

Uses and gratification of WhatsApp Meta for Academic and Social Life of Fountain University, Osogbo Students

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Abstract

This study explores the uses and gratifications of WhatsApp among Fountain University students, focusing on how they utilise the platform to meet their cognitive, social integrative, affective, and tension-release needs. Leveraging the Uses and Gratifications Theory, this research investigates the role of WhatsApp in facilitating academic collaboration, social interaction, and information sharing among students. Findings suggest that students predominantly use WhatsApp for social integrative needs, such as staying connected with friends and family, and cognitive needs, like sharing study materials and discussing coursework. The study highlights the significance of WhatsApp in enhancing students' academic experiences, social connections, and collaborative learning. Results also indicate that students' perceived usefulness, and ease of use of WhatsApp influence their adoption behaviour, underscoring the platform's potential as a teaching supplement. This research provides insights into the impact of social media on students' academic and social lives, offering implications for educators and policymakers seeking to integrate technology into university education.

Keywords:

Uses and gratification, Meta AI, communication platforms, academic support

Introduction

The use of WhatsApp among students is regarded as being mainly for socialisation purpose since it is the major reason for the social media platforms. The social media platforms have been so pervasive that everyone,

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including students, find them quite useful. The platforms have been extended to other purposes which include marketing, and academic/religious propagation. Students of Fountain University, Osogbo have equally been found to have been exploiting the numerous advantages presented by the social media platforms, especially in their academic pursuit and social lives. This is what has necessitated this present study. To this end, this study is hinged on the main objective; finding out what students do with their WhatsApp Meta and the benefits they derive from its use.

The development of learning support machines began with teaching machines in the mid-20th century according to Skinner (1963) followed by intelligent tutoring system development in the 1970s (Anderson et al., 1985). Selwyn (2019) agrees with the public sentiment that machines cannot replace human teachers from their educational position. With the growing influence of artificial intelligence in digital communication, platforms like WhatsApp, have evolved beyond simple messaging tools. The integration of Meta AI into WhatsApp has introduced new features that allow students to access real-time information, clarify academic concepts, and manage social interactions more effectively. For university students, especially at Fountain University, this AI-powered tool offers convenience, speed, and on-demand learning support.

AI transforms social platforms through improved personal connection development and effective functionalities that result in altered digital communication operations according to Kaplan et al. (2019). WhatsApp Meta provides a sophisticated artificial intelligence model as an addition to the messaging service, WhatsApp, which now offers students direct access to educational resources as well as information. The platform benefits from these capabilities with tools including automated response systems and echobots and message automation and predictive forecasting features. The global community uses WhatsApp Meta as one of the primary social media tools that changed traditional communication methods. Students need WhatsApp because it gives them instant messaging features and voice and video calling functionalities together with group chats and file sharing capabilities. At Fountain University, Osogbo, the integration of Meta AI on WhatsApp serves as a vital tool for academic purposes, interaction, and information dissemination among students. Research must explore why students use WhatsApp Meta because this knowledge helps explain how social media affects both relationships and academic activities and achievement. Selwyn (2019) opines that students misuse Meta AI by relying on it to complete their assignments and exams without grasping the relevant content while also using it as their primary information source instead of using traditional learning materials.

Fountain University Osogbo (FUO), located in Osun State, serves as an indicative way to study WhatsApp usage among its student population. Academic life is witnessing a technological surge that has prompted students to leverage WhatsApp between social purposes and message dissemination and education delivery. Performing a study about the gratifications and uses of

WhatsApp among Fountain University students helps researchers understand how students use the platform for practical work and academic objectives and how those uses alter their communication behavior patterns. The research project adds to current knowledge about how WhatsApp functions transform student communication patterns in educational institutions. The research will provide recommendations regarding the implementation of WhatsApp's digital potential by educational institutions to boost learning experiences and improve student involvement. Students worldwide depend heavily on WhatsApp as a digital tool which requires thorough analysis of how it helps them meet their needs while determining its academic applicability. The investigation will deliver beneficial knowledge about the functions that WhatsApp serves in the daily lives of students at Fountain University.

Artificial Intelligence (AI) technology has introduced quick changes which reform both communication methods and digital platform interaction protocols. The development of AI in messaging applications leads to major effects on content interaction and social connections along with academic management. Few studies address how students within Nigerian universities are influenced by the global adoption of WhatsApp Meta platform. Research about WhatsApp mainly examines its widespread role in social interaction and communication without addressing specific student utilization of AI features for academic goals or their effect on educational outcomes. Other scholars (Rambe et al., 2013) also highlighted the use of WhatsApp for academic purposes. The absence of empirical research data gathered from Fountain University students makes it challenging to comprehend their use of WhatsApp AI functions as well as their social and academic impact. The investigative research targets the particular uses of WhatsApp Meta's AI features together with student-related difficulties and needs among students in Fountain University.

Despite the rising popularity of WhatsApp Meta among students, little is known about how it affects their academic behaviours and learning experiences. The widespread integration of artificial intelligence demands deep comprehension regarding its adoption by students who use this technology for academic and social purposes. According to Kaplan et al. (2019) the individualised characteristics that AI technologies introduce to social media platforms drive new user experiences which also modify student approaches to educational materials. While many rely on its AI features for quick answers, summaries, and collaboration, concerns about overdependence, reduced critical thinking, and distraction persist. This study addresses the gap by investigating the specific motivations, perceived benefits, and potential influences of WhatsApp Meta on students' academic and social lives at Fountain University. Specifically, however, the study seeks to consider the factors that motivate the use of Meta by FUI students, to assess the perceived benefits that students

derive from using WhatsApp Meta and to investigate the influence of WhatsApp Meta on students.

Literature Reviews: Conceptual, Empirical and Theoretical Reviews

WhatsApp as a Digital Communication Tool

WhatsApp serves as one of the world's highly significant instant messaging platforms which Meta Platforms Inc. (then Facebook Inc.) successfully developed. Statista (2018) reports that after Brian Acton and Jan Koum launched WhatsApp in 2009 it secured the third spot among global social networks and gradually gained 1.5 million users. Research by mobile technology experts shows MIM had a user base of 142.3 million in 2014 which grew to more than 3.8 billion by 2018. Research revealed that daily WhatsApp messaging succeeded in taking control of seventy-five percent of all mobile traffic in 2018 (Yoon et al., 2015). Research studies dedicated to pedagogical theory investigated WhatsApp because it provided favorable conditions for the development of emotional and intellectual learning exchanges (Kim et al., 2014).

Modern society adopted WhatsApp mainly because of its easy-to-use design alongside cost-effective pricing and regular updates designed for evolving communication needs. Social networks and mobile instant messaging (MIM) operate as participative tools because they provide in-group/inter-group interaction features that bypass classroom temporal and spatial limitations (Elhay et al., 2018). Research investigation into educational technology application has gained substantial importance among researchers throughout recent times according to Gamede et al. (2022). Educational technology has gained increasing popularity for instant messaging applications because people widely accept and utilize WhatsApp. The adaptable instant messaging system of WhatsApp enables users to exchange various types of content through text messages and voice and video messages. This platform enables its users to establish audio as well as visual connection capabilities.

Two opposing perspectives arose from this, which the positive approach comprises promising findings on MIM contributions such as cognitive interactions improvement or cognitive load reduction (Gao et al., 2017; Kim et al., 2014; Rambe et al., 2013). The negative approach by which the use of MIM are negatively evaluated while attending lectures or working on assignments, and their learning results are also widely undermined (Jahnke et al., 2017; Santos et al., 2018).

Influence of WhatsApp Meta on Learning and Communication Abilities

The Meta AI tool represents a new advanced feature which Meta (formerly Facebook) developed to deliver enhanced application user experiences particularly on WhatsApp. Such features are designed by artificial intelligence to improve user communication by integrating smart responses with automated workflows and integrated chatbot functionality. Every Meta platform features Meta AI assistant which operates through real-time Bing and Google search information. Users can generate images and animations at high resolution through the image creation function while typing on the platform. The software application called conversational chatbots uses natural language processing techniques to replicate human dialogue.

The AI-based technology in Smart replies generates pre-formed replies with information that relates directly to user messages. Through Natural Language Processing technology this system enables users to type minimal responses because the field of natural language processing got its start in the 1940s following World War II. The importance of language translation between codes drove scientists to envision an automatic system for performing this work at the time. People soon discovered that the execution of this task proved more challenging than expected. Certain researchers detected essential challenges in NLP development when 1958 arrived. Noam Chomsky among these researchers stated concern about language models recognizing non-comprehensible sentences which followed grammar rules precisely as much as they recognized unnecessary sentences that both lacked a correct structure. Chomsky criticized that NLP systems incorrectly recognized both "Colorless green ideas sleep furiously" and "Furiously sleep ideas green colorless" as having equal probability even though every native English speaker can easily recognize the first as valid while understanding the second is unacceptable. He thought a machine should demonstrate the same level of understanding.

Human agency in this article is a choice and decision-making capacity, including the corresponding ability to act, i.e., both power of decision and power of action (there is a lack of consensus on the definition of the term) (Cham, 2016; Hohenstein et al., 2020). A recent synthesis of key research themes and trends in AI-mediated communication (AI-MC) states that SR users retain "substantial agency: they choose which suggested message to use or to ignore and may also modify the message" (Jeffrey et al., 2020). However, suggested texts can affect us in various ways without us being aware of it. For instance, lack of time in day-to-day business, a tendency to rely too heavily on automation, or complacency can guide us. When such circumstances prevent the user from thinking at length about the best possible response, they de facto

limit the user's ability to retain agency. Since that transfer of agency is forced by circumstances, loss of agency would be a more appropriate term. And there may be subliminal stimuli. Priming occurs when previous SR suggestions determine responses because the SR user would have responded differently if they had not received those suggestions in the first place (Arnold et al., 2020; Mieczkowski et al., 2021).

AI in Communication Platforms

The set of vital components for optimizing communication speed features AI-based technologies containing machine learning algorithms together with NLP and chatbots systems. Multiple customer requests flow through chatbot services that use automatic question answering capabilities without requiring support from human operators (Huseynov, 2023). Systems enabled with NLP process speech from people effectively to generate friendly intuitive conversations (Muthugurunathan et al., 2024). Educational platforms together with businesses implement AI-driven virtual assistant technology to deliver important alerts and automated scheduling for immediate information delivery which simplifies both operations and creates improved user experiences (Sajja et al., 2024).

Evans (2019) investigated the various industrial benefits that virtual assistants together with chatbots deliver to numerous sectors. Artificial intelligence functions as the basic technology tool across various business sectors especially banking and digital healthcare and e-commerce and other projects. Customers have positively received this assistance due to its functional capabilities which lead to productive results combined with sustainability. He considered the educational use of technology to represent an exceptional phenomenon because of its distinctive nature. Artificial Intelligence brings better customer service by supplying automated responses that boost business production and reduce both human errors and incorrect outcomes. The operational tools run without any delays thereby delivering continual support services. Organisations can use accessible business data to evaluate service interactions with clients for performance improvement.

Information-seeking represents a goal-oriented practice in which users deliberately search for information to fulfill their particular requirements. According to Savolainen (2010), users need information for diverse purposes which extends from basic inquiry resolution to news updates and educational material as well as professional field updates. Platform users benefit from information retrieval enhancements through AI features on WhatsApp that deliver automated suggestions together with better search options and automated chatbot solutions (Vashishth et al., 2024).

Users Experience and Satisfaction with AI Features

The integration of Artificial Intelligence into WhatsApp communication systems improves both service quality as well as user content satisfaction. WhatsApp users receive the benefit of artificial intelligence that individualizes their communication, as well as raises productivity with automatic responses and voice-command capabilities and automated processes (Nama, 2023). The analysis examines how these features help users and analyzes their effect on satisfaction through identification of vital patterns and implications. The digital platform relationship between users and programs falls under the scope of User Experience (UX) as described by Jahnke et al. (2018). People experience satisfaction from online platforms when services fulfill advertised promises while meeting their requirements. Features of artificial intelligence produce enhanced user experiences by helping users perform tasks more efficiently and maintaining personalisation which according to Yang et al. (2020) accelerates communication speed.

The Impact of Artificial Intelligence on Education

Education receives revolutionary transformation from Artificial Intelligence along with other different sectors. The implementation of AI technology in educational settings has reshaped student learning because it modifies how people obtain information and mode of content engagement and skill acquisition. Educational organisations across the world are adopting AI tools and platforms which optimise personalised education and improve teaching methods while increasing educational efficiency (Rahiman et al., 2023). A conceptual research examines AI's educational effects on students' learning while discussing the advantages and obstacles and their associated results.

AI provides education with its greatest advantage through personalized learning. AI-based systems evaluate student information to discover learning patterns and personal preferences and learning difficulties of individual students. Custom learning environments develop through these systems because they understand individual student needs (Rahiman et al., 2023). AI educational predictions which remain unfeasible have been made about the field. According to White (2019), Nikolas Kairinos who leads Fountech.ai as its founder and CEO stated that we will receive brain implants next decade which will eliminate the need for human memory functions. According to Aldridge (2018), the real reasons behind why such artificial knowledge insertion is unlikely for human use both now and in the next 20 years can be found in his analysis of Gibson (1986). According to Aldridge (2018) who uses a phenomenological understanding of knowledge this kind of knowledge

insertion is impossible. According to Puddifoot et al. (2018), excessive use of technology for storing academic content might lead students to lose opportunities for memory system engagement in abstract understanding and insight generation of newly acquired knowledge.

The educational tools promote student engagement which results in more comprehensive knowledge acquisition of advanced materials (Renacido et al., 2025). Students' points of view, engagement, recommendations, and participation are often not appropriately appreciated by teachers, they seem to be mostly ignored therefore. Students' engagement, students' points of view and their activity in school should be considered for effective improvement towards better achievement in education. The position of teaching assistants seems more precarious than that of teachers. Much subsequent work has been undertaken which demonstrates that this finding can be reversed if teaching assistants are given careful support and training (Webster, Blatchford, & Russell, 2013). Nevertheless, the arguments as to why large numbers of teaching assistants will be needed in an AI future seem shakier than the arguments as to why large numbers of teachers will still be needed.

Empirical Review

The introduction of Artificial Intelligence (AI) functionalities within WhatsApp platform transformed how users communicate and exchange data and meet their communication requirements. Research indicates that numerous empirical investigations analyse the Artificial Intelligence features integrated into WhatsApp to understand the profound effects on user behavior and communication quality.

Xie et al. (2022) examined the relationship between user gratification dimensions using a meta-analysis of 12 studies. The research adopted Uses and Gratifications Theory to study four types of satisfaction including, utilitarian, technology, hedonic, and social aspects affecting user satisfaction with AI-powered chatbots. User satisfaction primarily come from utilitarian gratification based on findings suggesting utility takes precedence in chatbot development. Utilitarian gratification has the highest impact rate among four positive factors influencing satisfaction. For maximising user satisfaction, chatbot developers need to focus on creating functional systems, enjoyable encounters, technological elements and social interactions.

According to Apuke et al. (2018) students at university benefit from faster connectivity and clear information exchange through WhatsApp usage. Research data was collected via online questionnaires completing by 158 undergraduates following a quantitative approach. Most students in the study preferred using WhatsApp as their main messaging platform since they spent more than three hours performing activities on the platform each day. The research study recognized three main issues that students experience including urgent response expectations alongside unregulated content exposure along with the temptation to get distracted from academics. The research confirms

that WhatsApp enhances learning endeavors with social relationships but establishes its need for users to adopt careful behavior online.

The research by Ben-Enukora et al. (2022) investigated undergraduate student knowledge along with their use and evaluation of WhatsApp customer service chatbots throughout Lagos, Nigeria. Results showed that students demonstrated minimal knowledge and engagement in using chatbots because they questioned how effectively these bots could serve them better than typical customer support platforms. The introduction of artificial intelligence features on WhatsApp has led to both better information retrieval and also improved knowledge sharing benefits. The researchers Korda et al. (2024) demonstrated that AI-driven chatbots inside WhatsApp moved users toward faster accurate information access in academic and workplace scenarios through their longitudinal study. Users experienced a 65% enhancement of their satisfaction after utilizing AI tools that offered real-time dependable responses. The research of Sajja et al. (2024) demonstrated how AI-based content recommendations build better academic cooperation because they enhance scholarly discussions among learning groups.

The study conducted by Sage et al. (2023) examined 100,000 user reviews of Artificial Intelligence products with the aim to identify essential components that affect user satisfaction in human-AI interactions. The researchers discovered that satisfying elements such as adaptability and customization together with error recovery and security practices led to positive overall satisfaction experiences regardless of the users' work experiences. The large-scale deployment of AI functions is impossible within WhatsApp systems due to the many system advantages that face-blocking issues prevent. The principal hurdles to AI deployment depend on hardware faults of machines as well as AI system malfunction and human security concerns about information safety according to Angafor's (2025) findings. AI developers choose to have human interaction instead of automated services because machine-based automation leads to the removal of all human contact. Better AI systems development while improving user education provides the solution to present-day difficulties according to the authors.

Theoretical Framework

Uses and Gratifications Theory (UGT)

According to Katz et al. (1974), the uses and gratifications theory emerged in the early 1940s to explain why people choose particular media platforms combined with their fundamental needs before describing their media consumption benefits. The requirement of media theory suggests that those

who consume media fully understand their motivation behind choosing their chosen platforms for utilisation.

The theory acknowledges humans have the ability to determine what media they want above what the media may influence in them. According to Katz et al. (1973) classified the uses and gratifications theory by defining five needs such as affective, cognitive, personal, integrative, and tension free needs. The present research paper explores the significance of these needs to explain the uses and gratifications theory through an examination of these theoretical needs.

According to the principle Uses and Gratifications Theory (UGT) people actively pick their media choices to address their social and psychological needs. Users play an active part in choosing media content since they align their choices with personal interests and individual reasons (Katz *et al.*, 1974). The research study examines UGT for two essential purposes. The application of UGT examines audience reasons for media selection while map usage remains minimal thus limiting researchers' understanding of which nations dominate specific themes. Social media platforms have established close connections with UGT throughout the past few years. This mapping method will enable researchers to investigate UGT and social media more effectively for present and future studies of instant messaging (Gan et al., 2017) and mobile learning supported by mobile technology (Aburub et al., 2019; Chang et al., 2021; Shukla, 2021). The theoretical framework of U&G is suitable because Smart mobile learning (SML) creates access to computer-mediated learning while directly involving internet technologies and information systems (IS) and new media platforms. The discussion established that U&G theory provides an appropriate methodology for analysing continuance intention among users after they have accepted the system. A detailed comprehension of user post-acceptance gratification emerges through investigating different satisfaction forms after usage completion. The UGT approach demonstrates superiority in post-acceptance investigations because it features a holistic view that recognises emotional aspects and extends satisfaction understanding.

Technology Acceptance Model

Davis (1989) in his Technology Acceptance Model (TAM) opines that personnel demonstrate acceptance patterns for technology through behavioural intentions. The behavioural intention to adopt new technology serves as the main subject of the Technology Acceptance Model which functions as the primary research model in technology adoption studies. The model contains two fundamental elements namely Perceived Usefulness (PU) and Perceived Ease of Use (PEU).

Perceived Usefulness is held by an individual who believes that the technology has enhanced his/her output in work. Students enhance their productivity by using WhatsApp Meta for collaborative study groups that

assist them in sharing study materials and coordinating assignment work (Eltahir et al., 2024). Perceived usefulness has a significant influence on consumers' intention to adopt AI-based chatbots. Anthropomorphism is the term that describes the human ability to ascribe human characteristics and behaviours to the inanimate objects such as robots and chatbots (Salles et al., 2020). When a human interacts with something that is not human, they tend to look for similarities between the two (Servais, 2018).

The effectiveness of chatbots to help in retail research should also be checked in terms of their ability to closely resemble true human communication, including the voice quality, conversational skills, and response. AI functions incorporated into WhatsApp Meta tools increased information retrieval efficiency and precision thus producing better student learning success. Personnel express their technological acceptance behavior through their intentions according to the Technology Acceptance Model developed by Davis (1989). The crucial element of research in the Technology Acceptance Model is technology adoption behavioral intention. The base of the model contains two fundamental elements.

PEOU serve as a convenient gratifier because WhatsApp Meta supplies a simple user interface featuring auto-text suggestions and direct file-sharing functionality. Students exchange shallow messages through WhatsApp Meta because they choose to type short messages over meaningful deep conversations. Continuous university collaboration via WhatsApp reduces the ability of students to speak and socialise effectively especially when communicating via mobile phone or face-to-face meetings. The study proves that students select AI tools because these tools offer a friendly interface which seamlessly integrates into their system environment.

Methodology

The study is qualitative in design as it employed a Focus Group Discussion (FGD) method to investigate the uses and gratification FOU students derived from using WhatsApp Meta. FGD helps in learning how users use the platform by exploring what they do together and sharing their thoughts and experiences with it. The target population for the study comprised all undergraduate students of Fountain University, Osogbo. This group suits this project as university students are known to use WhatsApp for academic tasks by chatting and sharing information regularly. This study adopted convenience sampling technique to ensure the study involves the use of participants obtained from the student population of FOU, in response to their will and readiness to be involved in the research and data collection process. Convenience sampling

describes the data collection process from a research population that is effortlessly reachable to the researcher.

For this study, a sample size of 42 students were selected to allow for proportional representation across colleges of the university. To ensure equal and fair representation, the convenience sampling technique was used. For the FGD, six sessions was conducted and participants for the FGD were selected as a result of their availability to participate in the FGD sessions to gain deeper insights and reactions in data collection the way they can be discussed. This study design is effective because students are digitally literate, allowing them to thoroughly explore their WhatsApp Meta experiences, thoughts and interactions regularly with mobile phones. A total of six FGDs sessions was conducted, with each session involving 6 to 8 participants. The FGDs was held physically in designated venues within University. The sessions focus on analyzing how students use WhatsApp Meta AI for academic and social reasons. While facilitating the FGDs process, digital recorders was capture audio for transcription and note other important points. The use of thematic analysis on the qualitative data allowed us to explain in detail how students rely on WhatsApp Meta in every part of their lives. They recognized major and repetitive concepts and used them to sort and organize the responses from participants. Using this approach allowed us to understand well, how and why Fountain University students use WhatsApp Meta and by applying thematic analysis, the data could easily be analysed in a systematic way, relating the findings closely to what participants said in their own situations.

Themes' Analysis and Discussion of Findings

The findings of this study paint a picture of different themes gleaned from the questions posed to the participants based on the three research objectives/questions for this study. The first research question is on motivating factors for the use of WhatsApp Meta while the second question on the benefits derived from using WhatsApp Meta and the third research question on the influence of WhatsApp Meta on students.

The participants, while responding to questions bothering on the first RQ of the motivating factors for choosing WhatsApp Meta, themes like ease of use and accessibility, popularity of the application, convenience and benefits of the application were generated to indicate the factors motivating their use of WhatsApp Meta. These are exemplified by these responses from them: FGD1-P1, a 200-level student from the College of Management and Social Sciences and Sociology department said, ***"It's built with WhatsApp, so I do not have to download new apps just to use AI on my phone, and it's simple to use compared to other AI applications."*** (FGD2-P3, a 300-level student of Sociology department). COMAS said, ***"I liked the idea of chatting with AI, I tried it and it worked. If I find most questions difficult I will go to my WhatsApp AI because it's the easiest and paste my questions to it and it will give me the correct answer because if I ask the same question on google it***

will bring out the same answers.” FGD6-P7 said, *“if I need questions to be answered, I can easily just open Meta AI and to deliver my answers why I continue to use Meta AI is because it's convenient I'm able to check my social life and school life, academic life on WhatsApp, So everything is linked together, and if I need questions to be answered, I can easily just open Meta AI and to deliver my answers.”*

All the above responses buttress the fact that the ease with which users are able to use a technology plays a vital role in its adoption as suggested by the theories of Uses and Gratification by Katz and Blumler (1974) as well as Davis' (1989) Technology Acceptance Model. In the same vein, the submissions align with the findings of the research studies conducted by Savolainen (2024) who found that users need information for diverse purposes like basic inquiry to news updates and educational material as well as professional field updates, and Vashishth et al. (2024) who claimed that WhatsApp's AI features deliver automated suggestions with better search options and automated chatbot solutions.

For the second research on the derivable benefits from using WhatsApp Meta, themes such as improved access to information, enhanced communication, stress reduction and time saving were recorded from the respondents. For example, FGD1-P4 said, “Yes, I used the Meta AI to summarize a 20 pages journal article in minutes”, FGD2-P4 said, *“It does not take time because if you type a question to it within 5 seconds it will show the answer to get question you sent so it is not stressful”*, FGD2-3 said, “I once generated a questionnaire format using Meta AI”. These comments suggest a variety of benefits derivable from the use of WhatsApp Meta by the students and is very much in line with the proposition of the Uses and Gratification theory and the Technology Acceptance Model by Katz et al. (1974) and Davis' (1989) respectively. These responses also align with the submission of empirical studies by Bouhnik et al. (2014) who submitted that users benefit from academic collaboration through the platform for distributing information and enhancing group teamwork. Ahad et al. (2014) noted that students benefit from faster connectivity and greater information generation by using WhatsApp.

Similarly, for the third RQ, themes like improved performance, accessible learning materials, over-dependence, and impact on traditional learning were recorded highlighting the multifaceted nature of the uses and gratifications of WhatsApp Meta on the academic and social lives of and its impact on students of Fountain University, Osogbo. Responses pointing to these themes include the following: FGD1-P3 said, *“Well, I would say it has improved my grades in some courses, most especially in written assignments”*, FGD6-P4 said, *“AI is like a personal study guide that helps me understand anything i*

am struggling to solve”, FGD2-P6 said, *“I over depend on WhatsApp AI to the extent that even if I want to message my friends, I will go to Meta AI first to ask if the sentence I construct is correct or to construct another one for me”*, FGD4-P1 said, *“AI is changing how we prepare for exams instead of rewriting notes from books, I now use the AI to generate summaries and key concepts which saves time”*. The results confirm the statement of Cao et al. (2013) who claimed that the application of social media in academic settings influences learning in a positive way. Nevertheless, they also encounter the risk of excess dependence, as well as possible diversions, the opinion which was shared by some FOU students too. Moreover, Bouhnik et al. (2014) also note the dual spirit of WhatsApp in the academics because it improves communication and brings flexibility into the mix, nevertheless, it can encourage confusion between academic concentration and social distraction.

Summary, Conclusion and Recommendations

This study investigated the uses and gratifications of WhatsApp Meta, an AI tool embedded in the social media platform of WhatsApp, by students of Fountain University, Osogbo. This is in view of the applications pervasive nature and widespread use among the students. The objectives of the study include to know the motivating factors for using the application by the students, the benefits derived from its use by the students and the types of influence it has on them particularly in their academic and social lives. The uses and gratification theory and the Technology Acceptance Model of Katz et al. (1974) and Davis (1989) respectively were adopted as the theoretical framework for the study while a qualitative design using the Focus Group Discussion method was adopted as the method of gathering the needed data for the study. A variety of themes were generated from the six (6) FGD sessions conducted to answer the research questions adopted for the study.

The findings indicated that factors such as ease of use and accessibility, popularity of the application, convenience and benefits of the application were the motivators for the students to use the application for their academic and social activities as participants alluded to these in their responses during the different sessions of the FGDs. Similarly, themes such as improved access to information, enhanced communication, stress reduction and time saving were reported by participants as the benefits that are derivable from the use of WhatsApp Meta by the students for their academic and social engagements. In the same vein, participants claimed that their use of WhatsApp Meta has invariably impacted them in the form of improved performance, accessible learning materials, over-dependence, and impact on traditional learning. The import of these is that while a section of the students believe WhatsApp Meta has influenced them by improving their academic performance and improved their access to learning materials, others believe it has also resulted in their being over-dependent on the application to solve many of their academic problems for them. Not only these, the participants also believe that WhatsApp

Meta has seriously impacted traditional learning in the form of classroom lecture as students now feel reluctant to attend classes because they believe they can always get lesson notes about class topics from WhatsApp Meta easily.

These findings align with the submission of previous studies such as those by Pillai et al. (2020) who claimed that software application called conversational chatbots uses natural language processing techniques to replicate human dialogue and Puddifoot et al. (2018) who affirmed that excessive use of technology for storing academic content might lead students to lose opportunities for memory system engagement in abstract understanding and insight generation of newly acquired knowledge.

In line with the findings above, this study recommends that lecturers look more into the adoption of AI tools for academic purposes since students now find it a reliable companion. However, this should be in a facilitated approach that promotes independent learning and critical thinking. Also, universities should offer counseling and orientation on the responsible use of AI to ensure students do not overuse the platform or misuse it to the extent they can ignore their responsibilities to play their part in academic work. Furthermore, It is necessary to research further on the academic and psychological effects of AI use on university students over a long period to refine education policies and plans.

References

- Aburub, F., & Alnawas, I. (2019). An Integrated Model to Investigate the Adoption Factors of Mobile Learning in Higher Education through Empirical Research. *Educ Inf Technol*, 24, p. 2145–2158.
- Aldridge, D. (2018). Cheating Education and the Insertion of Knowledge. *Educ Theory*, 68, p. 609-624. <https://doi.org/10.1111/edth.12344>.
- Anderson, R. C., & Pearson, D. (1985). Reading Comprehension: What Works. *Educational Leadership*, 51, p. 2-7.
- Angafor, G. N. (2025). Social media security: the impact of AI-generated Whatsapp scams on the security and privacy of Whatsapp community groups.
- Apuke, O. D., & Iyendo, T. O. (2018). University Students' Usage of the Internet Resources for Research and Learning: Forms of Access and Perceptions of Utility. *Heliyon*, 4(Issue 12), e01052. ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2018.e01052>.

- Arnold, K., Chauncey, K. Z., & Gajos (2020). Sentiment bias in predictive text recommendations results in biased writing. *Proceedings of Graphics Interface*, 2018, pp. 33–40. doi: 10.20380/GI2018.07.
- Ben-Enukora, C. A., Ejem, A. A., Adeyeye, B. K., Ikunle, O. F., & Maduadichie, F. E. (2022). Awareness, Adoption and Perception of Whatsapp Customer Service Chatbots in the Banking Sector: Perspectives from Undergraduate Students in Lagos, Nigeria. *Nigerian Journal of Communication Review (NJCR)*, 1(2).
- Cham. (2016). Masaaki Kurosu (Ed.). *Human-Computer Interaction. Novel User Experiences*. Springer International Publishing, pp. 96-106. 10.1007/978-3-319-39513-5_9.
- Chang, Y., Lee, S., Wong, S. F., & Jeong, S. P. (2021). An integrative model of AI-powered learning application use and gratification *Inf Technol People*. 35(7), 2115–2139.
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319.
- Elhay, A. A., & Hershkovitz, A. (2018). Teachers' perceptions of out-of-class communication, teacher-student relationship, and classroom environment. *Education and Information Technologies*, 24, p. 1–22.
- Eltahir, M. E., & Babiker, F. M. E. (2024). This paper studies how student performance changes because of their use of Artificial Intelligence technology during their experimental work in online learning. *Electronic Journal of e-Learning*, 22(9), 91-110.
- Evans. S. Y. (2019). Opportunities and Challenges in Using AI Chatbots in Higher Education. The conference publication ICEEL '19. *Proceedings of the 2019. 3rd International Conference on Education and E-Learning*. Pp. 79-83.
- Gamede, B. T., Ajani, O. A., & Afolabi, O. S. (2022). Exploring the Adoption and Usage of Learning Management System as Alternative for Curriculum Delivery in South African Higher Education Institutions during Covid-19 Lockdown. *International Journal of Higher Education*, 11(1), 71-84.
- Gan, C., & Li, H. (2017). Understanding the effects of gratifications on the continuance intention to use WeChat in China: a perspective on uses and gratifications. *Comput Hum Behav.*, 78, p. 306–315.
- Gao, Q., Yan, Z., Wei, C., Liang, Y., & Mo, L. (2017). Three different roles, five different aspects: Differences and similarities in viewing school mobile phone policies among teachers, parents, and students. *Computers and Education*, 106, p. 13–25.
- Gibson, W. (1986). *Count Zero*. London: Gollancz, 3 and 5.
- Hohenstein, J., & Jung, M. (2020) in *Computer Human Behaviour*. AI-mediated communication as a moral safety mechanism. 106, p. 1–30. 10/gk49jg.

- Huseynov, F. (2023). The Role of Internet of Behaviors (IoB) in Digital Marketing. *Contemporary Approaches of Digital Marketing and the Role of Machine Intelligence*, pp. 123-144. IGI Global.
- Jahnke, I., Bergström, P., Märell-Olsson, E., Häll, L., & Kumar, S. (2017). Digital didactical designs as research framework: iPad integration in Nordic schools. *Computers & Education*, 113, p. 1–15.
- Jeffrey, T., Hancock, Mor, Naaman (2020). Karen Levy developed AI-Mediated Communication: Definition, Research Agenda, and Ethical Considerations. *Journal of Computer-Mediated Communication*, 25(Issue 1), 89–100.
- Kaplan, A., & Haenlein, M. (2019). *The influence of artificial intelligence on social media marketing*. researchgate.net.
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973-1974). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509–523.
- Khan, R., & Bansal, H. (2018). A review paper on human computer interaction. *International Journal of Advanced Research in Computer Science and Software Engineering*, 8(53).
- Kim, H., Lee, M. Y., & Kim, M. (2014). Effects of Mobile instant messaging on collaborative learning processes and outcomes: The case of South Korea. *Educational Technology & Society*, 17(2), 31-42.
- Korda, D. R., Dapaah, E. O., & Akolgo, E. A. (2024). The role of AI chatbots in education: A review. *Academy Journal of Science and Engineering*, 18(1), 79-87.
- Mieczkowski, H., Hancock, J. T., Naaman, M., Jung, M., & Hohenstein, J. (2021). AI-mediated communication: Language use and interpersonal effects in a referential communication task. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), 1-14.
- Muthugurunathan, G., Padmapriya, S., Leelavathy, L., Talukdar, V., Gupta, A., & Mittal, M. (2024, March). Smart Conversations: Enhancing User Engagement through NLP in IoT Environments. 11th International Conference on Reliability, Infocom Technologies and Optimization (Trends and Future Directions) (ICRITO). pp. 1-6). IEEE.
- Nama, P. (2023). AI-Powered Mobile Applications: Revolutionizing User Interaction through Intelligent Features and Context Aware Services. *Journal of Emerging Technologies and Innovative Research*, 10(01), g611-g620.
- Puddifoot, K., & O'Donnell, C. (2018). 'Human memory and the limits of technology in education'. *Educational Theory*, 68(6), 643–55.
- Rahiman, H. U., & Kodikal, R. (2023). Revolutionizing education: Artificial intelligence empowered learning in higher education. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2023.2293431>.

- Rambe, P., & Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of technology. *British Journal of Educational Technology*, 44(4), 544–561.
- Renacido, J. M. D., & Biray, E. T. (2025). In Advancing Sustainable Development Goals with Educational Technology. pp. 277-342.
- Sage, K., Sherrie-Anne, K., & Oviedo-Trespalacios, O. (2023). What factors contribute to the acceptance of artificial intelligence? A systematic review, *Telematics and Informatics*, 77(101925). ISSN 0736-5853, <https://doi.org/10.1016/j.tele.2022.101925>.
- Sajja, R., Sermet, Y., Cikmaz, M., Cwiertny, D., & Demir, I. (2024). Artificial Intelligence-Enabled Intelligent Assistant for Personalized and Adaptive Learning in Higher Education. *Information*, 2024, 15, p. 596. <https://doi.org/10.3390/info15100596>.
- Salles, A., Evers, K., & Farisco, M. (2020). Anthropomorphism in AI. *AJOB neuroscience*. 11(2), 88-95.
- Santos, I. M., Boheco, O., & Habak, C. (2018). A survey of student & instructor perceptions of personal mobile technology usage and policies for the classroom. *Education and Information Technologies*, 23, p. 617-632.
- Savolainen, R. (2010). Everyday Life Information Seeking. *Encyclopedia of Library and Information Sciences*. Third Edition. DOI: 10.1081/E-ELIS3-120043920.
- Selwyn, N. (2019). Should robots replace teachers?: AI and the Future of Education.
- Servais, V. (2018). Anthropomorphism in Human-Animal Interactions: A Pragmatist View. *Front Psychol*. 9, p. 2590. doi: 10.3389/fpsyg.2018.02590. PMID: 30619001; PMCID: PMC6305360.
- Shukla, S. (2021). M-learning adoption of management students': A case of India. *Education and Information Technologies*, 26(1), 279-310.
- Skinner, B. F. (1963). Operant Behavior. *American Psychologist*, 18, p. 503-515.
- Statista. (2018). Global social networks. *Education and Information Technologies*. Retrieved from <https://www.statista.com/statistics/014/global-social-networks-ranked-by-number-of-users/> (consulted June 2025).
- Vashishth, T. K., Sharma, V., Sharma, K. K., Kumar, B., Kumar, A., & Panwar, R. (2024). AI-based chatbots supply second-to-second guest assistance together with individualized advice across 24-hour operational periods. *Technology and Luxury Hospitality*, pp. 211-236. Routledge.
- Webster, R., Blatchford, P., & Russell, A. (2013). Challenging and changing how schools use teaching assistants: findings from the Effective Deployment of Teaching Assistants project. *School Leadership & Management*, 33(1), 78–96. <https://doi.org/10.1080/13632434.2012.724672>
- Xie Chenxing, Yanding Wang, & Yang Cheng (2022). Does Artificial Intelligence Satisfy You? A Meta-Analysis of User Gratification and User

-
- Satisfaction with AI-Powered Chatbots. *International Journal of Human-Computer Interaction*, DOI: 10.1080/10447318.2022.2121458.
- Yang, B., Wei, L., & Pu, Z. (2020). Artificial intelligence tools serve as the basis to measure and enhance user experience in design applications. *Frontiers in Psychology*, 11, p. 595374.
- Yoon, C., Jeong, C., & Rolland, E. (2015). Understanding individual's adoption of mobile instant messaging: A multiple perspectives approach. *Information Technology and Management*, 16, p. 139-151.