

USE OF WHATSAPP IN THE ACADEMIC PERFORMANCE OF STUDENTS IN SELECT POLYTECHNICS IN NORTH CENTRAL NIGERIA

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Abstract

This research, titled "Use of WhatsApp in the Academic Performance of Students in Select Polytechnics in North Central Nigeria," investigates the influence of WhatsApp usage on the academic performance of students. The study employed a survey research method with a sample size of 345, utilising a questionnaire as the primary instrument for data collection. Federal Polytechnic, Nasarawa in Nasarawa State, and Fidei Polytechnic, Gboko in Benue State, were selected as the study's population, employing a purposive sampling technique. The research revealed a high adoption rate of WhatsApp among participants, with social interaction identified as the primary motivation for platform usage. Contrary to expectations, the study found that participants did not significantly utilise WhatsApp for academic purposes. Instead, their excessive reliance on the platform acted as a distraction, negatively impacting their academic performance. Based on the study's findings, it is recommended that institutions initiate educational awareness programmes to make students cognizant of potential distractions associated with excessive WhatsApp usage. Furthermore, organising workshops or seminars focused on enhancing students' digital literacy skills, with an emphasis on appropriate usage of WhatsApp and other social media platforms, is crucial. Lastly, institutions should consider integrating WhatsApp into the educational process, leveraging its popularity among students to enhance overall academic outcomes. These recommendations aim to foster a balanced and productive use of social media platforms among students in academic settings.

Keywords: WhatsApp, Academic Performance, Students, Communication

Introduction

Smartphones and instant messaging software have significantly transformed communication dynamics among students in educational institutions worldwide. Notably, WhatsApp has emerged as a leading player in this communication development, garnering broad usage as a dynamic and real-time platform for enabling seamless communication, collaboration, and the quick flow of information. Today, there have been an increasing number of WhatsApp users (Usman & Bukar, 2018). It has been projected that there are 2.7 billion WhatsApp monthly active users, and it is expected that the app's monthly active users globally are likely to rise by 18% from 2023 to 2025. Furthermore, data shows that a major number of the users are young college or university students (Shewale, 2024).

Undoubtedly, the emergence of these technical instruments (smartphones and WhatsApp) has brought in countless advantages, boosting connectivity and breaking down

conventional barriers to communication. WhatsApp, with its user-friendly interface and rapid messaging functions, has become a vital element of the educational ecosystem (Mojeed & Olaniyan, 2023). It facilitates speedy information sharing, encourages collaborative debates, and provides a simple outlet for students to engage in real-time interactions, overcoming geographical restrictions. However, amidst the apparent benefits, a growing anxiety has developed over the potential ramifications on academic performance, particularly within the sphere of university education (Mojeed & Olaniyan, 2023).

Numerous scholarly inquiries (e.g. Ngbede 2017; Daramola, 2021; Irfan & Dhimmarr, 2019) have probed into the consequences of technology on scholastic outcomes, with an expanding body of work positing that the usage of instant messaging applications represents a dual-edged issue. On the bright side, these platforms give students innovative channels for collaborative learning,

information sharing, and intellectual discourse. Conversely, the propensity for distractions and the incorrect utilisation of these tools may produce detrimental consequences for students' concentration, temporal management, and, eventually, their scholastic accomplishments. Consequently, a continuous dialogue remains regarding the influence of developing media, mainly WhatsApp, on the academic achievement of students. This worry is particularly prominent in contemporary Nigerian academia, given the rising occurrence of substandard academic performance across multiple educational strata, notably at the university level.

This article investigates the complicated interactions between WhatsApp usage and the academic performance of students. The study primarily addresses polytechnic students residing in the north-central area of Nigeria, recognising the distinct socio-cultural context that impacts their educational experiences. By focusing on a specific sector, the study reveals how essential context is in affecting the outcomes of technology-mediated interactions in the academic world. It gives us useful information that could assist in changing educational practices, regulations, and future research in comparable scenarios.

Statement of the Problem

The proliferation of social media platforms, particularly the widespread use of WhatsApp among students, has introduced a dynamic element to academic life, often with positive intentions (Augustine, 2016). The prevalence of smartphones equipped with WhatsApp among undergraduate students is virtually ubiquitous. However, the impact of this social media tool on academic performance appears to vary, contingent upon factors such as individual perceptions, patterns of usage, and the time allocated to it on a daily basis. Gibson (2021) suggests that the extensive use of social networking tools may be negatively influencing students' academic endeavours, as they prioritise technological engagement over scholastic commitments. The prevalence of smartphones and laptops has led to a pervasive culture of constant connectivity, creating an imbalance in the utilisation of technology for academic purposes. Ngbede (2017) notes that WhatsApp, originally designed as a social platform, has permeated various spheres of life, including professional environments, family dynamics, and friendships.

Research indicates that Nigerian tertiary institution students, in particular, have integrated WhatsApp into their daily routines, with a significant portion dedicating substantial time to communication and interaction on the platform. The speculation that the average Nigerian tertiary institution student spends six to seven hours daily on social media, including late-night chatting, raises concerns about the potential impact on their study habits and research activities. In light of these observations, this research aims to explore the influence of WhatsApp usage on the academic performance of students in selected polytechnics in North Central Nigeria specifically, Federal Polytechnic, Nasarawa in Nasarawa State, and Fidei Polytechnic, Gboko in Benue State.

Research Questions

- i. What is the extent the students of Federal Polytechnic, Nasarawa and Fidei Polytechnic, Gboko use WhatsApp?
- ii. What is the gratification students of Federal Polytechnic, Nasarawa and Fidei Polytechnic, Gboko seek from the use of WhatsApp?
- iii. What is the perceived effects of the use of WhatsApp on the academic performance of students of Federal Polytechnic, Nasarawa and Fidei Polytechnic, Gboko?

Literature Review

WhatsApp

WhatsApp, a neologism derived from the colloquial English phrase "What's up?" denoting an inquiry about current affairs, constitutes a pervasive instant messaging application designed for smartphones. This technological platform facilitates the seamless exchange of multimedia content, such as photos, videos, and audio or text messages, leveraging Internet connectivity (Church & De Oliveria, 2013; Sahu, 2014). Tus (2017) contends that WhatsApp, in an educational context, empowers students to craft class publications and disseminate collaborative group work effortlessly. The platform proves instrumental in the facile editing and dissemination of information and knowledge. WhatsApp, thus, serves as a catalyst for instantaneous connectivity, reflective engagement, and streamlined coordination of collaborative efforts in both informal and formal learning settings. Furthermore, it functions as a versatile tool for

accessing educational resources, offering hierarchical and peer support grounded in on-task behaviour, thereby fostering meaningful and contextually relevant learning experiences.

In essence, WhatsApp transcends its role as a mere instant messaging application, assuming the characteristics of a mobile social networking platform. Compatible with a diverse array of contemporary devices and operating systems, its ubiquitous presence in the realm of digital devices underscores its indispensability in modern educational landscapes. Notably, WhatsApp augments social interaction dynamics among students and educators, fostering collaborative learning endeavours and enhancing the educational milieu.

Academic Performance

Academic performance is a multifaceted construct that encompasses various indicators of a student's achievements in educational settings (Smith, 2017). The measurement of academic performance often involves assessing a student's mastery of subjects, completion of assignments, and performance on standardized tests (Jones et al., 2015). It is a quantifiable result obtained during the learning process, based on the evaluations carried out by the teachers through objective exam evaluations (Noemy, et al. 2017). Academic performance is frequently connected with grades, but it also encompasses other elements such as leadership positions in student groups, extracurricular activities, and remarkable test scores. For instance, grades are sometimes used to rank students by their GPA, awarding specific designations such as valedictorian and salutatorian for those who graduate first and second in their class.

In addition to academics, extracurricular accomplishments such as acquiring a varied set of skills, serving as student body president or holding officer positions in student groups, and engaging in volunteer organizations can also reflect academic performance. These accomplishments indicate intelligence, curiosity, and persistence, attributes desirable to universities and companies.

Review of Empirical Studies

In the extensive exploration of the impact of WhatsApp on academic performance and social dynamics, various researchers have delved into the subject, offering insights into both positive and negative aspects. Ngbede (2017) focused on

Bingham University, Karu, employing media system dependency theory and uses and gratifications theory. The study, utilising simple random and purposive sampling, revealed universal access to the Internet and widespread familiarity with WhatsApp among the sampled students. The study established that there is high usage of WhatsApp among the respondents, which has both positive and negative implications for their learning process. Daramola (2021) extended this investigation to the Federal Colleges of Education in Bichi, Kano State, particularly assessing the influence of WhatsApp on business education students in cost accounting. Employing survey methodology, the study found high dependency on WhatsApp as a tool for social interaction among classmates as well as a means to access learning materials and information about lectures, thus establishing a positive impact on academic performance.

Sunday's (2021) research on social media activism among youths in Nasarawa State highlighted the role of various platforms in fostering awareness, influencing public opinion, and empowering young individuals to express their views freely. This study emphasised the transformative potential of social media in challenging traditional media narratives. Irfan and Dhimmir (2019) concentrated on university-level students in Surat and Navsari, Gujarat, adopting a quantitative approach. Their findings highlighted WhatsApp's positive contributions to communication, idea sharing, and information flow. However, the study also underscored the negative impact on education and called for a balanced perspective. Examining the situation at Begum Rokeya University, Rangpur, Bangladesh, Appiah (2016) discovered a predominantly negative effect of WhatsApp on college students. The study, based on questionnaire responses from two hundred students, identified disruptions to study time, adverse effects on behaviour, and a distraction from academic responsibilities. The conclusion emphasised the crucial role of time management in online activities.

Sharma and Shukla's (2016) investigation in Gwalior, India, echoed concerns about WhatsApp's impact on the lifestyle of youth, particularly in their studies. The study, based on responses from a hundred students, revealed adverse effects on language, writing skills, and information accuracy, emphasising the prevalence of distractions and gossip. In a study conducted by

Maheswari (2014) among undergraduate students in Salem District, Tamil Nadu, the persistency of WhatsApp usage was explored. The majority of respondents engaged in sending pictures, videos, and group chatting, showcasing the varied nature of interactions on the platform.

Similarly, the Usman and Bukar (2017) study examined the use of WhatsApp Instant Messenger as a learning tool in Kaduna State, Nigeria. The study involved 598 final-year students from five tertiary institutions, selected through stratified random sampling. The research found that students are familiar with WhatsApp features and use them for various purposes, making integration as a learning tool seamless. The study concluded that the use of WhatsApp and other social networking platforms by teachers and students should be encouraged in learning institutions. The findings suggest that promoting the use of these platforms can enhance learning experiences.

Collectively, these studies provide a comprehensive view of the multifaceted impact of WhatsApp on academic performance and social dynamics, acknowledging both positive contributions and potential drawbacks. However, it is noteworthy that there exists a significant gap in the literature concerning this subject within the context of Nigeria. Despite the global prevalence of WhatsApp usage, limited research has been conducted to specifically investigate its effects on academic performance and social dynamics in the Nigerian educational landscape. This gap underscores the need for more localised studies to address the unique socio-cultural and educational factors that may influence the outcomes of WhatsApp usage in Nigeria.

Theoretical Framework

The research is grounded in the theoretical framework of Uses and Gratifications Theory. Elihu Katz pioneered this theory by claiming that individuals exploit media for their personal purposes. This perspective originated during the early 1970s, as Katz, alongside his colleagues Jay Blumber and Michael Gurevitch, further explored the concept. Notably, this perspective departed from past conceptions that regarded the audience as a passive entity (Asemah, Nwammuo, & Nkwam-Uwaoma, 2017).

At its foundation, the Uses and Gratifications Theory claims that individuals

expose themselves to media information based on the unique needs and enjoyment gained from such content (Nwabueze, 2014). According to this view, media consumption is driven by diverse needs, wishes, or reasons, encompassing requirements for information, leisure, companionship, diversion, or escape. In essence, individuals are encouraged to participate in specific mass communication channels due to certain gains or circumstances. This theory serves as an audience-centric method for grasping mass communication, straying from other media effect theories that query, "What does media do to people?" Instead, it focuses on "What do people do with media?"

The primary question motivating the Uses and Gratifications Theory is: Why do individuals utilise media, and what goals do they serve? The idea explicates how consumers consciously select media to suit various requirements and promote knowledge, relaxation, social contacts, companionship, diversion, or escape. Contrary to passive consumption, this theory says that audience members actively shape their media consumption, interpreting and integrating media into their lives. Unlike competing theoretical approaches, the Uses and Gratifications Theory believes that audiences possess the agency to choose media for their desires, given a purposeful intent and usage.

This research investigated the relationship between the usage of WhatsApp and the academic performance of students in polytechnics located in north-central Nigeria, utilising the Uses and Gratification Theory as the theoretical framework. Applying the theory to the context of WhatsApp usage among students allows for a nuanced study of how the platform fulfils their needs and whether these requirements fit with or deviate from academic goals.

Research Methodology

A survey as a research methodology is found to be the most suitable option for this research study because survey research focuses on people, events, situations, the vital facts of people, and their beliefs, opinions, and attitudes. The population for this study comprises all the students from all the departments at Federal Polytechnic, Nasarawa, and Fidei Polytechnic, Gboko. Thus, the population of Federal Polytechnic, Nasarawa, as obtained (2022) from the registrar office is 7367, and that of Fidei Polytechnic, Gboko, as obtained (2022) from the registrar office is 2854, making the

total population under study to be 10221. The researcher sampled only the Higher National Diploma (HND II) Mass Communication students from the selected polytechnics. The reason is that Mass Communication students are information and communication technology (ICT) inclined. Thus, the population of the Mass Communication Students at the Higher National Diploma (HNDII) Federal Polytechnic, Nasarawa, in Nasarawa State, is 314 as obtained (2022) from the level coordinator, and that of the Fidei Polytechnic, Gboko, is 53 as obtained (2022) from the Head of Department, making a total of 367 samples out of the total population of 10221. The researcher employs the questionnaire instrument in the

collection of data for this study. This enhances efficiency in retrieving completed tasks. Thus, questionnaires were administered to the respondents. The questionnaire for this study was designed to include closed-ended questions. The researcher personally administered the questionnaire for this study to the respondents to enable them to complete it in record time and revert. Tables are used to present and analyse data and information that were collected from respondents. The results were calculated and presented using tables and a simple frequency distribution.

Data Presentation

Table1: Demographic of Respondents

Gender	Frequency	Percentage
Male	152	44.1%
Female	193	56.9%
Total	345	100%
Age Distribution of Respondents		
17-20	49	14.2%
21-23	97	28.1%
24-27	146	42.3%
28 and above	53	15.4%
Marital Status of Respondents		
Single	251	72.8%
Married	74	21.4%
Divorced	13	3.7%
Widowed	7	2.1%
Total	345	100%
Schools of Respondents		
Federal Polytechnic Nasarawa	297	86.1%
Fidei Polytechnic Gboko	48	19.9%
Total	345	100%

Source: Survey, 2023

From the data presented in Table 1, the study has 345 respondents, of whom 152 (44.1%) were males and 193 (56.9%) were females. This shows that more female respondents were female. This shows that there were more female' respondents than ale respondents. In terms of age distribution, the respondents were categorised as follows: 49 (14.2%) respondents were within the age range of 17–20 years, 97 (28.1%) respondents were within the age range of 21–23, 146 (42.3%) respondents

were within the age range of 24-27, and 53 (15.4%) respondents were 28 years and older. Therefore, the majority of respondents fall within the age range of 24–27 years old. The survey research carried out showed that the majority of the respondents were singles, 251 (72.8%). In the schools of respondents, 297 (86.1%) were from Federal Polytechnic, Nasarawa, in Nasarawa State, and 48 (19.9%) respondents were from Fidei Polytechnic, Gboko, in Benue State.

Table 2. Extent of WhatsApp use among Respondents

Options,	Frequency,	Percentage
Always,	209,	60.6%
Sometime,	136,	39.4%
Never,	0,	0%
Total,	345,	100%

Source: Survey, 2023

Table 2 indicated that 209 respondents, which is 60.6%) from the table, say that they always use WhatsApp, while 136 (39.4%) respondents say they sometimes use WhatsApp, and 0 (0%) say

they never use WhatsApp. Accordingly, the majority of the respondents always use WhatsApp.

Table 3: Gratification Respondents seek from the Use of WhatsApp

Options	Frequency	Percentage
Academic messages	175	50.7%
Romantic messages	84	24.3%
Religious messages	47	13.6%
Business messages	39	11.4%
Total	345	100%

Source: Field Survey, 2023

Table 3 shows that 175(50.7) respondents share academic messages, 84 (24.3%) respondents share romantic messages, while those that says they share religious messages were 47 (13.6%) and

39(11.4%) respondents says they share business messages on WhatsApp. Thus, majority of the respondents share academic messages on WhatsApp.

Table 4: Perceived Effects of the Use of WhatsApp on the Academic Performance of Respondents

Options	Frequency	Percentage
To a large extent WhatsApp distract my studies and affect me negatively	104	30.4%
To some extent WhatsApp distract my studies	119	34.4%
To low extent WhatsApp distract my studies	57	16.4%
To no extent WhatsApp distract my studies	65	18.8%
Total	345	100%

Source: Field Survey, 2023

Table 4 shows that 104 (30.4%) respondents admit that, to a large extent, WhatsApp distracts them from their studies. 119 (34.4%) respondents opined that, to some extent, WhatsApp distracts them from their studies. 57 (16.4%) respondents said that to a low extent, WhatsApp distracts them from their studies, and 65 (18.8%) respondents said that to no extent, WhatsApp distracts their studies. Here, the majority of respondents agreed that, to some extent, WhatsApp distracts them from their studies.

Discussion of Findings

The study, among other objectives, seeks to find the extent to which the students of Federal Polytechnic, Nasarawa, and Fidei Polytechnic, Gboko, use WhatsApp. The study's results revealed that a significant majority of 209 respondents (60.6%) consistently utilise WhatsApp, emphasising a prevalent and consistent usage pattern. This observation resonates with Ngbede's (2017) earlier findings, which highlighted a substantial prevalence of WhatsApp usage among students at Bingham University, Karu. Additionally, Rabi (2013) affirmed the popularity of WhatsApp among students, supporting the current study's indication of widespread usage. Furthermore, the study aligns with the perspective presented by Sharma and Shukla (2016), who argued that students tend to dedicate extended periods to their engagement with WhatsApp. This convergence of findings establishes a cohesive narrative that strengthens the validity of the Uses and Gratification Theory, suggesting that individuals actively choose and

employ specific media, such as WhatsApp, to fulfil certain needs.

The second objective of this research is to discern the gratifications sought by students at Federal Polytechnic, Nasarawa, in Nasarawa State, and Fidei Polytechnic, Gboko, in Benue State, through their use of WhatsApp. The investigation reveals a multifaceted spectrum of purposes for employing WhatsApp among the respondents. Notably, the primary gratification students derive from the platform is centred on friendship and social interaction, with 175 (50.7%) respondents acknowledging this as their predominant use. Additionally, 84 (24.3%) respondents utilise WhatsApp to access news and information, while 47 (13.6%) and 39 (11.4%) respondents employ the platform for educational purposes and escapism or tension release, respectively. These findings align with the outcomes of a previous study by Maheswari (2014), affirming that a substantial number of students leverage WhatsApp primarily for social interaction. The research concurs with Bukar's (2017) earlier work, which similarly established the diverse purposes for which students employ WhatsApp. Maheswari's study and the current research both underscore the significance of WhatsApp in facilitating social interactions, as students engage in activities such as chatting with friends, classmates, and family members, thereby reinforcing the Uses and Gratification Theory. The theory posits that individuals actively choose media to satisfy specific needs, implying that students, in this case, select WhatsApp based on the gratifications it provides, predominantly in the realm of social interaction.

Objective three of the study aimed to investigate the perceived impact of WhatsApp usage on the academic performance of students at Federal Polytechnic, Nasarawa, in Nasarawa State, and Fidei Polytechnic, Gboko, in Benue State. The results reveal that a significant portion of the respondents acknowledge that WhatsApp serves as a distraction to varying degrees in their academic pursuits. Specifically, 104 (30.4%) respondents admit to a large extent that WhatsApp distracts them from their studies, while 119 (34.4%) respondents believe it to some extent. Additionally, 57 (16.4%) respondents state that WhatsApp distracts them to a low extent, and 65 (18.8%) respondents assert that WhatsApp does not distract them at all from their studies. The predominant sentiment among the respondents suggests that WhatsApp has a distracting influence on their academic focus, aligning with the findings of Appiah (2016). Appiah's study revealed a predominantly negative impact of WhatsApp on college students, highlighting disruptions to study time and the consequential adverse effects on behaviour and responsibilities.

Furthermore, supporting evidence is drawn from the research conducted by Sharma and Shukla (2016), who identified detrimental effects of excessive WhatsApp use on language and writing skills, ultimately impacting academic performance negatively. Their findings contribute to the growing body of evidence suggesting that WhatsApp, when used excessively, can have adverse consequences for various aspects of students' academic engagement. Contrary to the aforementioned perspectives, the study results are at odds with the findings of Usman and Bukar (2017), who argue that WhatsApp Messenger enhances learning and academic performance by providing students access to valuable learning content. This opposing viewpoint challenges the prevailing notion that WhatsApp universally hinders academic pursuits and introduces a contrasting perspective that emphasises the potential benefits of the messaging platform for educational purposes. The study presents opposing viewpoints, with some students acknowledging WhatsApp's negative impact on academic focus and others asserting its positive influence on learning. This reflects the diversity of gratifications and the dynamic nature of media use. According to the theory, individuals actively choose media to fulfil specific needs, and these needs can vary among users.

Conclusion

In conclusion, this study evaluated the degree of WhatsApp usage among students at Federal Polytechnic, Nasarawa, and Fidei Polytechnic, Gboko, and to identify the gratifications sought and perceived implications on academic performance. The findings demonstrated a large and consistent usage pattern of WhatsApp among the majority of respondents, matching previous research and confirming the validity of the Uses and Gratification Theory. The primary enjoyment obtained from WhatsApp was social connection, followed by receiving news and information, educational reasons, and escapism. However, when it comes to the impact on academic performance, there is a diversity of perspectives. A considerable number of respondents saw WhatsApp as a distraction. This study underlines the complexity of media use and the different ways in which students engage with WhatsApp, underscoring the need for a nuanced understanding of the platform's significance in both social and academic elements of students' lives.

Recommendations

Based on the findings reported in the study, the following recommendations are put forward:

1. Institutions may consider developing educational awareness programmes to make students aware of the possible distractions connected with excessive WhatsApp usage. These programmes could educate students on efficient time management, emphasising the need to balance social interactions on WhatsApp with academic commitments.
2. Organise workshops or seminars to develop students' digital literacy skills, emphasising how to use WhatsApp and other social media platforms appropriately. Include study skills instruction into these sessions to assist students in establishing efficient ways for managing their time and maintaining attention on academic objectives.

Institutions might study ways to incorporate WhatsApp into the educational process, leveraging its popularity among students for favourable academic outcomes. Educators might explore adopting WhatsApp as a supplementary tool for exchanging relevant educational content and resources and engaging in discussions relating to coursework.

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