

## Availability and Use of Social Media Platforms for Academic Activities among Postgraduate Students in Universities in Katsina State, Nigeria

By

<sup>1</sup>Gambo Umar Danmusa, <sup>2</sup>Hakeemat, S. Bello PhD, <sup>3</sup>Abubakar Garba Musa & <sup>4</sup>Mahmoud Ahmad Musa

<sup>1,2,3&4</sup> Federal University Dutsin-Ma, Katsina, Nigeria. Department of Library and Information Science, <sup>1</sup>[gudms911@gmail.com](mailto:gudms911@gmail.com), <sup>2</sup>[bhakeemat@fudutsinma.edu.ng](mailto:bhakeemat@fudutsinma.edu.ng), <sup>3</sup>[ammusa@fudutsinma.edu.ng](mailto:ammusa@fudutsinma.edu.ng), <sup>4</sup>[parissalman22@gmail.com](mailto:parissalman22@gmail.com),

### Abstract

*This study examined the availability and use of social media platforms for academic activities among postgraduate students in universities in Katsina State, Nigeria. Two objectives guided the study: to identify the social media platforms available to postgraduate students for academic activities and to determine the academic purposes for which these platforms are used. A descriptive survey research design was adopted for the study. The population comprised 4,655 postgraduate students in selected universities in Katsina State, with a sample of 323 respondents determined using the Research Advisors (2006) sampling table. Proportionate stratified sampling technique was used to select the respondents. Data were collected using a structured questionnaire titled Social Media Platforms for Academic Activities Questionnaire (SOMPAAQ). The reliability of the instrument was established using Cronbach's Alpha, yielding a coefficient of 0.889. Data collected were analyzed using frequency, percentage, mean, and standard deviation with a benchmark of 2.50. The findings revealed that several social media platforms such as WhatsApp, YouTube, ResearchGate, Zoom, and Academia.edu were widely available to postgraduate students for academic activities. The results also indicated that postgraduate students use social media platforms for various academic purposes including communication with supervisors, sharing academic materials, searching for research articles, participating in academic discussions, attending webinars, and improving academic writing. The study concludes that social media platforms play a significant role in supporting postgraduate academic activities. It is therefore recommended that universities should encourage the academic integration of social media platforms and provide appropriate digital support to enhance their effective use for research and learning.*

**Keywords:** Social Media Platforms; Academic Activities; Postgraduate Students; Digital Learning and Universities in Katsina State.

### Introduction

Universities are institutions of higher learning that offer a broad variety of academic programs, conduct research, and provide a space for intellectual dialogue and debate. Universities are often characterized by their commitment to academic excellence, intellectual freedom, and the pursuit of knowledge. Alemu, (2018) views a university as a higher learning institution that brings men and women to a high level of intellectual development in the arts and sciences and in the traditional

professional disciplines and promotes high level of research. Universities are structured around various academic departments such as political science, civil law and library and information science and each specializes in a particular area of study. These departments may offer undergraduate and graduate degree programmes as well as provide opportunities for research and scholarly activities. Universities create space for learning, teaching, inquiry, and discoveries where individuals explore their intellectual interests and develop the skills and knowledge necessary for personal and professional growth.

The evolution of social media began in the late 1990s and early 2000s with platforms like Six Degrees and MySpace, which introduced the concept of online networking. The rise of Facebook in 2004 and Twitter in 2006 marked a shift toward real-time interaction and global connectivity. Social media refers to online platforms and tools that allow users to create, share, and interact with content, information, or other users in a virtual environment. Examples include Facebook, Twitter (X), Instagram, and LinkedIn. Social media enables users to connect, communicate, and share ideas, experiences, and perspectives with others in real-time, regardless of geographical location. Social media has emerged as a crucial supplement to the scant physical academic infrastructure in underdeveloped nations, particularly in Africa.

Researchers have shown how African postgraduate students use websites like YouTube and WhatsApp to acquire lecture materials, take part in online study groups, and augment classroom instruction (Chukwuere & Marutha, 2020; Boateng & Amankwah, 2021). Social media platforms are online tools or applications that enable users to create, share, and interact with content, facilitating communication, collaboration, and community building. These platforms allow users to create profiles, share information, and engage with others through various features such as posting, commenting, liking, and sharing.

The availability of social media platforms plays a significant role in determining how students utilize digital tools for academic activities. Several studies have reported that university students have access to a wide range of social media platforms that support learning and research activities. These platforms include messaging applications, video-sharing services, professional networking sites, and academic collaboration platforms (Mashauri & Kandengukila, 2025). Research conducted in higher learning institutions revealed that platforms such as WhatsApp, YouTube, Facebook, and X (Twitter) are among the most commonly accessible digital tools used by students for academic engagement. These platforms enable students to share lecture notes, discuss assignments, access tutorial videos, and collaborate with classmates (Mashauri & Kandengukila, 2025). The availability of social media platforms in universities therefore creates opportunities for students to access diverse information resources and engage in collaborative learning environments. However, the level of availability may vary depending on institutional infrastructure, digital literacy levels, and internet accessibility (Sakhieva et al., 2024).

The use of social media for academic purposes among postgraduate students is a growing phenomenon, yet empirical literature on its scope, effectiveness, and challenges remains limited. However, academics, researchers and professionals mostly use social media for entertainment and communication with friends, family and, colleagues even though the technology has also been designed for academic use. Such social media that can be employed for academic activities are referred to as Academic social media platforms (University of Toronto, 2022).

Postgraduate students are those students pursuing higher degree programmes which includes; Postgraduate Diploma, Master's and Doctoral students enrolled in accredited postgraduate

programmes in universities. Postgraduate students are a distinctive population whose academic activities (sustained research, thesis/dissertation writing, supervisory communication, conference and publication efforts) place atypical demands on time, access to resources, and professional networking.

Academic activities have evolved into a multifaceted digital experience that extends far beyond the physical library or classroom. Postgraduate students engage in a broad range of academic activities using social media platforms, including sharing and accessing library and research resources, exchanging knowledge and learning materials, and participating in scholarly communication and collaboration. Undie and Afebende, (2024) found that platforms like YouTube, blogs, and WhatsApp make it easier to share academic content and use library resources, allowing postgraduate students to interact with information more successfully (material availability and ICT skills development). Therefore, this study examines the availability of social media platforms and the academic purposes for which postgraduate students use them in universities in Katsina State.

### **Statement of the Problem**

The growing availability of digital technologies has created new opportunities for improving teaching, learning, and research activities in higher education institutions. Social media platforms, in particular, have become widely used communication tools among university students, offering various possibilities for collaboration, knowledge sharing, and access to academic resources.

Despite these opportunities, many postgraduate students still face challenges in maximizing the academic benefits of social media platforms. In some cases, these platforms are primarily used for social interaction rather than academic engagement. Furthermore, the extent to which different social media platforms are available to postgraduate students for academic purposes remains unclear, particularly in developing regions.

Another concern is that while social media platforms are widely accessible, their academic potential may not be fully utilized due to lack of awareness, limited digital literacy skills, or inadequate institutional support. As a result, postgraduate students may not be taking full advantage of these digital tools to support their research and academic activities.

Given the research-oriented nature of postgraduate education, it is important to understand which social media platforms are available to students and how they are utilized to support academic activities. However, empirical studies addressing these issues among postgraduate students in universities in Katsina State remain limited. This study therefore seeks to fill this gap by investigating the availability of social media platforms and the academic purposes for which postgraduate students use them.

### **Objectives of the Study**

The main objective of this study is to assess the use of social media platforms for academic activities among postgraduate students in universities in Katsina State, Nigeria. The following specific objectives of this study are:

1. To identify the social media platforms available to postgraduate students for academic activities in universities in Katsina State.

2. To determine the purposes postgraduate students use social media platforms for academic activities in universities in Katsina State.

### **Literature Review**

Empirical studies have been conducted on related topics to this study. Among these studies is the work by Owoade and Alabi, (2023) conducted a study titled Availability and Utilization of Social Media Platforms for Academic Purposes among Postgraduate Students in Southwestern Nigeria, with four objectives aimed at identifying available platforms, usage patterns, benefits, and challenges. The study adopted a descriptive survey research design and targeted a population of 3,420 postgraduate students across three federal universities, from which a sample of 420 respondents was selected using proportionate stratified sampling. Data were collected using a structured questionnaire titled Social Media Academic Use Questionnaire (SMAUQ), and analysis was carried out using descriptive statistics (frequency counts and percentages). The findings revealed that WhatsApp, Facebook, Google Scholar, ResearchGate, and YouTube were the most available platforms, while platforms such as ORCID and Academia.edu were less known. The authors recommended that universities should intensify awareness and training on academic social media platforms. Similarity with the present study lies on postgraduate students, use of survey design, questionnaire instrument, and descriptive statistics while differences include area of study; Southwest Nigeria and Katsina State.

Another study by Balogun and Ajayi, (2020) studied social media as a Learning Support Tool among Postgraduate Students in Nigerian Federal Universities. Using a survey design with five objectives, the study targeted 4,500 postgraduate students and sampled 450 through multi-stage sampling. Data were collected using questionnaires and analyzed with descriptive statistics. Findings showed that students used WhatsApp for group chats, YouTube for tutorial videos, and Facebook for academic networking. The study recommended improved internet connectivity. Both studies identify specific academic activities. Balogun and Ajayi used a larger population and sample size than present-day study.

Similarly, Usman and Shehu, (2024) examined Purposes of Social Media Use for Academic Engagement among Postgraduate Students in Northern Nigerian Universities, guided by five objectives and a descriptive correlational research design. The population comprised 2,185 postgraduate students from two state universities, with a sample size of 327 selected through simple random sampling. Data were gathered using a self-developed questionnaire and analyzed using mean scores and standard deviation. The findings indicated that postgraduate students primarily used social media for seminar coordination, sharing academic materials, supervision communication, literature searching, and peer collaboration, while non-academic uses were secondary. The study recommended structured integration of academic social media use into postgraduate training. Similarity with the present study includes focus on postgraduate students, emphasis on academic purposes, questionnaire method, and descriptive analysis; differences include sampling technique, inclusion of correlational design in the reviewed study.

Also, Mabidi, (2024) carried out a study titled Frequency of Social Media Use and Academic Engagement among Postgraduate Students in African Universities, which consisted of six objectives and employed a cross-sectional survey design. The population comprised postgraduate students from five public universities across three African countries, with a sample of 510 respondents selected using multistage sampling. A structured questionnaire was used for data collection, and data were analyzed using descriptive statistics and chi-square tests. Findings

showed that WhatsApp and Telegram were used daily for academic communication, while ResearchGate and Mendeley were used occasionally, mainly during literature review stages. The study recommended institutional support to encourage consistent use of academic platforms. Similarity with the present study lies in the examination of frequency of academic social media use, survey design, and questionnaire method; differences include continental scope versus state-level focus, larger sample size, inclusion of inferential statistics, multiple institutions across countries, and absence of explicit strategies component in the reviewed study.

Similarly, in the research conducted by Adewale, (2022) conducted a study titled Adoption of Social Media Platforms for Academic Purposes among Postgraduate Students in Southwestern Nigerian Universities. The study had four objectives and employed a descriptive survey design. The population consisted of 4,800 postgraduate students, from which a sample of 420 respondents was selected using stratified random sampling. A structured questionnaire was used for data collection, and descriptive statistics (frequency and percentage) were applied in the analysis. Findings revealed that WhatsApp, YouTube, Facebook, and Telegram were the most widely used platforms for academic tasks. The author recommended integrating academic-specific platforms into postgraduate orientations. There will be a similarity between this present study and the past research because both studies focus on postgraduate students' social media platform use and adopt a survey design. This study was conducted in southwestern Nigeria, used four objectives, and applied only descriptive analysis, unlike the present study which is based in Katsina State.

### **Methodology**

The study adopted a descriptive survey research design. The population for this study comprised a total of four thousand six hundred and fifty-five (4,655) Postgraduate students in Universities in Katsina State, there are seven hundred and ninety-five (795) Postgraduate Diploma students, two thousand seven hundred and one (2,701) are Masters Students while one thousand, one hundred and fifty-nine (1,159) were PhD students across the state. A sample size of 323 respondents was determined using the Research Advisors (2006) sampling table. The respondents were selected proportionately using stratified sampling technique to ensure adequate representation of postgraduate students across the selected universities. Data for the study were collected using a structured questionnaire titled *Social Media Platforms for Academic Activities Questionnaire (SOMPAAQ)*. The questionnaire contained items designed to obtain information on the availability of social media platforms and their academic usage by postgraduate students. The instrument was validated by expert lecturers and the reliability of the instrument was determined using Cronbach's Alpha method. The reliability analysis produced a coefficient value of 0.889, indicating a high level of internal consistency and confirming that the instrument was reliable for data collection. The data collected from the respondents were analyzed using descriptive statistics including frequency counts, percentages for research question 1 while research question 2 mean scores, and standard deviations was used. These statistical tools were used to answer the research questions of the study. A bench mark of 2.50 (Decision Rule) was established to accept/reject item statement of research question 2 with the aid of Statistical Package for Social Science (SPSS V27.0).

**Results**

**Research Question 1:** What are the social media platforms that are available to postgraduate students for academic activities in universities in Katsina State?

**Table 1: Availability of Social Media Platforms for Academic Activities by PG Students (N = 323)**

S/N	Social Media Platforms	Available (N)	(%)	Decision
1	Facebook	14	46.1	Available
2	WhatsApp	314	97.2	Available
3	Telegram	214	66.3	Available
4	YouTube	299	92.6	Available
5	Instagram	135	41.8	Available
6	X (Twitter)	134	41.4	Available
7	LinkedIn	210	65.0	Available
8	ResearchGate	274	84.8	Available
9	Academia.edu	266	82.3	Available
10	Google Classroom	173	53.5	Available
11	Zoom	269	83.2	Available
12	Microsoft Teams	134	41.4	Available
13	Mendeley	101	31.2	Available
14	TikTok (Educational Content)	179	55.4	Available
15	School/Faculty Online Portals	188	58.2	Available
16	Skype	92	28.4	Available
17	Blogs (Academic & Research)	132	40.8	Available
18	Google Scholar	226	69.9	Available
19	Zotero	87	26.9	Available
20	QuillBot (Academic writing & paraphrasing tool)	109	33.7	Available

**Key:** High Availability (70% and above); Moderate Availability (40% – 69%) and Low Availability (Below 40%)

Table 1 presents the availability of social media platforms for academic activities among postgraduate students in universities in Katsina State using frequency and percentage distribution. The results show that WhatsApp (97.2%) and YouTube (92.6%) are the most widely available platforms to postgraduate students, followed by ResearchGate (84.8%), Zoom (83.2%), and Academia.edu (82.3%). Other platforms such as Google Scholar (69.9%), Telegram (66.3%), LinkedIn (65.0%), and School/Faculty online portals (58.2%) were also reported as available by a considerable proportion of respondents. This indicates that postgraduate students have access to a wide range of platforms that support communication, research, and academic collaboration. However, the level of availability varies across platforms. While general-purpose platforms such as Facebook (46.1%), Instagram (41.8%), X (Twitter) (41.4%), and Microsoft Teams (41.4%) recorded moderate availability, specialized academic tools such as Mendeley (31.2%), Zotero (26.9%), Skype (28.4%), and QuillBot (33.7%) were reported as less available. Despite these

variations, all listed platforms were generally available to postgraduate students, suggesting that the academic environment provides multiple digital platforms that can support postgraduate academic activities, though access to specialized research tools appears relatively limited compared to general social media platforms.

**Research Question 2:** What are the academic purposes for which postgraduate students in universities in Katsina State use social media platforms?

**Table 2: Purposes of Using Social Media Platforms for Academic Activities by PG Students (N = 323)**

S/N	Items Statement	Mean	Std. Dev.
1	I use social media platforms to communicate with my supervisors.	3.76	.438
2	Social media platforms help me share academic materials with colleagues.	3.57	.520
3	I use social media platforms to search for research articles and journals.	3.64	.506
4	I engage in academic discussions with peers through social media platforms.	3.47	.553
5	Social media platforms support collaborative research and group assignments.	3.51	.565
6	I use social media platforms to attend academic seminars and webinars.	3.49	.576
7	I use social media platforms for data collection and survey distribution.	3.48	.586
8	Social media platforms assist me in disseminating my research findings.	3.45	.574
9	I use social media platforms for improving academic writing and paraphrasing skills	3.60	.527
10	I use social media platforms for receiving feedback on academic work from peers or supervisors	3.46	.564
<b>Grand Mean</b>		<b>3.54</b>	

**Decision Rule=  $\geq 2.50$**

Table 2 presents the mean scores and standard deviations of postgraduate students' responses on the purposes for which social media platforms are used for academic activities. The Table indicates that postgraduate students strongly agree that social media platforms are used for a wide range of academic purposes, as all item statements recorded mean scores well above the decision benchmark of 2.50. Notably, communication with supervisors recorded the highest mean score (3.76), followed by searching for research articles and journals (3.64), improving academic writing and paraphrasing skills (3.60), and sharing academic materials with colleagues (3.57). These high mean values underscore the central role of social media platforms in supporting research activities, academic communication, and collaborative learning among postgraduate students. Other academic purposes, including engaging in academic discussions (3.47), supporting collaborative research and group assignments (3.51), attending academic seminars and webinars (3.49), data collection and survey distribution (3.48), dissemination of research findings (3.45), and receiving

feedback on academic work (3.46), also recorded strong levels of agreement. The overall grand mean of 3.54 further confirms that postgraduate students purposefully and consistently use social media platforms for diverse academic activities in universities in Katsina State.

### **Discussion of the Findings**

Findings from Table 1 revealed that a wide range of social media platforms are available to postgraduate students for academic activities in universities in Katsina State, with platforms such as WhatsApp, YouTube, ResearchGate, Google Scholar, Zoom, Telegram, and LinkedIn recording high availability levels. This finding is in agreement with earlier empirical studies reviewed which reported that postgraduate students in Nigerian and African universities have increasing access to both general-purpose and academic-oriented social media platforms due to improved mobile technology and internet penetration. Similarly, studies conducted outside Nigeria, such as those by Greenhow and Chapman, (2020) and Pérez-Sánchez et al., (2023), corroborate the present finding by indicating that messaging applications and academic networking platforms are widely accessible and form the backbone of postgraduate academic communication. However, unlike some earlier studies that reported limited access to academic-focused platforms, the present study shows relatively high availability of platforms such as ResearchGate and Google Scholar, suggesting gradual improvement in access to scholarly digital tools in the study area.

Findings from Table 2 shows related to the purposes of using social media platforms indicate that postgraduate students use these platforms primarily for academic communication with supervisors, sharing academic materials, searching for research articles, collaborative research, attending seminars and webinars, and improving academic writing skills. This result collaborates with the findings of Olowe and Adekunle, (2021) and Nduka and Popoola, (2024), who reported that WhatsApp and Telegram are extensively used for supervision coordination, peer feedback, and dissemination of academic materials. Likewise, international studies by Greenhow and Chapman, (2020) and Khalid and Ahmed, (2023) are in line with the present findings, identifying research collaboration, literature discovery, and scholarly communication as key academic purposes of social media use among postgraduate students. The present study, however, extends these findings by showing a broader and more balanced use of both general-purpose platforms and academic-specific platforms, reflecting a more integrated academic use pattern among postgraduate students in Katsina State.

### **Conclusion**

This research concluded that social media platforms are widely available and actively used by postgraduate students in universities in Katsina State for diverse academic purposes. These platforms play a significant role in facilitating academic communication, research activities, collaboration, and access to scholarly resources.

### **Recommendations**

Based on the findings of this study, the following recommendations are made:

1. Universities should invest in improving campus internet connectivity and ensuring affordable access to data services for postgraduate students.
2. Regular digital literacy training and workshops should be organized to enhance postgraduate students' skills in using academic social media platforms effectively.

## References

- Adewale, O. A. (2022). *Adoption of social media platforms for academic purposes among postgraduate students in Southwestern Nigerian universities* (Unpublished master's thesis). University of Ibadan, Ibadan, Nigeria.
- Alemu, S. R. (2018). The meaning, idea and history of university in Africa: a brief literature review. *Forum for International Research in Education*, 4(3), 210-227.
- Balogun, A. O., & Ajayi, L. A. (2020). Social media as a learning support tool among postgraduate students in Nigerian federal universities. *Journal of Library and Information Science Research*, 12(1), 61–75.
- Boateng, R., & Amankwaa, A. (2019). The impact of social media use on student academic performance: Evidence from tertiary institutions. *Information Development*, 35(1), 1–14.
- Chukwuere, J., & Marutha, N. (2020). Students' academic use of WhatsApp: Benefits and challenges. *South African Journal of Information Studies*, 36(1), 12–21.
- Greenhow, C., & Chapman, A. (2020). Social distancing meets social media: Digital tools for academic collaboration. *Information and Learning Sciences*, 121(5/6), 359–370.
- Khalid, A., & Ahmed, R. (2023). Postgraduate students' use of social networking sites for academic purposes. *Asian Journal of Educational Technology*, 12(4), 89–105.
- Mabidi, J. (2024). Academic uses of social media among postgraduate students in sub-Saharan Africa. *International Journal of Educational Technology in Higher Education*, 21(1), 1–19.
- Mashauri, D., & Kandengukila, P. (2025). The applicability of social media platforms for academic purposes in higher learning institutions. *Asian Research Journal of Arts & Social Sciences*, 23(2), 75–85.
- Nduka, S. C., & Popoola, S. O. (2024). Exploring social media technologies awareness and use among postgraduate students of Library and Information Science in Nigeria: An investigative study. *International Journal of Knowledge Content Development & Technology*. ([ir.unilag.edu.ng](http://ir.unilag.edu.ng))
- Olowe, M. O., & Adekunle, P. A. (2021). WhatsApp as an academic communication tool among postgraduate students in Nigeria. *African Journal of Library, Archives and Information Science*, 31(1), 67–82.
- Owoade, A. A., & Alabi, A. O. (2023). Availability and utilization of social media platforms for academic purposes among postgraduate students in Southwestern Nigeria. *Library Philosophy and Practice*, 2023, 1–18. <https://digitalcommons.unl.edu/libphilprac/>
- Perez, E., Manca, S., Fernández-Pascual, R., & McGuckin, C. (2023). *A systematic review of social media as a teaching and learning tool in higher education: A theoretical grounding perspective*. Education and Information Technologies.
- Research Advisor. (2006). Table for determining sample for research activities Educational and Psychological Measurement 30, 609-610. Lexington Books, Plymouth, United Kingdom.
- Sakhieva, R. G., Meshkova, I. E., & Zhdanov, S. (2024). Exploring the relationship between social media use and academic performance. *Online Journal of Communication and Media Technologies*.

- Undie, F., & Afebende, G. (2024). Influence of availability and utilization of ICT resources on postgraduate students' utilization of library services. *Library Philosophy and Practice (e-journal)*, 2024 (1), 1-23. <https://digitalcommons.unl.edu/libphilprac/>.
- University of Toronto, (2022). Academic social network, research impact and researcher identity. Retrieved from <https://guides.libraryutoronto.ca>.
- Usman, H., & Shehu, M. (2024). *Social media use, distractions, and academic efficiency among postgraduate students in Nigerian universities*. *Journal of Higher Education and Digital Society*, 9(1), 101–118.