

## DIGITAL LITERACY SKILLS AS CORRELATE OF WHATSAPP USAGE AMONG UNDERGRADUATES IN A NIGERIAN UNIVERSITY

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### Abstract

*The study investigated the influence of digital literacy skills on undergraduates' use of WhatsApp in a Nigerian university. The study specifically sought to identify the digital literacy skills required to use WhatsApp by undergraduates; digital literacy skills possessed by undergraduates, purpose of WhatsApp usage and frequency of WhatsApp usage by undergraduates. The descriptive survey research design was adopted for the study, while University of Ilorin undergraduates were purposively chosen for the study. The stratified sampling technique was used to select 200 and 400 level students from six (6) departments in the university. The sample size for the study was 340 undergraduates. Questionnaire was used for data collection. Data analysis was done using descriptive statistics. The findings revealed that document creating and editing skills, web search skills, privacy skills, and internet usage skills were requisites for WhatsApp usage by undergraduates. The study identified computer literacy skills, web search skills, document creating and online editing skills, information retrieval skills and online/internet safety skills as the digital literacy skills possessed by the undergraduates. It was further revealed that most of the undergraduates use WhatsApp for academic related activities, project collaborations, social interaction, video/audio call meetings, and advertisement. Also, most of the undergraduates use WhatsApp on a regular basis for academic and non-academic purposes. It was recommended that universities should prioritise the development of digital literacy skills among undergraduates through workshops and coursework teaching on responsible use of digital tools such as the WhatsApp.*

**Keywords:** Digital literacy, digital skills, students, social media, WhatsApp

### Introduction

Massive societal changes have occurred over the last several decades as a result of advances in information, communication, and knowledge acquisition. These innovations have significantly impacted the methods by which we access, manage, utilise, and transform information (Allen, Belfi & Borghans, 2020). Therefore, it is imperative to have relevant skills and abilities in order to guarantee efficient communication in the digital environment. Essential skills for digital communication encompass digital literacy skills, digital content creation, and Information and Communication Technology (ICT). Learning strategies are also supported by these skills, as highlighted by Esteves and Whitten (2011), Recio, Silva and Marchant (2020), and Indah, Budhiningrum and Afifi (2022). Digital literacy skills

refer to the capacity to efficiently seek out, produce, consume, assess, and disseminate information through digital media and technology. These skills comprise a number of components, such as the ability to think critically and creatively, edit, assess information, ensure information security, and utilise digital platforms efficiently. Technology and the internet have become integral components of modern civilization, exerting a profound influence on multiple facets of existence (Pérez & Nagata, 2019). Therefore, possessing digital literacy skills is essential for all individuals who use digital platforms.

Digital literacy skills can be developed through various means, such as digital writing, which allows students to engage with digital media and develop their digital literacy skills (Pérez & Nagata, 2019). Acquiring digital literacy skills require a combination of factors which include: understanding the importance of digital literacy, assessing skills already possessed, taking on either formal or informal education, online resources utilisation, practicing and applying skills acquired, staying updated with technology trends, learning from others, collaborating, reflecting and adapting to technological developments (Mohammadyari & Singh, 2015; Mesenya, 2021; Tomczyk, 2020). By actively engaging in these strategies, individuals can acquire and enhance their digital literacy skills. These will enable them to effectively navigate and utilise digital technologies for personal and professional purposes.

The importance of digital literacy skills is evident in different fields of study, particularly, education. Digital literacy skills are crucial for effective learning and utilisation of digital technologies. The skills enable students to access and evaluate online resources, communicate and collaborate with peers, and develop critical thinking skills. Digital literacy skills have substantial influence on the talents of different students. This includes improved students' internet self-efficacy skills, online information retrieval and research skills, and building of confidence (Mirza, 2020). In developing countries like Nigeria, South Africa and Kenya; just as it is in more advanced countries, digital literacy skills can contribute to economic development by enabling individuals to effectively use ICT and perform tasks that contribute to the growth of their country.

The pedagogical role of WhatsApp in developing learning skills has been explored in several studies (Yeboah & Ewur, 2014; Kolawole & Mutula, 2017; Ahmed, 2019). Ahmed (2019) investigated the use of WhatsApp as a mobile-assisted language learning application in developing Yemeni EFL learners' reading and writing skills. The study found that participating in a WhatsApp chat group improved students' reading and writing skills. Udenze and Oshionebo (2020) also conducted a study to investigate the use of WhatsApp for collaborative learning among undergraduates. The study employed surveys and focus group discussions, to analyse data from 400 undergraduates. The findings revealed that WhatsApp was perceived as useful and easy to use, and that students incorporated WhatsApp groups for learning and other purposes. In terms of mobile learning, Udenze and Oshionebo (2020) found that WhatsApp was the most suitable social media application for students, with 65% of participants favouring it for mobile learning. Furthermore, Maulina, Geelan, Basri, and Noni (2021) emphasised the positive influence of WhatsApp on students' ability connect with peers anytime and anywhere.

WhatsApp has become a popular communication tool among undergraduates, serving various purposes beyond personal messaging. Some of the common purposes of WhatsApp usage by undergraduates include communication with classmates, lecturers/supervisors, family members and relatives and for advertisements purposes. Aharony and Gazit (2016) consider WhatsApp as a means of maintaining contact with family and friends, obtaining information, and providing entertainment. WhatsApp provides a convenient platform for students to promote events, products, or services to a wide audience, disseminating information to a large group of individuals, and communicating online. WhatsApp is frequently used by undergraduates to share study materials with their peers. Malhotra and Bansal (2017) found that veterinary students extensively and frequently use WhatsApp to share images and videos of important academic information and links to educational websites. Moreover, undergraduates often use WhatsApp for academic purposes, such as engaging in group discussions and contacting lecturers. A study conducted by Gazit, Aharony and Amichai-Hamburger (2019) examined the participation frequency of various social networking sites (SNSs), including WhatsApp, among undergraduate in Israel. These findings revealed WhatsApp as one of the most frequently used social media platforms among university undergraduates. Considering the popularity of WhatsApp, among university students, it is plausible to explore its potential as a valuable tool for educational purposes as well as the digital skills required for effective use.

WhatsApp usage promotes active learning and collaborative learning among undergraduates. WhatsApp is utilised by students for project collaborations because it allows them to communicate, share files, and coordinate their efforts effectively. Aziz et al. (2021) pointed that WhatsApp is beneficial for e-learning due to its simplicity, availability and ease of use for collaborative learning. Gasaymeh's (2017) study among students in Jordanian university also emphasised on the affordability and simplicity. The application allows students to engage in discussions, share resources, and seek clarification on academic topics. Morsidi et al. (2021) study findings show that WhatsApp is regularly used for interaction among students, though its usage for educational purposes is limited. Dahdal (2020) also found that when WhatsApp was used for delivering lectures and assignments, students' participation increased. Nevertheless, some studies including Kibona and Mgaya (2015) and Fori (2016) have revealed that the WhatsApp social media platform is been utilised by students for personal and social interaction.

WhatsApp and similar platforms have been effectively utilised in educational settings for various purpose, such as facilitating online and blended education, providing easy access to educational materials, disseminating administrative information to students, facilitating communication among students and between students and instructors, replacing traditional learning management systems, and motivating students (Alubthane & AlYoussef, 2021; Ajiboye & Jacob, 2024). Some of the key advantages of using WhatsApp in higher education, particularly in developing countries, are its easy affordability and accessibility. WhatsApp can be accessed using smart phones, which are commonly owned by students. This makes it a more cost-effective social media option compared to expensive digital tools (Bere, 2013; Bailey & Nyabola, 2021). It also eliminates the need for expensive infrastructure and ensures that students can easily engage with the platform. As a result,

WhatsApp emerged as a potential social networking tool that can effectively support teaching and learning in higher education.

Possession of digital literacy skills is crucial for students' academic success and future employability. Several studies have highlighted the importance of digital literacy skills in various educational contexts. For example, Asrifan and Dewi (2023) noted that it enables undergraduates to access and utilise online resources, communicate and collaborate with peers, and develop critical thinking skills. However, inadequate acquisition of digital literacy skills has been observed as one of the factors that serve as a barrier to effective learning. Ahmed and Roche (2021) examined the relationship between undergraduates' digital literacy and academic success in an English medium instruction (EMI) University. The study found a positive relationship between digital literacy and academic success, suggesting that undergraduates with higher digital literacy skills are more likely to achieve better academic outcomes. Furthermore, results from previous study (Drake & Reid, 2018; Majapeolo, 2023) have demonstrated that digital literacy skills are not innate. The myth of the digital native suggests that today's undergraduates, who have grown up with technology, are inherently proficient in using digital tools and platforms. This is supported by List (2019). However, research has debunked this myth and highlighted the need for explicit digital literacy education to develop the necessary skills for effective use of technology. Given the importance of digital literacy skills, it is crucial to investigate its relationship with WhatsApp usage among undergraduates. This will help to understand the extent to which undergraduates' digital literacy skills determine the usage of WhatsApp. One of the key skills required for WhatsApp usage by undergraduates is the ability to create and edit online documents. WhatsApp allows users to share files, including documents, presentations, and spreadsheets; and students need to possess basic digital literacy skills to create and edit these documents. Ahmed (2019) found that undergraduates who were proficient in using online document creation tools were more likely to effectively collaborate and share academic resources through WhatsApp. Another crucial skill for using WhatsApp is web search skills. WhatsApp often serves as a platform for sharing information and resources. Therefore, undergraduates need to be able to search for relevant information on the web and evaluate the credibility and reliability of the sources. A study conducted by Pozzi (2015) revealed that undergraduates who possessed strong web search skills were more likely to engage in meaningful discussions and share accurate information through WhatsApp.

Possession of digital literacy skills is crucial for students' academic success and future employability. Some studies including Techataweewan and Prasertsin (2018), Ahmed and Roche (2021), and Morgan, Sibson and Jackson (2022), have explored this in different contexts, providing valuable insights into the specific skills possessed by undergraduates. Prior et al. (2016) investigated the flow-on effects of attitude, digital literacy, and self-efficacy on online learning behaviour among undergraduate students. The study found that a positive attitude towards digital literacy was associated with more engaged online learning behaviour. This suggests that undergraduates with strong digital literacy skills are more likely to actively participate in online learning activities. Likewise, there may be variations in the digital literacy skills possessed by undergraduates. Yoleri and Anadolu (2022)

examined the digital literacy skills of undergraduate students using different variables and found that some undergraduates had high digital literacy skills, while others had medium or low skills. The variation in the students' level of digital skills possession was dependent on individual factors.

Privacy skills are also essential in order for WhatsApp users to protect their personal information and maintain online security. WhatsApp, like some other social media, provides various privacy settings, such as controlling who can view profile picture, status, and last seen. Dyavarishetty and Patil (2017) highlighted the importance of privacy skills among undergraduates. The study observed that those who were knowledgeable about privacy settings were less likely to experience privacy breaches or cyberbullying incidents on WhatsApp. Mildenberger (2021) also emphasised that online/internet skills are required for easy use and access to WhatsApp features. It was reported that those lacking the skills often face difficulties. Digital literacy skills have also been considered as essential for students to fully utilise WhatsApp for improving their writing abilities. Ahmed (2019) explored the use of WhatsApp instant text messaging to develop undergraduate students' writing skills. The study emphasised the need for digital literacy skills, including the ability to navigate the application, use text messaging features, and engage in effective written communication. In addition, the use of WhatsApp requires skills related to information evaluation and critical thinking. Thus, it is needful to critically evaluate the information shared on WhatsApp and discern which of the sources are reliable.

### **Objectives of the Study**

The specific objectives of the study were to:

- i. Determine the digital literacy skills required to use WhatsApp by undergraduates;
- ii. Examine the digital literacy skills possessed by undergraduates;
- iii. Identify the purpose of WhatsApp usage among undergraduates;
- iv. Assess the frequency of WhatsApp usage among undergraduates in University of Ilorin, Nigeria

### **Methodology**

The descriptive survey design was adopted for this study. According to Siedlecki (2020), this research design is suitable for investigating a phenomenon that tends to elicit respondents' opinions without the researcher's bias. The population of the study consists of undergraduates of University of Ilorin, Nigeria. 200 and 400 level students were purposively selected because they were expected to have handfull experience on the the use of WhatsApp and due to the number of years they had spent in the university. The 300 level students were excluded because of the Student Industrial Work Experience Scheme (SIWES) program. The total population for this study was 2,302. Stratified sampling technique was used to select participants from six (6) departments, that is, three departments each from the faculty of communication and information sciences and faculty of engineering. The students that participated in the study were from the department of computer science, mass communication, library and information science, electrical engineering, mechanical engineering and

civil engineering. The sample size ( $n=340$ ) was determined using the Yamane (1976) formula for determining sample size. A structured questionnaire was used as the instrument for data collection. The questionnaire comprised of four (4) sections; section A-D. Section A obtained data on the digital literacy skills required to use WhatsApp, Section B obtained data on the digital literacy skills possessed by undergraduates for WhatsApp usage, Section C gathered information on the purpose of WhatsApp usage among undergraduates while, Section D obtained data on the frequency of WhatsApp usage by students. Face and content validity of the questionnaire was ensured through peer-review and expert evaluation; while the reliability test was ensured with Cronbach alpha value of 0.78. The data gathered were and analysed using Statistical Product and Service Solutions (SPSS) while results were presented using tables, frequency counts, simple percentages, mean, and standard deviations. A response rate of 93% was obtained.

### Data Analysis and Results

The result of data analysis and discussion of the findings are presented in Tables 1-4, based on the research questions.

#### Research Question 1: What are the digital literacy skills required for WhatsApp usage by undergraduates?

**Table 1: Descriptive statistics of digital literacy skills required for whatsapp usage**

Digital literacy skills for whatsapp usage	Yes Freq (%)	No Freq (%)	Do not know Freq (%)	Mean	SD
Typing skills	303(95.6)	9(2.8)	5(1.6)	1.06	0.29
Web search skills	255(80.4)	46(14.5)	16(5.0)	1.25	0.54
Internet literacy skills (ability to use internet).	308(97.2)	8(2.5)	1(0.3)	1.03	0.19
Computer literacy skills (ability to use computer)	289(91.2)	26(8.2)	2(0.6)	1.09	0.31
Ability to download & save document on the web	291(91.0)	20(6.3)	6(1.9)	1.10	0.36
Privacy skills	277(87.4)	31(9.8)	9(2.8)	1.15	0.43
Creating and editing online documents	239(75.4)	68(21.5)	10(3.2)	1.28	0.51
Communication skills	295(93.1)	15(4.7)	7(2.2)	1.09	0.36
Information retrieval skills	279(88.0)	36(11.4)	2(0.6)	1.13	0.35
Online/internet safety skills	278(87.7)	29(9.1)	10(3.2)	1.15	0.44
<b>Weighted mean = 1.13</b>					

As shown in Table 1, the results show that the digital literacy skills required for WhatsApp usage by undergraduates were: Creating and editing online documents ( $\bar{x}$  = 1.28, SD = 0.51); Web search skills (= 1.25, SD = 0.54); Privacy skills (= 1.15, SD = 0.43); and online/internet safety skills (= 1.15, SD = 0.43) amongst others.

### Research Question 2: What are the digital literacy skills possessed by undergraduates?

Table 2 presents the respondents' frequency counts, mean and standard deviation scores of the digital literacy skills possessed by undergraduates that participated in the survey.

**Table 2: Descriptive statistics of digital literacy skills possessed by undergraduates**

Digital literacy skills possessed by undergraduates	Strongly Agree Freq (%)	Agree Freq (%)	Disagree Freq (%)	Strongly Disagree Freq (%)	Mean	SD
I have typing skills	212(66.9)	96(30.3)	9(2.8)	-	1.36	0.54
I possess web search skills	154(48.6)	128(40.4)	34(10.7)	1(0.3)	1.63	0.69
I possess internet literacy skills (ability to use internet)	171(53.9)	117(36.9)	29(9.1)	-	1.55	0.66
I possess computer literacy skills (ability to use computer)	160(50.5)	127(40.1)	30(9.5)	-	1.59	0.66
I have ability to download & save document on the web	185(58.4)	109(34.4)	23(7.3)	-	1.49	0.63
I can create and edit online documents	169(53.3)	90(28.4)	42(13.2)	16(5.0)	1.70	0.88
I have communication skills	176(55.5)	127(40.1)	-	14(4.4)	1.53	0.72
I possess information retrieval skills	149(47.0)	128(40.4)	33(10.4)	7(2.2)	1.68	0.75
I possess online/internet safety skills	139(42.9)	133(42.0)	40(12.6)	8(2.6)	1.76	0.82
<b>Weighted mean = 1.59</b>						

As shown in Table 2, the digital literacy skills possessed by undergraduates were: online/internet safety skills (= 1.76, SD = 0.82); information retrieval skills (= 1.68, SD = 0.75); ability to create and edit online documents (= 1.70, SD = 0.88); web search skills (= 1.63, SD = 0.69) and computer literacy skills (ability to use computer) (= 1.59, SD = 0.66) amongst others.

### Research question 3: What is the purpose of WhatsApp usage among undergraduates in University of Ilorin?

Table 3 presents the respondents' mean and standard deviation scores on the purpose of WhatsApp usage among undergraduates.

**Table 3: Results on purpose of WhatsApp usage among undergraduates**

Purposes of use of WhatsApp	Strongly Agree Freq (%)	Agree Freq (%)	Disagree Freq (%)	Strongly Disagree Freq (%)	Mean	SD
Sharing educational resources (such as study materials, notes, and articles)	229(72.2)	83(26.2)	5(1.6)	-	1.29	0.49
Academic group discussion	177(55.8)	127(40.1)	13(4.1)	-	1.48	0.58
Staying updated on campus events and announcements	169(53.3)	125(39.4)	22(6.9)	1(0.3)	1.54	0.64
Project collaborations	179(56.5)	121(38.2)	15(4.7)	2(0.6)	1.50	0.64
Social interaction	192(60.6)	107(33.8)	18(5.7)	-	1.45	0.60
Video call meeting and group discussion	180(56.8)	114(36.0)	17(5.4)	6(1.9)	1.52	0.69
Creating awareness	201(63.4)	96(30.3)	20(6.3)	-	1.43	0.61
Making advert	181(57.1)	102(32.2)	30(9.5)	4(1.3)	1.55	0.72
<b>Weighted mean = 1.47</b>						

As shown in Table 3, the results revealed that most of the respondents use WhatsApp for the following purposes: Making adverts ( $\bar{x}$  = 1.55, SD = 0.72); Staying updated on campus events and announcements ( = 1.54, SD = 0.64); Video call meeting and group discussion ( = 1.52, SD = 0.69); Project collaborations ( = 1.50, SD = 0.64) and Academic group discussions ( = 1.48, SD = 0.58) amongst others.

### Research question 4: What is the frequency of whatsapp usage among undergraduates?

The study sought to know the frequency of WhatsApp usage by undergraduates. Table 4 presents the percentage, mean and standard deviation scores of the respondents' frequency of WhatsApp usage.



**Table 4: Results on Frequency of WhatsApp usage by undergraduates**

Frequency of WhatsApp usage by undergraduates	Strongly Agree Freq (%)	Agree Freq (%)	Disagree Freq (%)	Strongly Disagree Freq (%)	Mean	SD
How often do you use WhatsApp for academic purposes, such as group discussions, contacting lecturer?	202(63.7)	102(32.2)	13(4.1)	-	1.40	0.57
How often do you use WhatsApp for sharing study materials?	176(55.5)	126(39.7)	15(4.7)	-	1.49	0.59
How frequently do you use WhatsApp to communicate with friends and classmates for social interactions and organising events?	213(67.2)	93(29.3)	10(3.2)	1(0.3)	1.37	0.56
How often do you check or use WhatsApp throughout the day for purposes other than academics?	201(63.4)	105(33.1)	10(3.2)	1(0.3)	1.40	0.57
How frequently do you rely on WhatsApp to receive updates and notifications related to campus activities, club events, and academic announcements?	161(50.8)	140(44.2)	12(3.8)	4(1.3)	1.56	0.63
How often do you use WhatsApp to collaborate and work on academic projects with your peers?	170(53.6)	126(39.7)	17(5.4)	4(1.3)	1.54	0.66

**Weighted mean = 1.46**

As shown in Table 4, the results revealed the frequency of WhatsApp usage by undergraduates. The results show that majority of the respondents use WhatsApp very frequently or frequently, for academic purposes (about 95%), for sharing study materials (about 94%), to receive updates and notifications related to campus activities, club events, and academic announcements (about 95%), and to collaborate and work on academic projects with peers (about 84%) and throughout the day for purposes other than academics (about 96%). The results indicate that the WhatsApp is been used frequently by undergraduates for several purposes which are related to academics or school activities. Also, result indicates that a greater number of students use the WhatsApp more frequently for activities that are not academic based.

### Discussion of Findings

The findings of the study revealed creating and editing online documents, web search skills, privacy skills, and online/internet skills as the major digital literacy skills required for undergraduates' use of WhatsApp. This supports Ahmed's (2019) finding that indicated ability to create and edit online documents as one of the key skills required for WhatsApp usage by students. Since students use

WhatsApp to share files, including documents, presentation slides, audio, picture, video and spreadsheets, it becomes imperative for them to possess the basic digital literacy skills needed to create and edit these documents. Pozzi (2015) had also revealed that undergraduates who have strong web search skills were more likely to engage in meaningful discussions and share accurate information through WhatsApp. The finding also corroborates that of Dyavarishetty and Patil (2017), who highlighted privacy skills as a requirement for ethical use of WhatsApp by undergraduates. This is because those who were knowledgeable about privacy settings were considered to be less likely to fall victim of unethical practices, such as cyberbullying on WhatsApp and in the cyberspace.

The findings of the study revealed online or internet safety skills, information retrieval skills, online document creation and editing skills, web search skills and computer literacy skills as the digital literacy skills possessed by undergraduates for WhatsApp utilisation. These findings are in tandem with that of some previous studies. For instance, Obinyan (2021) agreed that most university students have developed computer competency or literacy skills from their constant handling of digital devices used for online communication. This also substantiates Ukwoma, Iwundu and Iwundu's (2016), finding that students possess some digital literacy skills such as information retrieval skills and the ability to use ICTs or computers to process and retrieve information. In the same vein, Soroya et al. (2021) study finding reveal that students were skilled in creating or posting documents online for social networks like Facebook, Twitter and WhatsApp. Ebijuwa and Oladejo (2023) in a more recent study showed that the undergraduates possess a high level of digital literacy with high online information searching strategies. Considering these findings, it can be implied that digital literacy skills has become a must-have for students and users of the electronic and social media. In line with the study findings, Ikenwe, Aiyebelehin and Adjarho (2022), noted that today's students have considerable level of digital literacy skills which is evident in their ability to create, edit, and share documents online. These students were also found to possess web search skills. The findings revealed that most of the students that participated in the study possessed relevant skills for optimal use of WhatsApp.

From the findings, the purpose of using WhatsApp by undergraduates include: making adverts, staying updated on campus events and announcements, video call meeting and group discussion, project collaborations and academic group discussions. The findings of the study in support of Raiman, Antbring and Mahmood (2017) who found that students use WhatsApp to share information and refer back to it at any time. In the same vein, Nyasulu and Chawinga's (2019) study findings revealed that WhatsApp helps students keep updated on current affairs in their field of study, allow students to receive instant updates and stay informed about campus activities. This also corroborates Aziz et al. (2021) opinion on WhatsApp been beneficial for collaborative learning. On the contrary, [Gasaymeh](#) (2017) discovered a low usage of WhatsApp for educational or academic related purposes. Nevertheless, Morsidi et al. (2021), reported that WhatsApp is regularly used for interaction among students and engaging in academic group discussions. Hashemi et al. (2022) also reported that students used the Internet and electronic communication platforms mostly for information search for social activities and their academics. The findings also agree with Sharma et

al. (2022) on the usefulness of WhatsApp for collaboration and communication among students. It can be deduced from the findings that WhatsApp is a valuable electronic communication platform that has features that could accommodate file sharing, instant or real-time messaging, collaboration, learning and social interactions among undergraduates.

Findings of the study revealed that WhatsApp is used more frequently by undergraduates in the surveyed university. The findings indicate that most of the undergraduates use WhatsApp on a regular basis for academic related purposes including: sharing resources for study, receiving updates and notifications on campus activities and academic programmes, and collaborating with peers on academic assignments or projects, receiving information on social or club events and for other non-academic engagements. The findings also show that more undergraduates make use of the WhatsApp platform regularly for non-academic activities. These findings substantiate that of Rahaded, Puspitasari and Hidayati's (2020) whose study on the impact of WhatsApp on undergraduates' behaviour in learning process revealed that students always use WhatsApp to communicate. Haque, and Wok (2020) also confirmed a high frequency of use of WhatsApp among students. Their study on the effect of attitude on the relationships between WhatsApp usage and behavioural impact revealed a positive high level of WhatsApp usage among postgraduate students. However, Barrera-Verdugo and Villarroel-Villarroel (2022) in their evaluation of the relationship between the frequency of social media usage and attitudes of students, discovered both low and high frequency of use of social media platforms, like WhatsApp among students. These findings indicate heavy usage of WhatsApp among undergraduates. It can be concluded that the use of the WhatsApp platform has become habitual for many of the undergraduates. It is either students use them for academic purposes or for non-academic related purposes.

## **Conclusion**

The study on digital literacy skills and WhatsApp usage among undergraduates in a Nigerian university provides valuable insights into how students engage with technology and social media platforms. Based on the findings of the study, it is important to note that: skills for creating and editing online documents, web search skills, privacy skills, and online or internet skills are crucial for effective WhatsApp usage by students. Likewise, undergraduates use the WhatsApp social media more frequently for making advertisements, receiving updates, academic announcements, video calls, group discussions, project collaborations, and academic group discussions are common uses of WhatsApp among undergraduates.

## **Recommendations**

Consequently, the following recommendations are proposed to enhance digital literacy skills and promote responsible WhatsApp usage among undergraduates. Considering the frequency at which students use WhatsApp for purposes other than academics, it is recommended that the university management prioritise the development and promotion of digital literacy skills acquisition among undergraduates. This can be achieved through workshops, training and short courses targeted on

responsible use of digital tools like the WhatsApp among students. Likewise, the educational utilisation of the WhatsApp can be encouraged by lecturers through assessment of assignments or test via the WhatsApp platform. Students can equally be scheduled for online presentations via WhatsApp. Also, considering that WhatsApp is one of the commonly used social media by students, university management should provide uninterrupted access to the internet on campus, to ensure smooth and uninterrupted WhatsApp usage particularly for academic purposes. This can be achieved through infrastructure upgrades, increased institutional Wi-Fi coverage, and collaboration with telecommunication providers for subsidized data subscription. Implementing these recommendations will assist the undergraduates to develop digital literacy skills for appropriate WhatsApp use, equipping them for a tech-driven culture.

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