognized by both genders, reinforcing its potential as a universally effective educational resource.

Conclusion

This study established that undergraduate students in Kwara State hold positive perceptions of WhatsApp as a useful tool for academic learning and demonstrate active engagement with the platform for communication, collaboration, and access to study resources. The analysis revealed that WhatsApp enhances students'

understanding of course materials, supports timely communication with peers and instructors, and facilitates meaningful academic discussions. Furthermore, the findings showed no significant gender differences in students' perceptions or engagement levels, indicating that WhatsApp is an inclusive and universally accepted learning tool among male and female undergraduates alike. Overall, the study concludes that WhatsApp possesses strong potential to support technology-enhanced learning in higher education.

Recommendations

1. **Integrate WhatsApp into Teaching Strategies:**
Lecturers should adopt WhatsApp groups as supplemental learning spaces for sharing materials, facilitating discussions, and providing quick academic support.
2. **Training and Digital Literacy Workshops:**
Institutions should organize training for both students and lecturers on best practices for using WhatsApp for academic purposes, digital etiquette, and information management.
3. **Develop Institutional Guidelines:**
Universities should create policies that guide the professional and secure use of WhatsApp for learning to protect privacy and ensure responsible digital communication.
4. **Promote Equitable Access to Digital Tools:**
Institutions should ensure that all students have access to smartphones and stable internet connectivity to fully participate in WhatsApp-based learning activities.
5. **Enhance Academic Engagement:**
Lecturers should design interactive learning activities, such as quizzes, mini-lectures, and collaborative tasks, to maximize student engagement via WhatsApp.
6. **Continuous Evaluation:**
Universities should periodically review the effectiveness of WhatsApp-supported learning to identify challenges, track progress, and improve instructional delivery.

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