DIGITAL COMMUNICATION SKILLS AS PREDICTOR OF THE USE OF INSTITUTIONAL REPOSITORY AMONG POSTGRADUATE STUDENTS IN FEDERAL UNIVERSITIES IN SOUTH-SOUTH, NIGERIA

By

ADEMOLA FERDINAND OMOSEKEJIMI (CLN)

PhD. Researcher, Department of Library and Information Science, Ignatius Ajuru University of Education, PortHarcourt, Rivers State, Nigeria

VICTOR WAGWU (PhD)

Ignatius Ajuru University of Education, PortHarcourt, Nigeria

and

ANTHONIA EGHIESO OMEHIA (Prof.)

Ignatius Ajuru University of Education, PortHarcourt, Rivers State, Nigeria

Abstract

This study was conducted to examine digital communication skills and the use of institutional repositories among postgraduate students in federal universities in South-South, Nigeria. A mixed method of descriptive survey and correlational research designs was adopted for the study. The population comprised 1,402 postgraduate students (M.Sc. and Ph.D.) across three federal universities in the region, while a sample of 306 respondents was selected using purposive sampling. Data were collected through a structured questionnaire. 306 copies of the questionnaires were administered, and 293 copies were duly completed, retrieved, and found usable, representing a 96% response rate. The data generated were analysed using descriptive (Weighted Mean) and inferential (Pearson Product-Moment Correlation Coefficient (PPMC)) statistical tools. The findings revealed that postgraduate students possess a high level of digital communication skills. However, the extent of use of institutional repositories was found to be low, suggesting that repositories are not frequently utilised as primary academic resources among postgraduates in the region. The study also established a strong positive relationship between digital communication skills and the use of institutional repositories. It was therefore concluded that students with higher digital communication competence are more likely to access, retrieve, and utilize research materials stored in institutional repositories. The study recommends that federal universities in the South-South, Nigeria, should incorporate institutional repository (IR) training into postgraduate orientation and academic courses. This will help students understand how to access, upload, and utilise research materials effectively for academic and research purposes.

Keywords: Digital Communication, Digital Skills, Computer Literacy, Institutional Repository, Postgraduate Students, Databases.

Introduction

In the contemporary era of digital transformation, universities play a central role in the creation, preservation, and dissemination of scholarly knowledge across diverse fields of study. Through innovative research and academic engagement, they contribute significantly to national development, scientific progress, and social advancement. Yet, despite the enormous volume of academic output produced, a substantial portion of research remains inaccessible or underutilized by the wider scholarly community (Francisca & Abioye, 2017). This situation underscores the necessity for structured mechanisms that can store, organize, and make institutional research outputs readily available to researchers, students, and policymakers. Institutional Repositories (IRs) have emerged as one of such mechanisms, providing a sustainable digital infrastructure for the long-term preservation and open access to academic works (Sambo et al., 2022).

Institutional repositories serve as comprehensive online platforms designed to capture, preserve, and disseminate the intellectual contributions of universities. These repositories typically host a wide range of academic materials, including theses, dissertations, conference papers, journal publications, and technical reports. According to Nunda and Elia (2019), IRs promote institutional visibility, support knowledge sharing, and strengthen scholarly communication within and beyond university communities. For postgraduate students, they offer a valuable resource base for academic research, enabling access to credible, peer-reviewed, and contextually

relevant information that aids in the development of literature reviews, theoretical frameworks, and empirical analyses (Ibrahim et al., 2020).

However, effective use of institutional repositories is increasingly influenced by the users' digital communication skills. In today's interconnected academic environment, digital communication skills extend beyond mere computer literacy; they encompass the ability to use digital platforms, navigate online databases, exchange information effectively, and engage collaboratively through digital media. News (2024) describes these skills as the capacity to use online tools and applications for information retrieval, data management, academic networking, and knowledge sharing. Hence, for postgraduate students, possessing strong digital communication competencies is essential for accessing, utilizing, and contributing to institutional repositories effectively.

Oseghale (2023) notes that digital literacy and communication competence play a crucial role in helping students navigate electronic information systems efficiently. Likewise, Agina-Obu and Okwu (2023) argue that the ability to engage in digital communication enhances students' interaction with scholarly materials and fosters collaborative learning environments. Conversely, inadequate digital communication skills can hinder students from exploring institutional repositories to their full potential, leading to missed opportunities for academic growth and research innovation. Given the increasing reliance on digital technologies in higher education, the relationship between digital communication skills and the use of institutional repositories deserves critical attention. Understanding how these skills influence students' ability to locate, retrieve, evaluate, and disseminate research information is essential for promoting academic excellence and fostering a culture of open access. Therefore, this study investigates the relationship between digital communication

skills and the use of institutional repositories among postgraduate students in Federal Universities in South-South, Nigeria.

Statement of the Problem

Institutional Repositories (IR) serve as vital platforms for preserving and providing open access to scholarly resources such as theses, dissertations, and journal articles, thereby supporting academic research and knowledge dissemination. Despite their availability in many federal universities across South-South Nigeria, existing evidence and preliminary observations indicate that postgraduate students make limited use of these repositories. This underutilization raises serious concerns about students' level of digital communication skills, which are essential for accessing, retrieving, and sharing academic information effectively. Digital communication skills, such as the ability to use online research platforms, manage digital content, and engage with web-based academic tools, are critical for maximizing the benefits of IR. The apparent deficiency in these skills may impede postgraduate students from fully exploiting institutional repositories for research and learning purposes. Therefore, this study seeks to examine the relationship between digital communication skills and the use of institutional repositories among postgraduate students in Federal Universities in South-South, Nigeria.

Research Questions

The following research questions will be answered in this study:

- 1) What is the level of digital communication skills possessed by postgraduate students in Federal Universities in South-South, Nigeria?
- 2) To what extent do postgraduate students utilize institutional repositories in Federal Universities in South-South, Nigeria?

3) What is the relationship between digital communication skills and the use of institutional repositories by postgraduate students in Federal Universities in South-South, Nigeria?

Literature Review

The literature reviewed in this section was conducted in line with the research questions guiding the study.

Level of Digital Communication Skills Possessed by Postgraduate Students

In today's digitally driven world, communication skills extend beyond face-to-face interactions to encompass proficiency across digital platforms (Joglekar et al. 2022). In the 21st-century educational landscape, digital communication skills, which are the ability to convey and interpret information via digital channels effectively, have become indispensable, particularly among students in higher institutions of learning (Choren 2015; Nuralievna, 2023). For university students, postgraduates especially, these skills are critical not only for academic success (Ray 2023) but also for employability in an increasingly digitalised work environment (Feijao et al. 2021; Gašová et al. 2018). As universities normalize online learning, it becomes crucial to evaluate students' digital communication skills and their ability to send and receive electronic information resources that can contribute to their academic success.

A number of studies have been conducted to examine the level of digital communication skills possessed by university students. Bukhori et al. (2025) conducted a study to evaluate the digital communication skills and attitudes towards online learning among students in the Faculty of Engineering & Built Environment, University of Kebangsaan Malaysia. A survey research design was adopted for the study. The population comprised 133 registered engineering students of the university.

The sample size for the study consists of 121 students who were randomly selected for the study. The questionnaire was the instrument used for data collection. The internal consistency and reliability of the instrument were assessed using Cronbach's alpha. The overall reliability for the 33 items was 0.9261, indicating good reliability. Data collected for the study were analysed using simple percentages, pie, and bar charts. The study found that students are stronger in passive online communication skills, such as following instructions and answering questions, than in proactive roles, such as leading discussions. Overall, the study findings reflect a solid foundation in the digital communication skills necessary for effective online learning among students.

On the other hand, Diepiribo (2024) conducted a study to assess digital literacy skills among physical and health education students in secondary schools in Bayelsa State. A descriptive survey design was adopted for the study. To direct the study, two research questions were developed along with matching null hypotheses. All PHE students in the 192 secondary schools in Bayelsa state that are owned by the government make up the study population. The research sample consisted of 499 PHE students, 240 of whom were male and 249 of whom were female. The "Digital Literacy Skill Questionnaire (DLSQ)," a structured tool created by a researcher and approved by specialists, was used to collect data. The Cronbach Alpha formula was used to determine the instrument's reliability, and a coefficient of 0.84 was found. Mean and standard deviation were used to answer the study questions, and t-test statistics were used to assess the hypotheses. The findings revealed that while the extent to which communication technology skills are utilised among Physical and Health Education students in secondary schools in Bayelsa State is high for males and

low for female students, the extent to which communication technology skills are utilised for both groups of respondents is low.

The reviewed studies in this section underscore the growing importance of digital communication skills in both educational and professional contexts. While findings such as those by Bukhori et al. (2025) indicate that university students possess a solid foundation in digital communication, particularly in receptive and responsive capacities, other studies like Diepiribo (2024) highlight disparities in skill levels across gender and educational contexts. These differences suggest that while progress has been made in developing students' digital competencies, there remains a need for more inclusive and practice-oriented interventions to strengthen proactive communication, digital literacy, and equitable access to digital tools. Ultimately, enhancing digital communication skills is vital for academic achievement, employability, and effective participation in today's digitally connected world.

Extent of the Use of Institutional Repository among Postgraduate Students

An Institutional Repository (IR) serves as a digital archive designed to preserve the indigenous intellectual output of an academic institution. This indigenous content includes materials such as examination question papers, research publications, working papers, and inaugural lectures produced within institutions of higher learning. Such resources are invaluable for supporting teaching, learning, and research activities in universities (Sambo et al., 2022). According to Mohammed (2013), an IR functions as a mechanism for bridging the digital divide while enhancing researchers' visibility and facilitating the effective global dissemination of their scholarly outputs.

Although institutional repositories can be accessed by anyone equipped with the necessary digital skills and tools, they are primarily utilized by academic staff, students, and researchers with a strong research orientation. The establishment and utilization of IRs provide significant benefits to researchers, academic institutions, and the broader community. Their open-access nature promotes institutional visibility and reputation building. Furthermore, Nwachi and Idoko (2021) emphasized that information utilization has permeated every aspect of human activity, making it essential for students to effectively harness information resources to accomplish their academic goals. Given that institutional repositories are globally accessible and contain original scholarly works, they have become indispensable tools for researchers seeking credible and comprehensive research materials (Nwachi & Idoko, 2021).

Numerous scholars have investigated the extent of institutional repository (IR) utilization within universities worldwide. Hinmikaye (2015) examined the awareness and use of IRs among academic staff in federal universities located in North Central Nigeria. The study adopted a cross-sectional survey design and involved 2,720 academic staff across six federal universities. A proportionate sampling technique was used to select 270 participants, and data were analyzed using both descriptive and inferential statistics. Frequency tables were employed for data presentation, while chisquare tests were applied to determine relationships. The findings revealed that fewer than half of the respondents deposited their scholarly works in IRs for global accessibility. The low level of usage was attributed to factors such as inadequate awareness, poor funding, limited ICT infrastructure, and insufficient technical skills and training.

Similarly, Bamigbola and Adetimirin (2017) investigated IR utilization among lecturers in Nigerian universities through a descriptive correlational survey. Their study comprised 2,305 lecturers from five purposely selected faculties across

universities with functional repositories. From this population, 1,151 respondents, representing 50%, were randomly selected. Data were gathered using a structured three-section questionnaire and analyzed using descriptive statistical methods, including frequencies, means, and standard deviations. The results indicated that most lecturers were knowledgeable about IRs, accessed them frequently (daily or weekly), and deposited their research outputs periodically, either annually or biannually.

In a related study, Ibrahim et al. (2020) explored graduate students' perceptions regarding the use of IRs for development studies at the University for Development Studies (UDS), Ghana. Conducted across the Wa, Navrongo, Nyankpala, and Tamale campuses in May 2019, the research employed a descriptive survey design. Of the 104 questionnaires distributed, 88 were retrieved, and 85 were found valid for analysis. The study disclosed that although 67% of respondents were aware of the institutional repository, their actual usage was infrequent and largely occasional.

Furthermore, Owoicho and Adekoya (2021) investigated IR usage among students in a specialized Nigerian university using a descriptive survey design. The sample size was determined using Krejcie and Morgan's table, and a convenience sampling technique was adopted. Data were collected through a questionnaire, and analysis was conducted using mean scores to address the research questions. Findings showed that students demonstrated a high level of competence and comfort in using IRs, primarily for assignments, research projects, and article writing. The study concluded that the overall level of utilization and satisfaction with IRs among students was considerably high.

Digital Communication Skills and Use of Institutional Repository among Postgraduate Students

Proofpoint (2023, p. 2) defined electronic communication, also referred to as digital communication, as the transmission of knowledge, ideas, data, or messages through digital channels. The author emphasized that digital communication encompasses a wide array of methods, including email, instant and text messaging, online chat rooms and forums, social media platforms such as Twitter and Facebook, as well as video conferencing tools like Skype and Zoom. Similarly, Zorgle (2023) asserted that understanding digital communication skills entails recognizing the diverse forms of digital interaction along with their respective strengths and limitations. Core competencies in digital communication include the ability to write with clarity and brevity, employ an appropriate tone and language, and adhere to established norms of digital etiquette. In line with this, Fiveable (2025) highlighted that proficiency in these skills is vital in today's technology-driven world, as it significantly influences personal relationships, academic collaboration, and professional networking.

Existing literature on digital communication skills and the use of institutional repositories among postgraduate students remains relatively limited, indicating a clear gap in scholarly research on the subject. Nonetheless, a few relevant studies provide valuable insights into related dimensions of digital competencies. For instance, Romi (2024) conducted an empirical investigation examining the impact of digital skills on university students' academic performance. The study targeted international university students and employed an online questionnaire for data collection. Out of the distributed instruments, 176 valid responses were obtained and analysed. The findings from the regression analysis confirmed the hypothesized relationships between the independent and dependent variables, revealing that digital skills

dimensions significantly and positively influence academic performance. Specifically, the study emphasized that optimal academic outcomes require a combination of key digital skills, including general communication and application skills, educational digital problem-solving skills, digital safety competencies, and information and data processing abilities. Additionally, the study highlighted the relevance of advanced digital competencies such as application development, augmented reality, and database management systems.

Similarly, Khalil and Ebner (2017) explored the use of electronic communication tools in enhancing collaborative learning skills during online group activities. Their experimental study, conducted among education students at Mansoura University, divided participants into two groups: one engaged through synchronous communication tools and the other through asynchronous communication tools. The results demonstrated that electronic communication tools significantly fostered the development of collaborative learning skills. This research is relevant to the current discourse because it highlights the role of digital communication as a key component of digital literacy, illustrating how these tools enhance academic engagement and collaboration.

However, while Khalil and Ebner (2017) focused on undergraduate students and the use of communication tools for collaborative learning, the present topic is concerned with postgraduate students and the application of digital communication skills in relation to institutional repositories. Both perspectives underscore the critical role of digital competencies in academic contexts, but they diverge in focus—whereas the former emphasizes skill development for collaborative learning, the latter emphasizes digital literacy for knowledge preservation, scholarly communication, and improved access to research outputs.

Methodology

The study adopted a mixed method of descriptive survey and correlational research designs. The population of this study comprised 1,402 postgraduate students drawn from three federal universities located in the South-South region of Nigeria. This population includes all bona fide M.Sc. and Ph.D. students. For the fact that the student population of this study is large, the use of a sample becomes very necessary. As Ekeh (2003) puts it, a researcher cannot use as a subject every member of a large population for reasons of limitations in financial resources, time, effort, and scope. Hence, Krejcie and Morgan (1970) stated that the ever-increasing demand for research has created a need for an efficient method of determining the sample size that is needed to be representative of a given population.

Accordingly, Krejcie and Morgan (1970) reported that for a study that has a population of up to 1500 and below, the minimum sample size should be at least 306. In this light, the researcher selected 102 respondents from the total number of M.Sc. and Ph.D. students registered users of the library in each of the three federal universities under study that have adopted and are using institutional repositories using a purposive sampling technique, giving a total of 306. Hence, a sample size of 306 respondents was drawn from the total population. The three federal universities in this study are: Federal University of Petroleum Resources, Effurun; University of Benin; and University of Port-Harcourt. A questionnaire titled "Digital Communication Skills as Predictor of the Use of Institutional Repositories among Postgraduate Students in Federal Universities in South-South, Nigeria" was the instrument used for data collection. The instrument was validated by two experts in the field of Library and Information Science, and to ensure the reliability of the research instrument, the test-retest method was employed. The researcher

administered 30 copies of the questionnaire to postgraduate students from the University of Ibadan twice, giving them two weeks after the first administration.

The data generated from this pilot test was analysed using Pearson's Product-Moment Correlation Coefficient (r) to establish the internal consistencies for the research instrument, and the test result yielded a reliability index of r = 0.83, which indicated that the research instrument is highly reliable. The instrument was administered to the respondents face-to-face in their respective university libraries. 306 copies of the questionnaires were administered to the postgraduate students in the three federal universities under study, and 293 copies were duly completed, retrieved, and found usable. Hence, there was a 96% response rate. Data generated from the administration of the instrument were analysed with descriptive (weighted Mean) and inferential (Pearson Product-Moment Correlation Coefficient (PPMC) statistical tools.

Findings

Research Question 1: What is the level of digital communication skills possessed by postgraduate students in Federal Universities in South-South, Nigeria?

Data in Table 2 provides an answer to the question.

Table 1: Level of Digital Communication Skills Possessed by Postgraduate Students

S/N	Statement	VHL (4)	HL (3)	LL (2)	VLL (1)	Weighted Mean
1	I can effectively communicate academic ideas and arguments through digital platforms such as email, online forums, or learning management systems.	130	120	30	13	3.25
2	I am confident in participating in virtual meetings, webinars, and online group discussions using video conferencing tools (e.g., Zoom, Google Meet, Microsoft Teams).	125	115	35	18	3.18
3	I can create and share professional digital content (e.g., presentations, research updates, or publications) using online tools.	118	125	35	15	3.18
4	I can interpret and respond appropriately to messages or feedback received through digital communication channels.	140	110	25	18	3.27

International Journal of Information Resource Management (IJIRM) Volume 2, Number 4 (2025)

E- ISSN: 1118-7786

5	I frequently use social and academic networking platforms (e.g., ResearchGate, LinkedIn, Google Scholar) to engage with peers and researchers.	120	125	30	18	3.18
6	I am skilled at using collaborative digital tools (e.g., Google Docs) for teamwork and project management.	125	120	28	20	3.19
7	I ensure clarity, conciseness, and professionalism when communicating digitally for academic or research purposes.	135	115	30	13	3.27
8	I can manage and organize digital correspondence efficiently to maintain effective communication flow.	128	120	30	15	3.23
	I can troubleshoot basic communication challenges such as poor connectivity, software errors, or difficulties in using online platforms.	120	115	40	18	3.15
	Weighted Mean					3.21
	Criterion Mean					2.50

Table 1 revealed an overall weighted mean of 3.21, which is above the criterion mean of 2.50. It can therefore be concluded that the level of digital communication skills among postgraduate students is high. This indicates that most students possess adequate competence in using various digital platforms for academic communication, collaboration, and information exchange. Across the items, the weighted means range from 3.15 to 3.27, confirming that respondents generally demonstrate proficiency in skills such as composing academic messages, participating in online meetings, creating digital content, and utilizing collaborative tools. The findings suggest that postgraduate students are well-adapted to the demands of modern digital learning environments, where communication through electronic media is essential for research, interaction, and knowledge sharing. This high level of competence further implies that students can effectively engage in virtual academic communities, access global resources, and enhance their academic performance through efficient digital communication practices.

Research Question 2: To what extent do postgraduate students utilize institutional repositories in Federal Universities in South-South, Nigeria?

Data in Table 2 provides an answer to the question.

Note: VHE (Very High Extent), HE (High Extent), LL (Low Extent), VLL (Very Low Extent).

Table 2: Extent of the Use of Institutional Repository among Postgraduate Students.

S/N	Statements	VHE	HE	LE	VLE	Weighted
		(4)	(3)	(2)	(1)	Mean
1	I use the institutional repository	38	57	116	82	2.17
	frequently as a primary source of					
	academic information for my studies.					
2	I use the institutional repository to	48	67	105	73	2.31
	access past research works and					
2	academic publications.	42	62	110	70	2.24
3	I use the institutional repository to source materials for my	43	62	110	78	2.24
	source materials for my thesis/dissertation.					
4	I use the institutional repository to	53	67	100	73	2.34
•	find journal articles and conference	33	07	100	75	2.31
	papers relevant to my field of study.					
5	I use the institutional repository to	34	57	115	87	2.13
	retrieve lecture notes, course					
	materials, and other academic					
	resources.					
6	I consult the institutional repository	38	62	111	82	2.19
	to stay updated on the latest research					
7	within my discipline.	40	67	105	72	2.31
7	I use the institutional repository to access electronic theses and	48	67	105	73	2.31
	dissertations submitted by other					
	postgraduates.					
8	I use the institutional repository to	43	62	110	78	2.24
	improve my literature review by					
	finding credible academic sources.					
	Weighted Me	an				2.24
	Criterion Me	an				2.50

Table 2 revealed an overall weighted mean of 2.24, which falls below the criterion mean of 2.50. It can be concluded that the extent of the use of institutional repository among postgraduate students in federal universities in South-South, Nigeria is low. This suggests that the institutional repository is not frequently utilized as a primary academic resource by most students. Across the items, the weighted means range from 2.13 to 2.34, confirming that respondents generally exhibit a low extent of engagement with the IR for activities such as accessing past research works, sourcing materials for theses and dissertations, retrieving lecture notes, and improving literature reviews. The findings imply that while IRs are available, they are underutilized by postgraduate students.

Research Question 3: What is the relationship between basic computer skills and the use of institutional repositories among postgraduate students in federal universities in South-South, Nigeria?

Data in Table 3 provides an answer to the question.

Table 3: Summary of Pearson Product-Moment Correlation Coefficient (PPMC) on the Relationship between Digital Communication Skills and Use of Institutional Repositories among Postgraduate Students in Universities in South-South, Nigeria.

		Digital	Use of Institutional
		Communication	Repositories
		Skills	
Digital	Pearson Correlation	1	.768**
Communicatio			
n Skills			
	Sig. (2-tailed)		.001
	N	306	306
Use of	Pearson Correlation	.868**	1
Institutional			
Repositories			
	Sig. (2-tailed)	.001	
	N	306	306

Table 4.3 presents the summary of the Pearson Product-Moment Correlation on the relationship between digital communication skills and the use of institutional repositories among postgraduate students in universities in South-South, Nigeria. The

Pearson Moment Correlation coefficient between the two variables is r = 0.868, which indicates that there is a strong positive relationship between the two variables.

Discussion of Findings

The findings from the analyzed data on research question one indicated that the level of digital communication skills among postgraduate students is high. This study agrees with that of Bukhori et al. (2025), who found that students in the Faculty of Engineering & Built Environment, University of Kebangsaan Malaysia, possess a solid foundation in the digital communication skills necessary for effective online learning. This implies that postgraduate students are well-equipped to utilize various digital platforms for academic communication, collaboration, and research dissemination. Their high level of digital communication skills enhances their ability to engage effectively in online learning environments, access and share scholarly resources, and participate in virtual academic discussions, thereby improving overall academic performance and productivity.

Also, findings from the analyzed data on research question two revealed that the extent of institutional repository (IR) use among postgraduate students in federal universities in South-South Nigeria is low, indicating that most postgraduate students do not frequently engage with institutional repositories as a primary academic resource. This result aligns with the findings of Ibrahim et al. (2020), who reported that although the majority of students at the University for Development Studies in Ghana were aware of the institutional repository, their level of usage remained largely occasional. However, the present finding contradicts the results of Owoicho and Adekoya (2021), whose study revealed that students in a specialized Nigerian university demonstrated a high level of IR usage and satisfaction. The disparity between these findings may be attributed to contextual differences such as

institutional support, ICT infrastructure, user training, and the degree of integration of IR use into academic programs.

The study further revealed that there is a strong positive correlation between digital communication skills and the use of institutional repositories (IRs) among postgraduate students in universities within the South-South region of Nigeria. This indicates that as students' digital communication skills improve, their utilization of institutional repositories increases correspondingly. The finding is consistent with the work of Romi (2024), who established that attaining optimal academic performance requires a synergy of digital competencies, particularly digital communication and application skills, digital problem-solving abilities, digital safety awareness, information and data processing skills, and advanced digital capabilities such as application development, augmented reality, and database management systems. This finding underscores the crucial role of digital communication proficiency in enhancing postgraduate students' ability to navigate, access, and utilize institutional repositories effectively for scholarly and research activities. Consequently, developing and strengthening these skills among postgraduate students is essential for maximizing the academic and research potential of institutional repositories.

Recommendations

Based on the findings of this study, the researchers recommend that:

- Federal universities in the South-South, Nigeria, should incorporate institutional repository (IR) training into postgraduate orientation and academic courses. This will help students understand how to access, upload, and utilise research materials effectively for academic and research purposes.
- 2. University libraries and ICT units should organise periodic workshops and seminars aimed at enhancing postgraduate students' digital communication

competencies. Such training should focus on the practical use of online academic platforms, collaborative digital tools, and effective information exchange techniques.

- 3. University management should ensure that institutional repositories are user-friendly, well-maintained, and easily accessible both on and off campus. Regular system upgrades, adequate bandwidth, and 24-hour technical support should be provided to encourage consistent use among postgraduate students.
- 4. Librarians and academic departments should actively promote awareness about the importance and benefits of using institutional repositories. Awareness campaigns through university websites, newsletters, and social media can motivate students to engage more actively with the repositories for their research and learning needs.

Conclusion

This study comprehensively examined the relationship between digital communication skills and the use of institutional repositories among postgraduate students in federal universities in South-South, Nigeria. The findings revealed that while postgraduate students demonstrated a high level of digital communication skills, their extent of institutional repository usage remains relatively low. This suggests that although students are proficient in employing various digital tools for academic communication, collaboration, and content sharing, these competencies have not been fully translated into the effective utilization of institutional repositories for research and learning purposes.

The study further established a strong positive relationship between digital communication skills and the use of institutional repositories, indicating that students with higher digital communication competence are more likely to access, retrieve, and

utilize research materials stored in institutional repositories. This underscores the pivotal role of digital communication proficiency in promoting access to scholarly resources, fostering knowledge sharing, and enhancing research productivity. Overall, the findings highlight the need for universities to bridge the gap between students' digital communication competence and their engagement with institutional repositories.

References

- Agina-Obu, R., & Okwu, E. (2023). Impact of digital literacy on university students' use of digital resources in Nigeria. *Asian Journal of Information Science and Technology*, 13(2), 60-65. https://doi.org/10.51983/ajist-2023.13.2.3587
- Bamigbola, A. A., & Adetimirin, A. E. (2017). Evaluating the use of institutional repositories by lecturers in Nigerian universities. *Information Impact: Journal of Information and Knowledge Management*, 8(3), 83-102.
- Bukhori, M. F., Zainal, N., & Mustaza, S. M. (2025). Evaluating digital communication skills and attitudes toward online learning among students in the Faculty of Engineering & Built Environment, Universiti Kebangsaan Malaysia. *Innovative Teaching and Learning Journal*, 9 (1), 296–305.
- Choren, A. (2015). The importance of communication in the workplace. *IEEE Potentials*, *34*, 10–11.
- Diepiribo A.D. (2024). Assessment of digital literacy skills among physical and health education students in Secondary Schools in Bayelsa State. *British Journal of Education*, 12(2), 23-31.
- Ekeh, F. I. (2003). Research methodology and statistics in education. Nsukka: Madol Press.
- Feijao, C., Flanagan, I., Van Stolk, C., & Gunashekar, S. (2021). *The global digital skills gap: Current trends and future directions* (RR-A1533-1). Rand Corporation.
- Fiveable. (2025). *Digital communication skills*. https://fiveable.me/key-terms/english-11/digital-communication-skills
- Francisca, N. O., & Abioye, A. A. (2017). Institutional repositories in university libraries in Nigeriaand the challenges of copyright. *Advances in Social Sciences Research Journal*, 4(15) 62-72. https://www.scecsal.org/publications/papers2018/012%20_kakai_2018.pdf
- Gašová, K., Mišík, T., & Štofková, Z. (2018). Employers' demands on e-skills of university students in conditions of the digital economy. *CBU International Conference Proceedings*, 6, 146–151.
- Hinmikaiye, B. V. (2015). Awareness and use of institutional repositories among academic staff in the federal universities of North Central. https://teras.ng/api/asset/document/fb296bbd-9a86-4cd7-8d1a-ff00cb19c135
- Ibrahim, A. K., Mohammed, H., & Bawa, S. (2020). Perception of graduate students on the use of the institutional repository of the university for development studies, Tamale, Ghana. *UDS International Journal of Development [UDSIJD]*, 7(2), 437-447.

- Joglekar, Y., Purdy, D., Brock, S. E., Tandon, A., & Dong, A. (2022). Developing digital communication competency in the business classroom. *Business and Professional Communication Quarterly*, 85, 141–168.
- Khalil, H., & Ebner, M. (2017). Using electronic communication tools in online group activities to develop collaborative learning skills. Universal *Journal of Educational Research*, 5(4), 529-536. DOI: 10.13189/ujer.2017.050401.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, *30*, 607-610.
- Mohammed, A. (2013). Institutional digital repository: An option for scholarly communication in Nigeria. *International Journal of Education and Research*, *1*(6), 1-10. https://www.ijern.com/journal/June-2013/33.pdf
- Nunda, I. M., & Elia, E. F. (2019). *Institutional repositories adoption and use in selected Tanzanian higher learning institutions*. https://files.eric.ed.gov/fulltext/EJ1214269.pdf
- Nuralievna, S. O. (2023). Enhancing communicative competencies of future engineers: Strategies and implications. *Frontline Social Sciences and History Journal*, *3*(5), 96–1000.
- Nwachi, C., & Idoko, N. (2021). Staff use of institutional repositories for academic purposes in Nigerian university libraries: The Librarians' Perspective. *Library Philosophy and Practice (ejournal).* 5247. https://digitalcommons.unl.edu/libphilprac/5247
- Oseghale, S. (2023). Digital information literacy skills and use of electronic resources by humanities graduate students at Kenneth Dike Library, University of Ibadan, Nigeria. *Digital Library Perspectives*, 39(2), 181-204. https://doi.org/10.1108/DLP-09-2022-0071
- Owoicho, O. P., & Adekoya, C. O. (2021). Usage of institutional repositories among students of a specialized university in Nigeria. *Niger Delta Journal of Library and Information Science*, 2(1), 80-89. https://ndjlis.fuotuoke.edu.ng/index.php/ndjlis/article/view/18/18
- Proofpoint. (2023). What is electronic communication? https://www.proofpoint.com/us/threat-reference/electronic-communication
- Ray, S. T. (2023). Role and importance of communication skills for engineering students. *International Journal for Research Publication and Seminar*, 14(5), 151–156.
- Romi, I. M. (2024). Digital skills impact on university students' academic performance: An empirical investigation. *Edelweiss Applied Science and Technology*, 8(5), 2126-2141
- Sambo, A. S., Okonoko, V. N., & Akanbi, M. L. (2022). Challenges and strategies to the use of institutional repository among academic staff in universities libraries in South-west, Nigeria. *Abraka Humanities Review*, 12(1), 89-97.
- Zorgle. T. (2023). What are digital communication skills? https://zorgle.co.uk/what-are-digital-communicationskills/#:~:text=These%20skills%20refer%20to%20the,%2C%20 education%2C%20and%20personal%20life.