



Digital Literacy Skills and Job Performance of Librarians in Federal and State University Libraries in South-South, Nigeria

Abstract

The research investigated digital literacy skills and job performance of librarians in federal and state university libraries in south-south, Nigeria. Five hypotheses guided this study. This study is based on Campbell (1990) Job performance and Davis (1989) Technology Acceptance Model theoretical frameworks. The study adopted a correlational research design with a population of 283 librarians and sample size of 200 librarians. The instrument deployed for eliciting data is a structured questionnaire designed by the researcher. The questionnaire was validated by two experts from Department of Library and Information Science from Ignatius Ajuru University of Education affiliated to College of Education, Warri and was also subjected to reliability test which showed high consistency level ($r = 0.98$) in the instrument. The data elicited were analyzed using both descriptive (such as frequencies and statistical mean) and inferential statistics such as Pearson Product Moment Correlation and Simple Regression. It was found that electronic mailing skills of librarians predicted their job performance by 96% implying a high prediction. The null hypothesis is therefore rejected implying that there is a significant relationship between librarians' electronic mailing skills and their job performance in federal and state university libraries in south-south, Nigeria. This means that an increase electronic mailing skills will lead to a corresponding increase in the job performance of librarians and vice versa. The findings revealed that the relationship that existed between all the digital literacy, skills and job performance of librarians in federal and state university libraries in south-south, Nigeria is high. Based on the conclusion, it is evident that librarians have knowledge of these skills to fit into the demand of the digital age. It is recommended that librarians should scale up their interest in the aspect of digital literacy in order to take advantage of its potentials.

Keywords: job performance, digital literacy skills, libraries and librarians

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1.1 Introduction

Globalization, digitization, and ever-evolving technology have presented challenges for libraries throughout the globe.

These have driven digital and virtual libraries, virtual conference, online learning and library automation, web 2.0 and library 2.0. Digital technology has pervaded every aspect of our

civilization, it has set forth a revolution not only in how we store and transmit recorded knowledge, historical records, and a host of other kinds of communication but also in how we seek and gain access to these materials. Library is the storehouse of knowledge for future use and social knowledge can be recorded and preserved in different media. Academic libraries exist to support the teaching, learning and research needs of their institution. They perform these functions in order to attain national development (Agim & Azolo, 2019). Libraries assist its users in finding, using and interpreting appropriate information that open up opportunities for lifelong learning, literacy enhancement, informed citizenship, recreation, creative imagination, individual research, critical thinking, and ultimately, empowerment in an increasingly complex world.

These feats are achieved by libraries through technological advancement. The university is an institution regarded as one of the sources from where students in different disciplines acquire knowledge and skills for self-development. It is also known to be the apex of all higher institutions which is expected to make vital contribution to societal development by increasing and changing its programmes for the development of manpower within the premise of the needs of national requirements. The university library, which is commonly referred to as the nerve center of the university is primarily set up for the achievement of the university's set goals and objectives by providing information materials and services which satisfies the information needs of the entire university community. It is an integral part of a university, administered to meet the information and research needs of its students, faculty and non-teaching staff. According to Fajonyomi (2021), library personnel in university libraries, including librarians and library officers, are responsible for providing information services that support teaching, learning, and research, utilizing

skills in collection development, technical processing, and education. Each of these public universities have a library manned by a University Librarian working together with other professional librarians to provide relevant educational resources to support the curricula of the university programme

The librarians are those with educational qualification such as BLIS, BLS(ED), MLS and Ph.D. degree. While the library officers are those with NCE, ND, HND or Diploma certificate in library and information studies. They assist users in their disciplines, serving the university community by providing information services. Their roles include directing, planning, organizing, staffing, coordinating, budgeting, and evaluating library operations, while also applying experts' knowledge to solve problems.

Digital technologies have transformed university library services, extending beyond traditional print materials. They enable discovery, selection, circulation, organization, and evaluation of information, expanding access to consumers through acquisition and cataloguing (Agim & Azolo, 2019).

Edewor et al., (2016) opined that libraries are veritable information providers rendering strategic services. They provide access to information resources in diverse formats to users as well as provide timely and relevant information in support of teaching and research needs of their parent institutions (Adewoyin et al., 2017). Adewoyin et al., (2017), further expressed that libraries are looking for innovative ways of serving users efficiently and effectively. Library services, prior to the introduction of Information and Communication Technologies (ICTs), were essentially delivered manually which was very slow and the library materials were primarily in print format which had a lot of limitations because they could only be accessible during the opening hours. The cumbersome nature and the limitations of the traditional library services

have prompted libraries to apply ICTs in servicedelivery. Patel (2018) identified the areas where ICTs are applied in library and information services as acquisition, circulation, cataloguing, references services, etc. This is because ICT has been found to influence library services significantly.

To live and work in the technology enabled world of this second-decade of the 21st century, high level skills in the use of digital technologies are essential for all citizens and not just libraries. Adepoju (2020) identified the five abilities and competencies that academic librarians must possess to satisfy the expectations of the present day and deliver excellent online library services to consumers. Communication skills, information retrieval skills, design skills, database administration abilities, and multitasking skills are among the talents and competencies required. These abilities are important for librarians to have to provide good information services in a digital world and to improve their job performance. The performance of librarians can impact the growth and success of university libraries. As a result, job performance has become a key indicator in determining an organization's likelihood of success or failure. Job performance simply refers to an employee's capacity to perform effectively in agreement with the job requirements to achieve the organization's goals and objectives.

According to Igbinovia and Popoola (2016) job performance is influenced by qualitative traits such as abilities, competencies, motivation, and dedication. Personal discipline, communication skills, and self-development are required. Digital literacy, including knowledge of computers and the Internet, is required for 21st-century librarians to improve performance. Digital technologies improve work performance, productivity, accuracy, and space efficiency in library services.

Libraries either digital or traditional

are walled by trained personnel known as librarians. According to Ezeama et al., (2014), in the 21st century, academic librarians' ability to effectively utilize digital technology is heavily reliant on their requisite skills. Digital literacy helps professionals of all works of life to develop skills that can add to their economic status and improve their overall job performance and standard of living. There is need for librarians to have digital literacy skills, so that they can use these skills to progress on their jobs. With these skills, librarians will be more equipped for resource sharing, social networking, surfing the net, instant messaging, blogging and host of other digital oriented activities. These skills can also help them on their jobs to assist users get desired information and education. Digital skills are skills that all information professionals should thrive to possess. Reduced efficiency in services of the library, decline in prompt services and the misuse of resources as well as low turnout of research output are evidence of the librarians' low level of job performances. Available literature showed that expectations of performance on a job are predicted by work-related behaviours of employees. It identified that library management appraise work-related behaviours of employees in the library to ensure these are well managed. It is these work-related behaviours that turn into tangible job performances needed to meet the goals and objectives of the library

Shannon (2017) defined digital literacy as an individual's ability to find, evaluate, utilize, share and create content using information technologies and the Internet. A digital literate person is an individual who can evaluate and use information critically from relevant and authoritative sources online. Recent developments in ICT have transformed how individuals learn. Certain skills have been identified as needed in order to be competent in a digital age and one of such is the digital literacy skills. Digital literacy encompasses a

wide range of skills, all of which are necessary to succeed in an increasingly digital world. At present, it plays an important role in the teaching, learning and research process. Digital literacy can be said to include individual's ability to utilize digital devices such as smart-phones, tablets, laptops, and desktop PCs for purposes of locating, accessing, communicating information for collaboration and research (Yazon et al., 2019).

Nigerian university librarians are unsure of how to improve work-related behaviors and improve digital literacy. This will enable them to educate users on essential information resources, participate actively in civic, cultural, and intellectual life, and capitalize on new opportunities with digital technologies while addressing challenges. Every organization aims for high productivity or performance without which the goals and objectives of such establishment cannot be realized. It is evident that the efficiency of an organization such as the library depends immensely on the attitude of workers towards their job and their level of commitment to the job.

Librarians are responsible for the development and indexing of databases as well as instructing patrons on how to efficiently search through and locate needed reference and information resources. In view of the foregoing, it is evident that job performance of the librarians requires digital literacy skills which connote a working knowledge of computers and the Internet to enhance job performance.

1.2 Statement of the Problem

Libraries in the 21st century are facing challenges due to the convergence of ICT and digital technologies. Many librarians in Nigeria lack digital literacy skills, unable to operate computers, access email, or interact through the internet. They face challenges in acquiring, organizing, retrieving, and

disseminating print and non-print information resources. Most libraries in Nigeria are not fully automated, and few have skills to manage databases and computer hardware. To effectively carry out their job functions, librarians must be digitally literate. It has been observed that advancement in the use of technology can improve economic opportunities for all including librarians and the users. Effective service delivery in modern libraries is a function of the availability of information communication technology/digital technologies

However, the researcher's observation was discovered from related literatures and personal observation. Could these be attributed to inadequate funding of the university libraries? For a librarian to perform well in the job, good salary, job security, training and retraining in digital literacy is paramount, better service, opportunity for career development among others should be in place. A librarian that performs their work well will not only render quality services to the users, but also promote the image of the library. Thus, in view of this scenario, the present study was necessitated.

1.3 Research Questions

The study was guided by the following research questions

1. What is the relationship between electronic mailing skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?
2. What the relationship between resource sharing skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?
3. What is the relationship between browsing the internet skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?
4. What is the relationship between social

networking skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

5. What is the relationship between use of Microsoft Word skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

The study was guided by the following research questions.

1.4 Hypotheses

The following null hypotheses were tested at 0.05 level of significant to guide the study.

- Ho1. There is no significant relationship between the ability for electronic mailing skills and the job performance of librarians.
- Ho2. There is no significant relationship between the act of resource sharing skills and the job performance of librarians.
- Ho3. There is no significant relationship between the process of browsing the Internet skills and the job performance of librarians.
- Ho4. There is no significant relationship between the knowledge of social networking skills and the job performance of librarians.
- Ho5. There is no significant relationship between the ability to use Microsoft Word skills and the job performance of librarians.

1.5 Significance of the study

This study highlights the importance of digital literacy skills for librarians, enabling them to progress in their careers and improve their job performance. By learning essential skills like email sending, resource sharing, internet browsing, social networking, and Microsoft Word typing, librarians can enhance their productivity and service delivery. Libraries and users can benefit from these skills, making research work faster and more stress-free. The research community

can use this information to guide community initiatives and evaluate interventions. Parent institutions can benefit from improved service delivery and training for library staff. Additionally, digital literacy skills can help librarians become entrepreneurs in their field, contributing to their overall standard of living and overall job performance.

2.1 Literature Review

2.2 Conceptual Framework

The term “digital literacy” is used to portray the ability to make productive the potential of the digital tools. According to IFLA (2014), to be digitally literate is to have the ability to use technology to its fullest effect, ethically, efficiently and effectively to meet the information needs in personal, civic, and professional lives. Jisc (2015) defines digital literacy as the capabilities which fit someone for living, learning and working in a digital society. Digital literacy skill is more of a contemporary term but is limited to practical abilities in using digital devices such as smartphones and laptops (Emiri, 2015).

Tinmaz et al., (2022) affirmed that digital literacy refers to the ability to evaluate internet resources, which differs qualitatively and quantitatively from evaluative skills required for printed materials. From this point of view, it can be seen as one's ability to understand the use of information from different digital sources and so librarians in this digital age must put more effort to equip themselves with technological skills which will be useful in sharing resources and also render services to the users. Digital literacy involves using information and communication technologies to find, understand, evaluate, create, and communicate digital information, requiring cognitive and technical skills, and is supported by digitally equipped libraries.

2.3 Job Performance

Performance of librarians is extremely crucial for any organization as it ultimately

leads to organization's success (Shaughnessy, 2017). Job performance which is influenced by numerous factors is realized when an individual is able to successfully achieve the task appointed to him/her under subject to less constraints at the workplace (Matsuo, 2019). The job performance of librarians will be seen if they are able to apply their digital literacy in providing required services via the use of electronic index, computers and Online Public Access Catalogue (OPAC).

Nevertheless, there are issues of insufficient skilled manpower in libraries, few have been able to automatic their libraries and acquired the digital resources, of which some were not able to manage it due to lack of digital literacy skills.

Similarly, Oketunji (2014) highlighted creative and innovative ability, dependability and timeliness, leadership quality, relationship with co-workers, effectiveness, and efficiency, and team building as the indicators of job performance. All these are in line with the theory propounded by Campbell in 1990 and 1993 on job performance. According to Diyaolu (2019), librarians are responsible for acquiring, organizing, managing and distributing library resources, and ensuring that library provision meets the needs of all its users. As academic librarians are responsible for providing support to academic departments, job vacancies may demand a degree that is relevant to a particular subject area. Academic librarianship is a people-focused role, requiring individuals to manage learning resources while keeping the library users' needs in mind. Duties vary considerably according to the findings of this research, but typically include: The role involves selecting, developing, cataloguing, answering user queries, managing staff, collaborating with academics, external organizations, and suppliers, and managing budgets and resources. Evidence from the earlier studies (Agim & Azolo, 2019; Odunewu & Halisco,

2019; and Ilesanmi, 2023) already showed that computer/digital literacy skills are needed among librarians for effective service delivery.

Equally, Agim and Azolo (2019) carried out research on digital literacy and job performance of 21st-century library staff in Imo state. The study adopted a descriptive survey design and the population of the study comprised of all the library staff in the university libraries in Imo state, with a sample size of 40 library staff drawn from Imo state university and federal university of technology Owerri using random sampling technique. The instrument used for data collection was questionnaire and data collected was analyzed using simple percentages and frequency count. They found out that the literacy skill possessed by the 21st-century library staff that can enhance job performance are electronic mailing, mobile phone usage, internet browsing, social networking and others. It was recommended that library staff should be sensitized and provided training on digital literacy so as to improve their job output and government should provide academic libraries with enough funds.

Furthermore, Odunewu and Haliso (2019) conducted a study on knowledge sharing behaviour and librarians job performance in Nigerian Universities. The study employed the survey research design in obtaining necessary data for the research effort. The population of the study is comprised of 393 librarians in the universities in south-west zone of Nigeria. Total enumeration was adopted as the sampling technique because of the small and manageable population. The survey instrument that was used in collecting data for this study is the questionnaire. The data collected was analyzed using descriptive statistics for the research questions while regression analysis was used in the hypothesis testing. The hypothesis was tested at 0.05 level of significance using the statistical

package for social sciences (SPSS). The study found that knowledge sharing among librarians plays a significant role in influencing their level of job performance

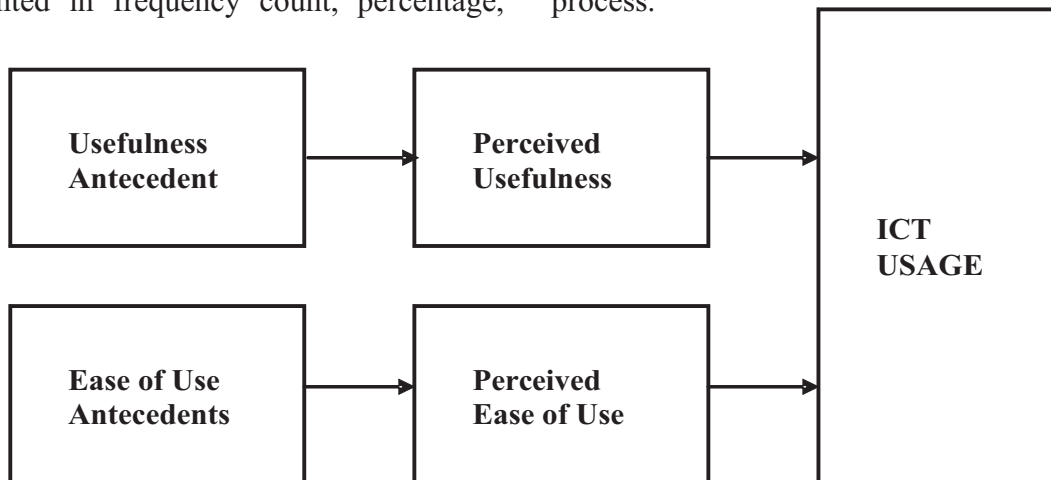
Ilesanmi (2023) examined librarians' ICT skills and service delivery in private universities with particular reference to Southern Nigeria. The study adopted the survey research method. Forty-five (45) private university libraries in Southern Nigeria and their librarians constituted the sample size for the study. The study's samples consisted of 181 librarians in the private universities, hence, total enumeration was adopted. Questionnaire was used for data collection from the respondents. Out of the 181 copies of the questionnaire distributed, 173 were returned and found valid for analysis. Data gathered was analyzed using the Statistical Package for Social Sciences (SPSS) Version 21 and the results were presented in frequency count, percentage,

mean and chart. Findings of the study revealed that librarians in private universities in Southern Nigeria delivered various library services to their users. The librarians have acquired basic ICT skills and were versatile in its application Microsoft-office related activities with the exception of programming skills. The finding revealed that the acquisition of ICT skills by librarians in Southern Nigeria private universities is relevant to their delivery of improved library services.

Theoretical Framework

TAM & Job Performance Theory (Campbell, 1990)

The Technology Acceptance Model (TAM) is a key theory in information systems, focuses on understanding how users accept and utilize technology, considering various factors influencing their decision-making process.



Sources: Davis & Bagozzi Figure 2.2 The TAM and ICT Usage

The determinant of technology acceptance and user behavior is influenced by perceived usefulness (PU) and perceived ease of use (PEOU). PU mediates the effect of PEOU on attitude and intended use of a specific technology. TAM suggests that librarians' positive attitude towards digital literacy skills, perceived as useful and user-

friendly, can enhance their job performance. This theory is relevant to the study investigating librarians' digital literacy skills and their job performance.

Job Performance theory was developed by Campbell (1990) with core task proficiency, demonstrating effort, and the maintenance of personal discipline as

components of all kinds of job. He defines performance as behavior, something that is usually done by the employee. The concept differentiates performance from outcomes and outcomes are the result of an individual's performance, but they are also the result of other influences. Job performance is influenced by employee behavior, digital literacy skills, and other factors beyond academics' behavior. Effectiveness is the ratio of outputs to inputs, with individual differences influenced by declarative knowledge, procedural knowledge, skill, and motivation (Campbell, 1990).

Declarative knowledge refers to the understanding of facts, principles, and objects, encompassing skills like cognitive, perceptual, and interpersonal abilities. It includes knowledge of these aspects, demonstrating the ability to expand effort, persist in expenditure, and perform tasks effectively. The theory refers to job performance, emphasizing the importance of digital literacy skills in librarians. It encourages the acquisition of basic computer skills and their application in online cataloguing, electronic book cataloguing, and retrieving unreturned books, enhancing circulation librarian performance and job satisfaction.

Conclusively, the digital skills acquired by the librarian will help him/her in performing certain aspect of the skills like resource sharing, browsing the internet, electronic mailing, blogging etc. and so this theory exposes the beauty and contributions of digital literacy skill to the librarian performance in the library effectively and efficiently and also make it easier and stress free for the 21st century library staff.

3.1 Methodology

This study adopted the correlational research design, Bhandari (2023) affirmed that correlational research design investigates

relationships between variables without the researcher controlling or manipulating any of them. The population size for this study was 283 while the sample size was 200. The instrument used to collect data was a structured questionnaire. The questionnaire is titled "Digital Literacy Skills and Job Performance of Librarians Questionnaire (DLSJPLQ)". The data obtained from the questionnaire were analyzed using simple percentages, descriptive and inferential statistics and pears on product moment correlation statistics was used to answer the research questions and simple regression was used to test the hypotheses because it sought to test for relationship between both the independent variables and dependent variables. The hypotheses were tested at a 0.05 level of significance The librarians were given the instrument by the researcher. A five-point Likert scale of 'Strongly Agree,' 'Agree,' 'Disagree,' 'Strongly Disagree' and 'undecided' response types was used for study questions 1 to 5. The data generated were split into even and odd numbers, thereafter, the Cronbach Alpha Statistics was used to analyze the data generated. Section by section as well as whole reliability tests were carried out on the instrument. Charles Brown Prophecy Formula was used to step up the reliability indexes to make whole since the responses were split and overall reliability, $r = 0.87$. The reliability indexes were higher than 0.50, which is reliable and appropriate for use in the study.

4.1 Result

Research Question 1: What is the relationship between electronic mailing skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

Table 1: Electronic Mailing Skills and Job Performance of Librarians

		Electronic Mailing System	Job Performance
Electronic Mailing System	Pearson Correlation	1	.981**
	Sig. (2-tailed)		.000
	N	200	200
Job Performance	Pearson Correlation	.981**	1
	Sig. (2-tailed)	.000	
	N	200	200

From question 1, Pearson correlation coefficient r is 0.981 which implies 98% degree of relationship. Therefore, there is a high degree of correlation between electronic mailing skills and job performance in federal and state university libraries in south-south, Nigeria.

Research Question 2: What is the relationship between resource sharing skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

Table 2: Resource Sharing skills and Job Performance of Librarians

		Resource Sharing	Job Performance
Resource Sharing	Pearson Correlation	1	.990**
	Sig. (2-tailed)		.000
	N	200	200
Job Performance	Pearson Correlation	.990**	1
	Sig. (2-tailed)	.000	
	N	200	200

From Table 2, Pearson correlation coefficient r is 0.990 which implies 99% degree of relationship. Therefore, there is a high degree of relationship between resource sharing skills and job performance in federal and state university libraries in south-south, Nigeria.

Research Question 3: What is the relationship between browsing the internet skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

Table 3: Browsing the Internet skills and Job Performance

		Browsing the Internet	Job Performance
Browsing the Internet	Pearson Correlation	1	.992**
	Sig. (2-tailed)		.000
	N	200	200
Job Performance	Pearson Correlation	.992**	1
	Sig. (2-tailed)	.000	
	N	200	200

From Table 3, Pearson correlation coefficient r is 0.992 which implies 99% degree of relationship. Therefore, there is a high degree of correlation between browsing the internet and job performance of librarians in federal and state university libraries in south-south, Nigeria.

Research Question 4: What is the relationship between social networking skills and job performance of librarians in federal and state university libraries in south-south, Nigeria?

Table 4: Social Networking skills and Job Performance.

	Social Networking	Job Performance
Social Networking	Pearson Correlation	1
	Sig. (2-tailed)	.980**
	N	200
Job Performance	Pearson Correlation	.980**
	Sig. (2-tailed)	.000
	N	200

From Table 4, Pearson correlation coefficient r is 0.980 which implies 98% degree of relationship. Therefore, there is a high degree of correlation between social networking skills and job performance of librarians in federal and state university libraries in south-south, Nigeria.

Research Question 5: What is the relationship between use of Microsoft word skills and job Performance of librarians in federal and state university libraries in south-south, Nigeria?

Table 5 Microsoft Word skills and Job Performance

	Use of Microsoft Word	Job Performance
Use of Microsoft Word	Pearson Correlation	1
	Sig. (2-tailed)	.985**
	N	200
Job Performance	Pearson Correlation	.985**
	Sig. (2-tailed)	.000
	N	200

From Table 5, Pearson correlation coefficient r is 0.985 which implies 98% degree of relationship. Therefore, there is a high degree of correlation between the use of Microsoft word skills and job performance of Librarians in federal and state university libraries in south-south, Nigeria.

5.1 Summary of Findings and Discussion of Result

It was found that the digital literacy skills predicted their job performance implying a high prediction. The null hypothesis is therefore rejected implying that there is a significant relationship between digital literacy skills and job performance of

librarians in federal and state university libraries in south-south, Nigeria.

The study revealed libraries of all types, inclusive of academic libraries all over the world, are moving in the direction of using social network sites such as Google plus, LinkedIn, Instagram, Myspace, twitter, YouTube, Facebook, blogs etc. Social

networking skills have established a bridge between library users and library resources. The relationship that exists between social networking skills and job performance of librarians in the south – south region, Nigeria is high.

Conclusion

The study tends to examine electronic mailing skills, to find out the resource sharing skills, ascertain the internet browsing skills, examine the social networking skills, and identify the use of Microsoft word skills and extent of job performance of librarians in the federal and state university libraries in the south-south of Nigeria. From the findings of this study, it could be concluded that librarians possess digital literacy skills such as electronic mailing skills, resource sharing skills etc. in various institutions. From the analysis it was evident that there is a relationship between all variables in the study. Besides, the research shows that federal and state university librarians have knowledge of these skills to fit into the demands of the digital age. Having the knowledge of these skills can enhance job performance to an appreciable level in the libraries.

Recommendations

Based on the findings of the study, the following recommendation were made.

1. Librarians should scale up their interest in this aspect of digital literacy in order to take advantage of its potentials.
2. Librarians should be more involved in resource sharing using digital technology.
3. Management should ensure the provision of standby power and internet for the library users to have access to the internet regularly.
4. University libraries should as a matter of policy embark on training and retraining of librarians in digital literacy skills in order to enhance job performance.
5. Library schools should periodically review their curricula to cater for modern digital technology in order to expose would-be librarians to digital literacy skills.

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