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INFLUENCE OF INFORMATION TECHNOLOGY ON THE JOB PERFORMANCE OF LIBRARY STAFF IN SPACE RESEARCH ACTIVITIES, SOUTH-WEST AND NORTH-CENTRAL NIGERIA

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Abstract

This study investigated the influence of Information Technology (IT) on the job performance of library staff at space research centres in South-West and North-Central Nigeria. It aimed to assess the extent of IT adoption, its impact on utilisation, and its overall relationship with job performance. The study employed a descriptive correlational survey using a census approach to target all 182 library staff across seven National Space Research and Development Agency (NASRDA) centres. Data collected via a structured questionnaire were analysed using descriptive statistics, Pearson Product Moment Correlation, and multiple linear regression ($\alpha = 0.05$). Findings revealed that library staff demonstrated generally high levels of job performance, particularly in cataloguing, reference services, and collection management. IT adoption was at a moderate level, with higher engagement in computerised cataloguing systems, Integrated Library Management Systems (ILMS), and library websites. IT utilisation exerted a wide-ranging and highly positive impact on performance outcomes. A statistically significant relationship was found between IT influence and job performance ($r = -.261$, $p = .001$), which shows that IT significantly influenced job performance in Space Research Institutes. The study concluded that strengthening IT infrastructure and enhancing digital literacy skills are essential for improving job performance in space research libraries, and recommends sustained investment in IT training, infrastructure development, and institutional policy support.

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Keywords: Information technology, Job performance, Library staff, Space research library.

Introduction

Libraries occupy a central and irreplaceable position in the ecosystem of knowledge production, dissemination, and preservation. As institutions entrusted with the curation and organisation of recorded knowledge, libraries serve a broad constituency students, researchers, academics, and the general public enabling informed decision-making, scientific discovery, and social development (UNESCO, 2020). In today's knowledge-driven economy, this foundational mission has become increasingly complex owing to the exponential proliferation of information and the rapid advancement of digital technologies.

The transformation of library services, from manual and print-based operations to digitally integrated environments, has fundamentally altered the professional landscape within which library staff operate, demanding new competencies, adaptive skills, and continuous professional development (Dapo-Aina, Okunnu, &Dapo-Asaju, 2014). Library staff in these specialised research environments face distinctive performance demands that go beyond those encountered in conventional academic or public libraries. The technical complexity of space science research, the specialised nature of information resources required, and the need to support highly skilled scientists and engineers place extraordinary demands on library staff competencies and job performance.

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Job performance refers to the efficiency, effectiveness, and quality of services provided by library staff and resources. Chukwunonso, Ayele, and Itodo (2020) stated that job performance is a construct that consists of many behaviours; they noted that the construct of job performance is multidimensional, and it includes: quality, quantity, timeliness, cost-effectiveness, need for supervision, and interpersonal impact. Library job performance is measured by their ability to effectively manage records, provide efficient access to digital resources, maintain the integrity and security of the information, respond to inquiries, the accuracy of information provided, and the overall satisfaction of library users. Ufuoma and Omekwu (2020) explained that job performance is the measure of how an output is produced as a result of the level of inputs given, and provides insights into the human psychology of work behaviours and factors that motivate.

Bossaller and Kammeraad (2021) referred to library job performance as the extent to which library staff effectively perform their duties and responsibilities, which include selecting, organizing, and managing library resources, providing assistance to library users, and maintaining an organized and accessible library space. The essential job functions carried out in the library include: acquisition, cataloguing and classification of information resources, provision of reference services, charging and discharging materials to users, digitization of information resources, among others. Each job performed by the library staff has its own responsibilities. Some responsibilities in a university library include online selection, ordering and acquisition, automated circulation of information resources, preparing an online public access catalogue, provision of online reference services, and

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digitization of information resources (Saka & Haruna, 2023). Thus, library staff must be adept at navigating various electronic systems and databases to provide timely and accurate information to users.

Information technology refers to technology that provides access to information via telecommunications devices and infrastructure. Information technology is the coming together of computing, telecommunication, and broadcasting technologies to produce information. Information technology (IT) has emerged as a central catalyst for this transformation. IT is defined broadly as the use of computer systems, software, networks, and digital devices to create, store, process, retrieve, transmit, and manage information efficiently; IT now underpins virtually every dimension of library service delivery from cataloguing and classification to reference services, digital preservation, and resource sharing (Quadri et al., 2021). The integration of IT into library operations has not only enhanced the accessibility and quality of information services but has also repositioned library staff as active facilitators of digital information, requiring them to competently navigate electronic resources, manage digital databases, and deliver efficient and user-centred services. Consequently, the job performance of library staff has become inseparably linked to their capacity to adopt, apply, and leverage information technology in carrying out their professional responsibilities and the efficiency of their job.

Statement of the problem

Libraries have undergone significant transformation due to the integration of information technology, which has reshaped core library operations such as cataloguing,

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resource management, reference services, and user engagement. This transformation has repositioned library staff as facilitators of digital information, requiring them to competently navigate electronic resources, manage digital databases, and deliver efficient and user-centred services. Consequently, the effective utilization of information technology in libraries is largely dependent on the Digital information literacy skills of library personnel, including their ability to locate, evaluate, and apply information using digital tools. Despite the increasing availability of information technology infrastructure in many libraries, evidence suggests that a significant proportion of library staff possess limited information technology and digital information literacy competencies, which negatively affects their job performance. Therefore, this study seeks to examine the influence of information technology on the job performance of library staff in space research libraries in the South-West and North-Central regions of Nigeria.

Research Questions

This study is guided by the following research questions:

1. What is the level of job performance among library staff in space research libraries in the South-West and North-Central regions of Nigeria?
2. To what extent has information technology been adopted in space research libraries?
3. What is the impact of information technology adoption on the job performance of library staff in space research libraries?

Hypothesis

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There is no significant relationship between information technology utilisation and library staff job performance in space research libraries in the South-West and North-Central regions of Nigeria.

Literature Review

The discharge of statutory duties or functions based on workers' fields of specialisation, geared towards the attainment of institutional goals and objectives, constitutes job performance, as defined by Saka and Haruna (2023). It is a multi-dimensional construct encompassing quality, quantity, timeliness, cost-effectiveness, and interpersonal impact. Drawing on the perspective that library job performance refers to the efficiency, effectiveness, and quality of services provided by library personnel measured by their ability to manage records, provide access to resources, and respond to user inquiries (Bossaller & Kammeraad, 2021), it becomes evident that maintaining the integrity of information systems is central to fulfilling institutional mandates.

Determining organisational effectiveness relies heavily on job performance, a metric that Ikonne and Fajonyomi (2019) stressed is increasingly viewed as a source of competitive advantage. Job performance of library staff in space research libraries encompasses a range of specialised functions including cataloguing and classification, reference and information services, collection management, research support, digital service delivery, and user education. Because these functions are particularly demanding in space research environments, users—who are typically scientists, engineers, and

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researchers—present complex, highly specialised information needs, as noted by Olatokun and Njideaka (2020), necessitating highly adaptable and skilled library professionals.

Evaluating work behaviour requires focusing on actions that are relevant to job and organisational success, a dimension of job performance defined by Austin et al. (2021). This definition is particularly apposite in the space research context, where the contribution of library services to research productivity remains the ultimate performance benchmark. Assessments of library staff job performance across various contexts reveal differing levels of proficiency, as seen when Amusa, Iyoro, and Ajani (2020) investigated public universities in South-West Nigeria and found a generally fair level of performance across professional practice, library development contributions, client responsiveness, and promotion criteria. Whilst this study provides multi-dimensional insights, its focus on conventional academic libraries limits direct applicability to space research settings. Similarly, identifying a lack of reward systems, poor working conditions, and limited career advancement opportunities as key barriers, Saka and Salman (2014) reported a moderate level of job performance (M = 3.00) among library staff in North-Central Nigerian universities, underscoring the universal need for supportive institutional frameworks.

Information technology refers to the use of computer systems, software, telecommunications networks, and digital devices to create, store, process, retrieve, transmit, and manage information. In the contemporary knowledge-driven society, IT has become an indispensable tool for enhancing communication, decision-making, service delivery, and organisational productivity across various sectors, including education,

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libraries, healthcare, and government institutions, as highlighted by Quadri et al. (2021), fundamentally transforming operational paradigms.

Modern library operations rely heavily on IT, which encompasses a wide array of tools and systems including Integrated Library Management Systems (ILMS), Online Public Access Catalogues (OPACs), electronic databases, digital repositories, and networked communication platforms. As Aina et al. (2022) observed, the utilisation of IT enhances the accessibility of digital information, diminishes the digital divide, and contributes to the overall quality of information services provided in the library, making digital integration essential for effective service delivery.

The relationship between information technology and library staff job performance has attracted substantial scholarly attention. Within this context, IT tools have been found to significantly enhance productivity, service delivery, workflow efficiency, and professional competence among library personnel (Abubakar & Saka, 2020; Oyovwe-Tinuoye et al., 2021). Consequently, the adoption of automated systems, electronic databases, and digital communication platforms has fundamentally altered how libraries operate, enabling staff to perform traditional functions with greater speed and accuracy while also supporting new service dimensions such as virtual reference, digital preservation, and institutional repository management.

Empirical evidence strongly supports the predictive power of technological competence on workplace efficiency. For example, in research institutes in Ibadan, Oyo State, Adejumo (2022) found that IT skills significantly predicted library staff performance

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with an IT skills beta coefficient of .794, underscoring this strong predictive power for performance outcomes. Furthermore, Popoola and Tabuke (2021) reported a positive relationship between information literacy skills and job performance (r = .682) among library staff in South-West Nigeria. Reinforcing this dynamic, Basahuwa et al. (2023) employed a regression model to find that professional ICT skills significantly influenced librarians' job performance (R^2 = .342), demonstrating that librarians possessing strong IT competencies consistently deliver timelier and more accurate services to their users.

Methodology

The study employed a descriptive survey research design with a correlational approach. The population for this study encompassed all 182 library staff engaged in space research activities in the South-West and North-Central regions of Nigeria. A census sampling technique was utilised. A structured questionnaire was designed for demographic information, Job performance, the extent to which information technology has been adopted, and impact. Research questions were analysed using descriptive statistics (frequency, percentage, mean, and standard deviation).

Results and Discussion

Questionnaire Response Rate

Number of Questionnaires Administered	Number of Questionnaires Returned	Per cent (%)
182	171	94%

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Table 4.1a presents the distribution of the returned Questionnaires, information technology adoption, and the job performance of library staff in space research libraries. Out of 182 questionnaires distributed, 171 were returned, resulting in a 94% response rate, which was used for analysis.

Table 4.1a: Distribution of Returned Questionnaires of Respondents by Space Research Library Location

S/N	Space Research Library	Frequency	Per cent (%)
1	National Space Research and Development Agency, Abuja	31	18.1
2	Centre for Space Transport and Propulsion, Epe	25	14.6
3	Centre for Space Science and Technology Education, Ile-Ife	25	14.6
4	Advanced Aerospace Engine and Laboratory, Oka-Akoko	26	15.2
5	Centre for Satellite Technology Development, Abuja	22	12.9
6	National Centre for Remote Sensing, Jos	23	13.5
7	Centre for Atmospheric Research, Ayingba	19	11.1
	Total	171	100.0

The table presents the distribution of respondents across the seven space research libraries that participated in the study, with a total of 171 respondents. The National Space Research and Development Agency (NASRDA), Abuja, recorded the highest number of respondents (f = 31; 18.1%), making it the most represented institution. This was followed

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by the Advanced Aerospace Engine and Laboratory, Oka-Akoko (f = 26; 15.2%), the Centre for Space Transport and Propulsion, Epe, and the Centre for Space Science and Technology Education, Ile-Ife, each contributing 25 respondents (14.6%). The National Centre for Remote Sensing, Jos, recorded 23 respondents (13.5%), while the Centre for Satellite Technology Development, Abuja, contributed 22 respondents (12.9%). The Centre for Atmospheric Research, Ayingba, had the fewest respondents (f = 19; 11.1%). The relatively balanced distribution across institutions strengthens the representativeness of the sample.

Research Question 1: What is the level of job performance of library staff in space research libraries in the South-West and North-Central regions of Nigeria?

Table 2

S/N	Statement	VH (F, %)	H (F, %)	L (F, %)	VL (F, %)	Mean (M)	STD
1.	Accuracy and efficiency in cataloguing and classifying library materials	68 (39.8)	77 (45.0)	22 (12.9)	4 (2.3)	1.78	0.75
2.	Effectiveness in providing reference and information services to library users	74 (43.3)	72 (42.1)	19 (11.1)	6 (3.5)	1.75	0.77
3.	Ability to support research and development activities within the library	45 (26.3)	88 (51.5)	29 (17.0)	9 (5.3)	2.01	0.83
4.	Promptness in retrieving and	56 (32.7)	81 (47.4)	26 (15.2)	8 (4.7)	1.92	0.82

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disseminating information to library users						
5. Systematic management and organisation of library collections	61 (35.7)	79 (46.2)	24 (14.0)	7 (4.1)	1.87	0.81
6. Collaboration with colleagues to improve the quality of library services	53 (31.0)	84 (49.1)	27 (15.8)	7 (4.1)	1.93	0.81
7. Timely and accurate delivery of bibliographic and technical services	48 (28.1)	86 (50.3)	31 (18.1)	6 (3.5)	1.97	0.79
8. Conduct of user education and information literacy training programmes	39 (22.8)	82 (48.0)	38 (22.2)	12 (7.0)	2.13	0.87
9. Regular maintenance and updating of library records and electronic databases	52 (30.4)	85 (49.7)	25 (14.6)	9 (5.3)	1.95	0.83
10. Meeting institutional targets and deadlines in library operations	47 (27.5)	88 (51.5)	28 (16.4)	8 (4.7)	1.98	0.81
11. Ability to handle multiple concurrent tasks without compromising service quality	43 (25.1)	83 (48.5)	35 (20.5)	10 (5.8)	2.07	0.84

Grand Mean = 1.94

Note: VH = Very High; H = High; Scale: VH = 1, H = 2, L = 3, VL = 4

Table 2 indicates that library staff in space research libraries demonstrate a generally high level of job performance (Grand Mean = 1.94). Highest performance was recorded in accuracy of cataloguing and classification (M = 1.78; SD = 0.75), with 84.8%

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rating their performance as high or very high. Effectiveness in reference and information services was equally strong (M = 1.75; SD = 0.77). Moderate performance was observed in user education and literacy training (M = 2.13; SD = 0.87) and handling of multiple concurrent tasks (M = 2.07; SD = 0.84), suggesting that these areas may benefit from targeted capacity building. This finding aligns with Ikonne et al. (2019), who found that librarians in public universities in South-West Nigeria demonstrated strong competencies in identifying information needs, accessing electronic resources, and evaluating information sources. Similarly, Adebayo and Ojo (2022) observed that librarians in North-Central Nigerian academic libraries with advanced information competencies were more capable of assisting users in complex research tasks directly analogous to the performance demands of space research library staff. The moderate performance observed in user education and multitasking roles is consistent with the position of Curral (2013), who argued that individual performance can be enhanced through targeted training and professional development.

Research Question 2: What is the extent of information technology adoption in space research libraries in the South-West and North-Central regions of Nigeria

S/N	Statement	VHE (F, %)	HE (F, %)	LE (F, %)	VLE (F, %)	Mean (M)	STD
1.	Computerised cataloguing and	80 (46.0)	72 (41.4)	8 (4.6)	11 (6.3)	1.71	0.831

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classification software						
2. Integrated Library Management Systems (ILMS; e.g., KOHA, Evergreen)	84 (48.3)	53 (30.5)	30 (17.2)	4 (2.3)	1.73	0.832
3. Electronic databases and digital repositories	31 (17.8)	64 (36.8)	48 (27.6)	28 (16.1)	2.43	0.970
4. Database management systems	65 (37.4)	48 (27.6)	42 (24.1)	16 (9.2)	2.05	1.002
5. Internet access and user computer facilities	41 (23.6)	49 (28.2)	74 (42.5)	7 (4.0)	2.27	0.875
6. Online Public Access Catalogue (OPAC)	45 (25.9)	31 (17.8)	64 (36.8)	31 (17.8)	2.47	1.070
7. Information services delivered electronically (e.g., via e-mail or web portals)	44 (25.7)	55 (32.2)	49 (28.7)	23 (13.5)	2.30	1.002
8. Online networks for resource sharing and interlibrary loans	54 (31.4)	50 (28.7)	44 (25.3)	23 (13.5)	2.21	1.036
9. Digital preservation systems	62 (35.6)	62 (35.6)	27 (15.5)	20 (11.5)	2.03	0.997
10. Library websites and online portals	85 (48.9)	63 (36.2)	14 (8.0)	9 (5.2)	1.69	0.835
11. Mobile technologies (e.g., library apps, social media platforms)	29 (16.7)	76 (43.7)	63 (36.2)	3 (1.7)	2.23	0.746
12. ICT infrastructure (hardware, software, and network facilities)	36 (20.7)	60 (34.5)	56 (32.2)	19 (10.9)	2.34	0.934

Grand Mean = 2.31

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Note: VHE = Very High Extent; HE = High Extent; LE = Low Extent; VLE = Very Low Extent

Table 3 reveals a moderate overall level of IT adoption (Grand Mean = 2.31) across space research libraries. Library websites and online portals (M = 1.69; SD = 0.835) and computerised cataloguing software (M = 1.71; SD = 0.831) were most widely adopted, followed by ILMS (M = 1.73; SD = 0.832). The OPAC recorded the highest mean value (M = 2.47), indicating comparatively lower utilisation despite its operational centrality. Electronic databases, mobile technologies, and ICT infrastructure all showed moderate adoption, confirming opportunities for deeper IT integration.

The finding of moderate IT adoption confirms the pattern reported by Omeluzor (2021) and Abubakar and Saka (2020), who noted that Nigerian university libraries have adopted automation for core functions such as cataloguing, circulation, and serials control, whilst reporting uneven deployment of advanced technologies such as OPACs, electronic databases, and digital preservation systems. The higher adoption levels for computerised cataloguing systems and ILMS reflect the operational centrality of these tools in library technical services. The comparatively lower OPAC utilisation is consistent with findings by Ozioko et al. (2018), who reported low ICT application across several library service functions despite the availability of IT infrastructure.

Research Question 3: What is the impact of information technology utilisation on library staff job performance in space research libraries in the South-West and North-Central regions of Nigeria?

S/N	Statement	SA	(F,	A (F, %)	D (F, %)	SD	(F,	Mean	STD

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	%)			%)	(M)	
1. IT utilisation has improved my productivity in cataloguing and classification of library materials	91 (52.3)	70 (40.2)	10 (5.7)	(0.0)	1.53	0.607
2. The use of digital resources has enhanced my ability to provide reference services to users	124 (71.3)	47 (27.0)	(0.0)	(0.0)	1.27	0.448
3. IT tools have increased the speed and accuracy of my work in library technical services	91 (52.3)	69 (39.7)	(0.0)	11 (6.3)	1.60	0.794
4. I can access and retrieve relevant information quickly due to IT utilization	46 (26.4)	102 (58.6)	14 (8.0)	9 (5.2)	1.92	0.747
5. IT utilisation has improved my ability to support research and development activities in the library	55 (31.6)	116 (66.3)	5 (2.9)	(0.0)	1.71	0.517
6. The use of library management software has streamlined my workflow and reduced my workload	78 (44.8)	77 (44.3)	10 (5.7)	6 (3.4)	1.67	0.742
7. IT utilisation has enhanced my skills and competencies in providing library services	68 (39.1)	84 (48.3)	5 (2.9)	14 (8.0)	1.80	0.847
8. I can provide better user services due to the availability of online resources and databases	92 (52.9)	65 (37.4)	5 (2.9)	9 (5.2)	1.60	0.786
9. IT utilisation has improved the overall quality of library services provided to users	68 (39.1)	84 (48.3)	3 (1.7)	16 (9.2)	1.81	0.870
10. I am able to work more efficiently and effectively due to the automation of	91 (52.3)	71 (40.8)	3 (1.7)	6 (3.4)	1.56	0.704

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library processes						
11. IT utilisation has enabled me to provide round-the-clock access to library resources and services	111 (63.8)	53 (30.5)	7 (4.0)	(0.0)	1.39	0.567
12. The use of IT has improved my job satisfaction and motivation	81 (46.6)	81 (46.6)	5 (2.9)	4 (2.3)	1.60	0.664

Grand Mean = 1.77

The table demonstrates a strongly positive impact of IT utilisation on library staff performance (Grand Mean = 1.77). The most notable impact was recorded for the use of digital resources in enhancing reference services (M = 1.27; SD = 0.448), with 98.3% agreeing. IT-enabled round-the-clock service availability recorded a similarly high impact (M = 1.39), with 94.3% in agreement. A combined 93.2% agreed that automation of library processes improved their efficiency, and the same proportion reported improved job satisfaction and motivation through IT use.

The strongly positive influence of IT utilisation on job performance, particularly in reference services, service accessibility, cataloguing productivity, and job satisfaction, is consistent with Oyovwe-Tinuoye et al. (2021) and Abubakar and Saka (2020), who found that ICT skill training resulted in enhanced service delivery, work efficiency, and reduced job stress in Nigerian academic libraries. The near-universal agreement that IT has enabled round-the-clock service access underscores the service delivery transformation afforded by digital technologies in specialised research library settings.

Test of Hypothesis

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H01: There is no significant relationship between the influence of information technology and library staff job performance in space research libraries in the South-West and North-Central regions of Nigeria.

		IT Influence	Job Performance
IT Influence	Pearson Correlation	1	−.261**
	Sig. (2-tailed)		.001
	N	171	171
Job Performance	Pearson Correlation	−.261**	1
	Sig. (2-tailed)	.001	
	N	171	171

** Correlation is significant at the 0.01 level (2-tailed).

The Pearson Product Moment Correlation revealed a statistically significant negative relationship between IT influence and library staff job performance ($r = -.261$, $p = .001$, $N = 171$). Noting that lower scores reflected higher IT adoption and better performance within the reversed-scale structure, this result indicates that greater IT utilisation is associated with stronger job performance. The null hypothesis (H01) is therefore rejected. On this basis, the null hypothesis (H01) is rejected, and it is concluded that there is a significant relationship between information technology influence and library staff job performance in space research libraries. The findings are in line with Basahuwa et al. (2023), Popoola and Tabuke (2021), and Adejumo (2022), who reported

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positive and significant associations between IT and library staff job performance across multiple Nigerian libraries.

Recommendations

The following recommendations are made based on the findings of the study:

1. Management of space research institutions should intensify investment in digital infrastructure by developing a phased technology integration roadmap that systematically expands IT adoption, particularly in OPAC platforms, advanced electronic databases, and digital communication tools across all functional areas of space research libraries.
2. Space research institutions should establish tiered IT training programmes that progressively advance staff competence from foundational to advanced levels, with collaboration with the Nigerian Library Association (NLA) and the Librarians Registration Council of Nigeria (LRCN) to standardise and certify these training pathways across the profession.
3. Space research institutions should create dedicated IT support units, ensure library staff have time for IT training, and collaborate with IT experts and universities to provide continuous and affordable digital skills development.
4. Library management should integrate automated instructional technologies and interactive e-learning modules into their portals to assist with user education and information literacy training. This would reduce the burden of manual, concurrent

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multitasking on library staff while empowering space researchers to navigate complex digital resources independently.

Conclusion

This study has established that information technology is a significant and positive influence on the job performance of library staff in space research libraries in South-West and North-Central Nigeria. Library staff demonstrate generally high job performance, strong foundational IT literacy, and experience a wide-ranging positive impact from IT utilisation. However, IT adoption remains moderate, and persistent challenges including heavy workload, insufficient funding, inadequate training, and poor infrastructure constrain the full realisation of IT's performance-enhancing potential.

The statistically significant relationships between IT influence and job performance, confirmed through both bivariate and multivariate analyses, affirm that investing in IT infrastructure and staff competencies is a strategically important means of improving library service quality in the increasingly technology-driven environment of space research. The findings extend empirical understanding of library staff performance into a previously uninvestigated institutional domain, providing a foundation for evidence-based policy and practice in Nigeria's emerging space research ecosystem.

References

Abubakar, D., & Saka, R. C. (2020). Influence of ICT on library staff job performance in universities in North-West Nigeria. *Library Philosophy and Practice* (e-journal), 3654. https://digitalcommons.unl.edu/libphilprac/3654

© 2026. IJIRM. All rights reserved (https://www.ijirm.com.ng)

Adebayo, S., & Ojo, A. (2022). Digital literacy and job performance of library staff in research institutes in Nigeria. *Journal of Library and Information Science Research,* 14(1), 45–62.

Adejumo, J. O. (2022). *Digital Literacy Skills and Job Performance of Library Staff in Research Institutes in Ibadan, Oyo State.* Master's Thesis, Lead City University, Ibadan.

Amusa, O.J., Iyaro, A.O., & Ajani, A.F. (2020). Work environment and job performance of librarians in the public university in South-West Nigeria.*International Journal of Library and Information Science. 5(11), 457-461*

Austin, D. S. (2024). *The legal brain: A lawyer's guide to well-being and better job performance* (1st ed.). Cambridge University Press.

Basahuwa, C. B., Unegbu, V. E., & Babalola, Y. T. (2023). Assessing the effectiveness of media and information literacy skills on the job performance of librarians in universities in South-East, Nigeria. Journal of Applied Information Science and Technology, 16(2), 87–101.

Bossaller, M. & Kammeraad, U. (2021). Libraries and Information Management in Nigeria: Seminal Essays on Themes and Problems. Ed-Linform Services.

Chukwunonso, P. C., Ayele, D. S., & Itodo, P. O. (2020).Job satisfaction as a predictor of job performance of librarians in university libraries in Nasarawa State, Nigeria. *Journal of Applied Information Science and Technology, 13(1), 9-20.*

Curral, L., Caetano, A., & Santos, S. C. (2013). Psychosocial aspects of entrepreneurial potential. *Journal of Small Business & Entrepreneurship*, *26*(6), 661–685. https://doi.org/10.1080/08276331.2014.892313

Dapo-Aina, A. J., Okunnu, H. O., &Dapo-Asaju, H. S. (2014). ICT integration for sustainable development of Nigeria academic libraries: Issues and challenges, *International Journal of Information Research,* 3(4), 334-345.

Ikonne, C. N., & Fajonyomi, O. J. (2019).Motivational factors and job performance of librarians in federal university libraries in North-East Nigeria.*Library Philosophy Practice, 1-19.*

© 2026. IJIRM. All rights reserved (https://www.ijirm.com.ng)

Olatokun, W., &Njideaka, T. M. A. (2020). Knowledge sharing practices among cataloguers in Nigeria's academic libraries. *Library Management*, *41*(4-5), 295-309.

Oyovwe-Tinuoye, G. O., Omeluzor, S. U., & Patrick, I. O. (2021). Influence of ICT skills on job performance of librarians in university libraries of South-South, Nigeria. *Information Development, 37(3), 345- 358.*

Ozioko, R. E., Asadu, B. U., & Ugwuanyi, R. N. (2018). *Information and communication technology (ICT) application in Polytechnic libraries in South-South, Nigeria*. *Review of Information Science Technology Journal (RIST),* 4, 91-97.

Popoola, S. O., &Tabuke, W. P. (2021).Psychological capital and information literacy skill as determinants of job performance of academic library employees in state universities in South-West, Nigeria. Regional Journal of Information and Knowledge Management, 6(1), 1–16.

Quadri, M. O., Quadri, G. O. &Oluwasina, O. O. (2021). Information and communication technology (ICT) application in library services: a comparative study of two Nigerian Universities. *Journal of Applied Information Science and Technology,* 8(2):35-41.

Saka, K. A., & Salman, A. A. (2014).An assessment of the levels of job motivation and satisfaction as predictors of job performance of library personnel in Nigerian universities. Journal of Balkan Libraries Union, 2(2), 26–33.

Saka, K.A.,&Haruna, I.(2023). Relationship between staff development and job performance among personnel in branch libraries in the University of Maduguri, *Nigeria. Mediterranean Journal of Social Sciences,* 4 (5), 9-17

Ufuoma, Eruvwe and Omekwu, Charles Obiora (2020)."Screening, Interviews, Selection Processes and its Effect on Job Performance of Librarians in Federal University Libraries in South-South, Nigeria".*Library Philosophy and Practice (e-journal*). 3946

UNESCO (2020) Protecting and preserving cultural diversity in the digital era. *Available at: https://www.unesco.org/en/articles/cutting-edge-protecting-and-preservingcultural-diversity-digital-era.*

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