

# INFLUENCE OF INFORMATION COMMUNICATION TECHNOLOGY ON JOB PERFORMANCE OF LIBRARIANS IN FEDERAL UNIVERSITIES IN SOUTH-WEST, NIGERIA

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## Abstract

*This study investigated the influence of information communication technology (ICT) on job performance of librarians in federal university libraries in South-West, Nigeria. Three research questions guided the study in line with the objectives. Descriptive survey research design was used and the target population of one hundred and sixty-four (164) librarians in the three selected federal university libraries in South-West, Nigeria were adopted for this study. A close ended structured questionnaire was used as data collection instrument. Total frequencies and median were statistical tools used for data analysis. Results showed that level of job performance of librarians is moderate, influence of ICT skills possession on job performance of librarians is high and ICT skills possession has a positive and strong relationship with job performance of librarians in federal university libraries in South-West, Nigeria. The study concluded that provision of good working environment, sufficient possession of ICT skills, high quality of ICT facilities and training and re-training of librarians in the aspect of ICT to acquire more ICT skills especially the advanced ICT skills would no doubt enhance their job performance. The study recommended that federal university libraries in South-West, Nigeria should make their libraries more conducive for staff and users, organise training and re-training for librarians to acquire more ICT skills especially the advanced ICT skills and more opportunities should be given to librarians to attend conferences, workshops and seminars in the area of ICT.*

**Keywords:** Federal Universities, Influence, Information Communication Technology, Job Performance, Librarians.

## Introduction

University libraries are those libraries that are established in universities as higher institution of learning to collect, organise, preserve and store information for the use of users such as students, teachers and others for educational purposes to enhance education, assist both students and teachers achieve their educational objectives (Ode and Ode, 2018). Considering the vital roles that libraries and their respective librarians play in achieving, the visions and missions of universities form the foundation on which the roles of university library are based. University library caters for the information needs of the university by providing reading materials for the various programmes of the university. There are different bodies that establish universities such as Federal, State and Private organisation. The focus of this study is on federal universities being established and funded by Federal Government of Nigeria. They receive allocations and support from the Federal Government and some percentage of the total grant to universities are meant to procure library

resources and render library services. This is to enable them support the academic objectives of the host institution. These services are mostly provided by librarians.

A librarian is one who undergo Library and Information Science (LIS) training in any approved institution of learning and has obtained first or higher degree in librarianship and perform professional duties such as selection and acquisition, cataloguing and classification, conducting reference services, bibliographic services (Saidu *et. al.*, 2020). It is pertinent to note that no university library can be effective or successful in its activities without the presence of qualified librarians who have been trained on how to provide relevant information resources and services to the user community. Thus, librarians have the responsibility of acquiring, organising, preserving and disseminating information. Librarians perform a wide range of services such as technical, readers', administrative and ICT related services in the university libraries. Librarians are believed to be the backbone of the services offered by the university libraries on their different job descriptions. Librarians working in Federal University Libraries in Nigeria are expected to possess adequate ICT skills in order to carry out effective library operations. Adequate ICT skills needed to possess by librarians could be the overall competencies, skills, knowledge, attitude and technical know-how to create, save, analyse, organise, retrieve, disseminate and manipulate digital information such as images, text, sounds and graphics in digital libraries or any type of information.

Job performance could be viewed as a core concept within work organisational system. This has to do with orientation of an individual on the approach to whatever task the person is carrying out. Job performance can also be described as what an employee does in work situation and how effectively and efficiently it was done for accomplishment of organisational goals and objectives. Agba *et. al.* (2013) defined job performance as the task accomplished by individual employee; it is how well a staff accomplishes a given task in an organisation. Job performance is a result of activities of either an individual or organisation for a specific period. Job performance involves taking series of actions to produce results and this is done through proper integration of knowledge and skills. Individual performance is generally determined by factors such as: motivation, the desire to do the job, the capability to do the job, the work environment, the available tools, facilities and information needed to do the job. If the problem is with the environment, the library management can adjust to promote higher performance. If a librarian lacks ability to perform, the person can be trained to perform.

Job performance of a worker can be determined by many factors such as work environment, knowledge, abilities, training skills, experience, technology or equipment available and willingness to improve on the job. This is so that, a work environment that is too hot or cold, dark and poorly ventilated will certainly not promote and encourage good job performance, thus culminating in poor productivity. However, a conducive work environment that is not hazardous and promotes collaboration, team work and trust is likely to encourage good job performance. For an organisation to excel among its peers in this competitive world, job performance of its workforce goes a long way in determining its success. Performance could be high or low, and keeping high performing employee has become a top priority for modern-day organisations, university libraries inclusive. Losing good and high performing workers is enormous in terms of time and finance required to recruit, interview, hire, assess, train and integrate new employees to

replace the high performing ones who might have left. Thus, retention of high job performers should be the main concern of the management of academic libraries (Adeeko *et. al.*, 2017). Any noticeable shortfall in ICT skills, abilities, knowledge and in-service training of librarians working in university libraries would no doubt have negative effect on their job performance. Therefore, job performance of librarians can be determined by use of Information Communication Technologies (ICTs) in library operations to enhance their job performance.

Information and Communication Technology (ICT) is a term that connotes various meanings. Information Communication Technology refers to technology that provides access to information via telecommunications devices and infrastructure. Information and Communication Technology (ICT) is the coming together of computing, telecommunication and broadcasting technologies to produce information. Example of computing technologies are the computers and its accessories while telecommunication technologies include telephone, facsimile, fax, e-mail. The broadcasting technologies include: radio, television, video. ICT can also be defined as the science of information processing which deals with the use of computer and other electronic devices to collect, process, store, retrieve and transmit or disseminate information to any part of the world. ICT skills could be viewed as the overall competencies (skills, knowledge, attitude and technical know-how) needed to create, save, analyse, organise, retrieve and disseminate digital information such as images, text, sounds and graphics in digital libraries or any type of information centre. In recent times, work for the information profession has become characterised by fast-paced change and new skills requirements (Seena and Pillai, 2014).

Information and Communication Technology (ICT) has brought tremendous transformation to academic libraries and information services. Such areas of transformation and development occasioned by ICTs in academic libraries include; computing technology, communication technology and mass storage technology. This has reshaped the way that libraries access, retrieve, store, manipulate and disseminate information to the users. In other words, students and staff (library users) now use ICT facilities available in the universities to source for reference material, online journal as well as send and receive e-mail from within and outside the country (Odionye, 2016).

Applications of Information Communication Technology (ICT) are numerous but mainly it is used in converting the existing paper-print records in the entire process of storage, retrieval and dissemination to electronic format. ICT presents an opportunity to provide value-added information services and access to a wide variety of digital based information resources to their clients. Furthermore, university libraries are also using modern ICTs to automate their core functions, implement efficient and effective library cooperation and resource sharing networks, implement management information systems, develop institutional repositories of digital local contents, and digital libraries and initiate ICT based capacity building programmes for library users (Krubu and Osawaru, 2010). The use of ICTs in library operations is significant, as it would help to accelerate the operations.

The availability of ICT facilities in university libraries such as CD ROM, computers, digital cameras, facsimile, Internet facilities, microfilm, photocopying machine, plotters, printers, projectors, scanners, white smart board is significant as it helps to increase accessibility and adequate use of information resources. Hence, ICT usage will facilitate development and job performance since there will be free flow of information between library personnel and users (i.e.

lecturers, students and the academic community). However, effective service delivery can only be achieved where ICT facilities such as: computers, printers, digital telephone, photocopying machines, CD-ROMs, projector, Internet facilities, plotters, facsimile, scanners, multimedia resources are available especially in the federal university libraries. The pervasive influence of ICT is obvious in all areas of human endeavour via the following ICT devices: computers, printers, digital telephone, photocopying machines, CD-ROMs, projector, Internet facilities, plotters, facsimile, scanners, multimedia resources. It is vital to note that ICT use in research has become a norm in university libraries where librarians have been identified as stakeholders in its development and implementation. The availability of ICT facilities in the university libraries would play a very vital role by providing easy, speedy and accelerated access to required information needed by the library users.

Availability of ICT facilities would also enhance the job performance of the librarians by effectively and efficiently discharging their responsibilities towards satisfying the users basic information needs. Yisadoko *et. al.* (2017) stated that ICT facilities have become the spine of many academic institutions. They serve as motivating factors to both library personnel and users by providing them with opportunity to transmit, acquire, download process and disseminate information on any subject of interest. It is enough for university libraries to make the ICT facilities available but also accessible for use. The accessibility of ICT is the ability of a person to perceive, use, navigate, communicate and interact with the ICT facilities. Similarly, increasing the availability of accessible ICT is considered a positive step in removing barriers that limit library personnel to effective use of ICT facilities in the university libraries in Nigeria. Therefore, university libraries should play active role in using ICT facilities as a means of effective information delivery, so as to equip librarians with right skills to access information independently which could also help in job performance. Afolabi (2014) observed that the prospects of ICT and the ideal situation of educational research in our ICT driven campus is still a mirage. This is why university libraries should endeavour to make ICT facilities available and accessible to their users.

The use of ICT facilities in the university libraries play a very crucial role by enabling library to easily provide the required information to the clientele. Oriogu *et.al.* (2014) stated that the use of Information and Communication Technology (ICT) is gaining momentum in university libraries especially now that most universities in Nigeria are adopting ICT in the development and improvement of their services. ICT has provided libraries with new opportunities to improve their resources and services.

### **Statement of the Problem**

The workforce of any organisation including libraries are responsible for its success and failure. The working environment of the library personnel is fast changing which demands new knowledge and skills for them to perform their job effectively and efficiently. For university libraries to achieve maximum productivity in terms of supporting learning, teaching, research and service to host community where the universities are located. University library personnel (Librarians) are expected to perform the statutory functions so as to achieve the set objectives of their university library. Thus, the job performance of librarians in federal university libraries in South-West, Nigeria was below expectation as Aboyade (2014) found that the job performance of professional librarians in Nigerian federal universities was on low level. Extant literature and researchers' observation have shown that, some librarians in federal university libraries in South-West, Nigeria

found it difficult to cope with the tools of the ICTs in library operations which may invariably affects their job performance. Could the challenges be due to inadequate ICT facilities, insufficient ICT skills, knowledge, abilities and technical known-how by librarians? It is against this backdrop that, the researcher investigated the influence of Information Communication Technology on job performance of librarians in federal university libraries in South-West, Nigeria.

### **Research Objectives**

The objectives of the study are to:

1. determine the level of job performance of librarians in federal university libraries in South-West, Nigeria;
2. ascertain the influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria;
3. find out if there is a significant relationship between ICT skills possession and job performance of librarians in federal university libraries in South-West, Nigeria.

### **Research Questions**

The following research questions guided the study:

1. What is the level of job performance of librarians in federal university libraries in South-West, Nigeria?
2. What is the influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria?
3. Is there a significant relationship between ICT skills possession and job performance of librarians in federal university libraries in South-West, Nigeria?

### **Literature Review**

Inuwa (2020) conducted a similar study with two specific objectives. The study was an experimental in nature. The population of the study covered the of all JSS II in Dutsinma zone. The researcher divided the students into two (2) groups: controlled and experimental and were taught some topics in social studies and thereafter forty objectives questions were administered to all the groups. ANOVA was used to analysed the results. The result showed that ICT has a positive impact in enhancing students' academic performance. The study concluded that there is significant difference in the mean academic performance of students taught social studies with ICT and those taught without it. The study recommended among other things that the use of ICT in the classroom instruction in the study area should be encourage in upper basic level in Dutsinma zonal quality assurance, Katsina State, Nigeria. The present study is similar with this study because the studies are on how ICT enhanced performance of a particular group of people.

Ozioko *et. al.* (2018) conducted a similar study that was guided by three specific objectives. The study adopted a descriptive survey design. The population of the study comprised 94 library staff and 711 library users. The instruments of the study were questionnaire and observation checklist. Descriptive statistical tools such as frequency and mean were used to analysed the collected data. The findings of the showed that various ICT facilities such as network facilities, photocopiers, printers, scanners, local area network among others were available in the libraries; that ICT application are used for different purposes in the libraries; that the extent of ICT application to library services in those libraries is extensively low except few services that are of great extent. The study concluded that provision of adequate technical support and provision of qualitative

bandwidth were suggested to enhance maximum application of ICT in the libraries. The study recommended that more ICT facilities should be made available, power supply should be improved and that adequate fund should be provided by the government to the libraries. The present study is similar with this study because the studies are on ICT application in academic libraries.

Okpokwasili (2018) carried out a similar study that was guided by two specific objectives. The study adopted survey research design. The population of the study comprised 542 library staff. The instrument used for the study was a structured questionnaire. Descriptive statistical tools such as: frequency, mean and standard deviation were used to analysed the collected data. From the findings of the study, the study concluded that there is high level of type of library crimes committed in academic libraries and high level of curbing library crimes with ICT in academic libraries in Nigeria. It was recommended that government and concerned authorities should adopt and make available information and communication technologies as means of curbing library crimes in academic libraries in Nigeria and since the traditional methods seems not meeting the security expectations. The present study is similar with this study because the studies are on impact of ICT and both used university libraries in Nigeria as areas of coverage.

Idakwo *et. al.* (2018) conducted a similar study that was guided by five research questions in line with the objectives of the study. The study adopted survey research design. The population of the study comprised 30 circulation staff of University of Ilorin, Federal University Lokoja and University of Abuja Libraries. The instrument used for the study was a structure questionnaire. Data collected were analysed using simple percentage. Findings of the study revealed that ICTs are utilised in circulation operations in the Federal University Libraries; ICT devices are available for circulation operations in the libraries among others. The study recommended that government should endeavour to provide adequate funds for procurement of ICT facilities for university libraries to enhance automation of circulation operations and university management should engage the circulation staff on continuous ICT training through organised seminars and workshops and among others. The present study is similar with this study because the studies are on application of ICT in library operations and both used university libraries as areas of coverage.

Yisadoko *et. al.* (2017) carried out a similar study that was guided by six specific objectives. The researchers adopted descriptive survey design. The population of the study was the 200 postgraduate students of Federal University of Technology, Minna. The instrument used for the study was a structured questionnaire. Descriptive statistical tools such as: frequency table and simple percentage were used to analysed the collected data. Findings revealed that ICT facilities were available at a low level. It was recommended that efforts should be made to place a high premium of priority on application of ICTs in the services on university libraries and adequate training and orientation on ICT should be emphasised. The present study is similar with this study because the studies are on influence of ICT on library professionals and both used university libraries as areas of coverage.

Seena and Pillai (2014) conducted a similar study that was guided by three research questions. The study was based on a questionnaire survey of library professionals in the library of the University of Kerala, India. The population of the study consisted of 102 professionals, para-professionals and university administrators. The instrument used for the study was a structured questionnaire. Data collected were analysed using version 23 of MS-Excel for appropriate statistical analysis and

description. Findings revealed that lack of training (40.20%) is one of the main constraint in acquiring ICT skills, ICT facilitates quick access to current data (52.94%) and ICT application improves quality of library services (53.92%). The study concluded that the university library needs proper ICT infrastructure and training for the professionals in using the digital resources effectively. It was recommended that libraries should promote ICT awareness to the professionals as well as users by providing short-term courses, in-house training programmes, organising workshops, seminars, conferences and public lectures etc. The present study is similar with this study because the studies are on ICT and both used university libraries as areas of coverage.

Ojiegbe (2010) conducted a similar study that was guided by three research questions. The study adopted descriptive survey design. The population of the study consisted of 136 professional and para-professional staff working in the university libraries. The instrument used for data collection was questionnaire. Mean score and percentages were used in analysing the data collected. Findings from the study revealed that the level of ICT competence among the library staff working in the university libraries were very low. Many of the library staff acquired the competencies they possess through private computer training, personal practice and on the job training. The study concluded that Nigerian Library Association (NLA) and Librarians' Registration Council of Nigeria (LRCN) should take up the mantle of leadership role to educate library heads and set standards of operations for libraries. The National Library's Centre for Advanced and Information Management (CALIM) in Enugu should be properly developed and put to use for competency training of librarians in Nigeria. It was concluded that the two Federal University libraries should dedicate a reasonable percentage of their annual library budget to training, the two Federal Universities libraries should create an internal committee on training that would be responsible for planning training programmes for the library staff and the two Federal Universities must make sure that every library staff have access to the use of the ICT facilities available in the library for practices. The present study is similar with this study because the studies are on ICT competencies of library staff and both used Federal University libraries as areas of coverage.

## **Methodology**

This study adopted a descriptive survey research design. The survey research design is used because survey type of research is characterized by population and sample as well as the use of data collection instrument. Mole (2019) defined descriptive survey research design as one which is aimed at collecting data from members of a given (usually large) population on their views, opinions, attitudes, beliefs, perceptions, among others on a phenomenon, event or practice in order to determine the characteristics, features or facts about the population. The population of the study comprised of one hundred and sixty-four (164) librarians working in Hezekiah Oluwasanmi Library; Obafemi Awolowo University, Ile-Ife, Albert Ilemobade Library; Federal University of Technology, Akure and Kenneth Dike Library; University of Ibadan, Ibadan. The study used simple random sampling technique to select the three universities based on status: two conventional and one specialised for the purpose of generalisation. The entire population was adopted for the study. A close ended structured questionnaire was designed titled "influence of Information Communication Technology (ICT) on job performance of librarians' questionnaire (IICTJPLQ) to capture the level of job performance of librarians and influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria. Research questions one and two were descriptively analysed using total frequencies and median as a measure of central tendency or average. According to Kostoulas (2021), the median is the

number found precisely in the middle of the distribution that shows what the likeliest response might be or what the average respondent might think. The draft copies of questionnaire were validated by three lecturers in the Department of Library Information Technology, one professional library staff all from Federal University of Technology, Minna and 40 copies of the modified version were pre-tested on 40 librarians of Kebbi State University of Science and Technology Library, Aliero, and Abubakar Gimba Library; Ibrahim Badamasi Babangida University Lapai respectively using test re-test method. The selection of these universities is due to the fact that they are State based conventional and specialised universities that are neither part of population, study area nor part of sample. The reliability coefficient of 0.92 was obtained. The figure is above half (1/2), which is an indication that the instrument is excellent and reliable. A total of 164 copies of questionnaire were administered to librarians in the selected federal university libraries in South-West, Nigeria. A response rate showed the returned of 164 copies of the questionnaire representing 100 percent. The analysis of the research questions one and two was done through median with a decision criterion of  $f_x \geq \text{median} = (\text{high or agreed})$ , and  $f_x < \text{median} = (\text{low or disagreed})$ . Research question three was inferentially analysed using Spearman's rho correlation analysis tested at 0.05 level of significance. Spearman's rho correlation analysis was used because it is the non-parametric version of the Pearson Product Moment Correlation (PPMC). Spearman's rho correlation determines the strength and direction of the monotonic relationship that exists between two variables rather than the strength and direction of the linear relationship between two variables.

**Results of Analysis of the Major Variables of the Study**

**Research Question One:** What is the level of job performance of librarians in federal university libraries in South-West, Nigeria?

The response on the level of job performance of librarians in federal university libraries in South-West, Nigeria is presented in Table 1.

**Table 1: Response on the level of job performance of librarians in federal university libraries in South-West, Nigeria**

S/N	STATEMENTS	Total <i>F<sub>x</sub></i>	Median <i>M=2078</i>	DECISION
	<b>Motivation (Personal Desires)</b>			
1	The prompt payment of staff salary encourages industrial harmony and good job performance in the library.	2189	$f_x \geq M$	High
2	Regular promotion of staff motivates me to come up with new ideas and better ways of doing things.	2145	$f_x \geq M$	High
3	The reward system for dedicated staff motivate me to make meaningful contributions during meetings in the library.	2114	$f_x \geq M$	High
4	Career prospects motivate me to work harder and meets work deadlines in the library.	2205	$f_x \geq M$	High
	<b>(Work Environment)</b>			
5	The working environment in the library is quite conducive for high performance.	934	$f_x \geq M$	Low
6	The requirements needed for promotions in my university encourages me to publish more locally and internationally.	2171	$f_x \geq M$	High
7	There is constant provision for acquisition of required skills for library personnel on the job performance.	1438	$f_x < M$	Low
	<b>Skills (Mental Ability)</b>			
8	Ability to comprehend complex ideas enables me acquire ICT skills to perform my job efficiently.	1835	$f_x < M$	Low
9	Librarians ability to reason quickly facilitates speedy completion of routine duties.	1882	$f_x < M$	Low
10	My ability to learn fast enables me to acquire ICT skills to perform my job better.	2004	$f_x < M$	Low



<b>(Physical Ability)</b>				
11	My ability to move around enables me to acquire ICT skills and enhances job performance.	2247	$f\bar{x} \geq M$	High
12	My ability to see properly enables me to acquire ICT skills and work effectively.	2173	$f\bar{x} \geq M$	High
13	My ability to hear properly enables me to acquire ICT skills and work better.	2135	$f\bar{x} \geq M$	High
<b>(Experience)</b>				
14	My years of experience on the job improves my skills perform my work very well.	1955	$f\bar{x} < M$	Low
15	My experience on daily tasks improves my skills which enhance my job performance.	1951	$f\bar{x} < M$	Low
<b>Facilities</b>				
16	Use of ICT facilities helps me reduce redundant work.	1749	$f\bar{x} < M$	Low
17	Use of ICT facilities improves my job competency to work better.	2119	$f\bar{x} \geq M$	High
18	Use of ICT facilities enables me to provide quality library services.	2042	$f\bar{x} < M$	Low

**Key 1:**  $f\bar{x} = \sum (SA \text{ value} * \text{statement value} + A \text{ value} * \text{statement value} + N \text{ value} * \text{statement value} + D \text{ value} * \text{statement value})$ .

**Key 2:**  $f\bar{x} \geq M = \text{High Performance}$ ,  $f\bar{x} < M = \text{Low Performance}$ .

The data presented in Table 1 were analysed for level of job performance of librarians. The median (M) of the total score ( $f\bar{x}$ ) for each item of the university libraries assessed was used. The criterion for each statement was High if  $f\bar{x} \geq M$  of 2078 (greater than or equal to 2078) and Low if  $f\bar{x} < M$  of 2078 (less than 2078). The results on Table 1 showed that the respondents indicated high performance to nine statements out of the eighteen items listed on the level of job performance of librarians as the  $f\bar{x} \geq M$  of 2078 (greater than or equal to 2078). On the other hand, respondents indicated low performance to the other nine statements as the  $f\bar{x} < M$  of 2078 (less than 2078).

**Research Question Two:** What is the influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria?

The response on the influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria is presented in Table 2.

**Table 2: Response on the influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria**

S/N	STATEMENTS	Total F <sub>x</sub>	Median M=2194	DECISION
<b>Basic Operation of ICT Hardware Skills</b>				
1	Ability to retrieve documents from storage devices enhance my job performance.	2238	$f\bar{x} \geq M$	High
2	My ability to save, edit and copy data into secondary storage devices such as: diskettes, flash drive and USB effectively enhances work output.	2287	$f\bar{x} \geq M$	High
3	My knowledge of ICT enables me to save, edit and copy data into primary storage device such as: hard disk effectively and this enhance job performance.	2213	$f\bar{x} \geq M$	High
4	Ability to scan and upload documents enhance librarians work output.	2236	$f\bar{x} \geq M$	High
5	My knowledge of ICT enables me to type and print documents which enhances job performance.	2195	$f\bar{x} \geq M$	High
<b>Email Management and Setup Skills</b>				
6	My knowledge of ICT enables me to create an online email account for my colleagues thus enhancing job output.	2152	$f\bar{x} < M$	Low
7	Ability to use e-mail in sending and receiving messages and this enhance job performance.	2282	$f\bar{x} \geq M$	High
<b>Safe Internet Usage Skills</b>				
8	My ability to open web pages, navigates web links and save favourite web pages enhance job performance.	1925	$f\bar{x} < M$	Low
9	My knowledge of ICT enables me to perform online cataloguing and classification and this enhance job performance.	2238	$f\bar{x} \geq M$	High
10	My knowledge of ICT enables me to use OPAC/Web OPAC to retrieve bibliographic information and this enhance job performance.	2235	$f\bar{x} \geq M$	High
<b>Online Research Skills</b>				

11	Ability to use search Engines such as: Mamma, AOL, Yahoo, Google in searching for information online enhances my job performance.	2229	$f_x \geq M$	High
12	My knowledge of ICT enables me check for reference sources online which enhance job performance.	2246	$f_x \geq M$	High
13	My knowledge of ICT enables me collect research data using Google forms or Survey monkey and this enhance job performance.	2160	$f_x < M$	Low
<b>Online Communication and Collaboration Skills</b>				
14	My knowledge of ICT enables me to use Electronic Bulletin Boards which enhances job output.	2109	$f_x < M$	Low
15	My ability to communicate and hold meetings with others on ZOOM enhances job performance.	1889	$f_x < M$	Low
16	Ability to share work related files on Dropbox or Google drive enhance librarians job performance.	2037	$f_x < M$	Low
17	My knowledge of ICT enables me to perform Electronic Documentary Delivery Services and this enhance job output.	2194	$f_x \geq M$	High
<b>Social/Academic Networking Sites Management Skills</b>				
18	My knowledge of ICT enables me to perform Networking activities and this enhance work output.	2142	$f_x < M$	Low
19	Ability to search and retrieve research papers on ResearchGate and Academia.edu. enhance librarians work performance.	2203	$f_x \geq M$	High
20	My knowledge of ICT enables me share my work findings on Twitter and this enhance work output.	2162	$f_x < M$	Low
21	Ability to reach out and collaborate with other colleagues on LinkedIn, ResearchGate enhance my job performance.	2229	$F_x > M$	High
<b>Document Creation and Retrieval Skills</b>				
22	My knowledge of ICT enables me to perform Statistical skills such as SPSS to analyse data and this enhance job performance.	1974	$f_x < M$	Low
23	My knowledge of ICT enables me to use Graphics such as: CorelDraw which enhance job output.	2048	$f_x < M$	Low
24	Ability to use spreadsheets to enter numerical value and text into cells as well as performing calculations using formula enhance my job performance.	2181	$f_x < M$	Low
25	My knowledge of ICT enables me to perform Presentation skills such as: power point presentation which enhance job output.	2191	$f_x < M$	Low
26	My knowledge of ICT enables me install Software and this enhance job output.	2192	$f_x < M$	Low
27	My knowledge of ICT enables me to select relevant and appropriate materials for download and this enhance work performance.	2200	$f_x \geq M$	High

**Key 1:**  $f_x = \sum (\text{VHI value} * \text{statement value} + \text{HI value} * \text{statement value} + \text{MI value} * \text{statement value} + \text{LI value} * \text{statement value} + \text{VLI value} * \text{statement value})$ .

**Key 2:**  $f_x \geq M$  = High Influence;  $f_x < M$  = Low Influence.

The data presented in Table 2 were analysed for the influence of ICT skills possession on job performance of librarians. The median (M) of the total score ( $f_x$ ) for each item of the university libraries assessed was used. The criterion for each statement was high if  $f_x \geq M$  of 2194 (greater than or equal to 2194) and low if  $f_x < M$  of 2194 (less than 2194). The results on Table 2 showed that the respondents indicated high influence to fourteen statements out of the twenty-seven items listed on the influence of ICT skills possession on job performance of librarians as the  $f_x \geq M$  of 2194 (greater than or equal to 2194). On the other hand, respondents indicated low influence to the other thirteen statements as the  $f_x < M$  of 2194 (less than 2194).

**Research Question Three:** Is there a significant relationship between ICT skills possession and job performance of librarians in federal university libraries in South-West, Nigeria?

This hypothesis is to ascertain whether there is significant relationship between ICT skills possession and job performance of librarians in federal university libraries in South-West, Nigeria.

**Table 3: ICT skills possession correlation coefficient test result on job performance of librarians.**

Correlations				
Spearman's rho	Job Performance	Correlation Coefficient	Job Performance	ICT Skills Possession
			1.000	.717**
		Sig. (2-tailed)		.000
		N	164	164
	ICT Skills Possession	Correlation Coefficient	.717**	1.000
		Sig. (2-tailed)	.000	
		N	164	164

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

Table 4.12 showed that Spearman’s correlation coefficient  $r_s = 0.717^{**}$ , and that this is statistically significant at ( $p=.000$  which is less than 0.05 level of significance). **Therefore, the null hypothesis is rejected.** This means that ICT skills possession has a positive and strong relationship with job performance of librarians in federal university libraries in South-West, Nigeria. The Spearman’s correlation coefficient of ICT skills possession of 0.717, this number is positive, meaning that every time there is an increase in the ICT skills possession of 0.717, job performance will also increase by 0.717 points.

### Summary of Major Findings

1. The level of job performance of librarians in federal university libraries in South-West, Nigeria is moderate.
2. The influence of ICT skills possession on job performance of librarians in federal university libraries in South-West, Nigeria is high.
3. The hypothesis testing result showed that ICT skills possession has a positive and strong relationship with job performance of librarians in federal university libraries in South-West, Nigeria.

### Discussion of Findings

Response to research question one sought to find out the level of job performance of librarians in federal university libraries in Nigeria. The result showed that respondents indicated high performance to nine statements out of the eighteen items listed on the level of job performance of librarians as the  $\bar{x} \geq M$  of 2078 (greater than or equal to 2078). This is corroborated by the respondents’ affirmative responses to the questionnaire items. The finding is supported by a similar study by Agada *et. al.* (2021) that, job performance is a measure of how effectively library staff carry out their duties or responsibilities in order to accomplish specific and desirable results. Furthermore, in line with the opinion of Curral (2013), individual job performance is the unique contribution of an employee to the achievement of organisational goals and can be enhanced by helping employees to acquire competencies through capacity building strategies such as training and re-training, workshops, conferences and seminars. This finding does not corroborate the

finding of Adeeko et. al. (2017) who reported that the level of job performance of library personnel in universities of Southwest Nigerian is high. On the other hand, the respondents indicated low performance to other nine statements as the  $f_x < M$  of 2078 (less than 2078). This is in line with the findings of Aboyade (2014) and Akor (2009) who both reported that job performance of professional librarians in Nigerian federal universities and government-owned universities in North-Central, Nigeria was on a low level. However, Library as a unit within an institution of higher learning such as universities requires high performing personnel so as to realise its vision and mission of meeting the information needs of the parent institution. Thus, a moderate level performance among librarians cannot be a source of joy, satisfaction and achievement with a feeling of mastery and pride. It is therefore, necessary for the management of various federal university libraries in Nigeria to put in place measures that will improve job performance of librarians. These measures include: adequate training in both the conventional and ICT aspects of library operations, good condition of services, possession of sufficient ICT skills, abilities and knowledge, good wages, provision for advancement in terms of promotion (for those who meet the requirement) as at when due and good working environment devoid of dangers and hazards, robust and adequate health and medical services.

Response to research question two sought to find out the influence of ICT skills possession on job performance of librarians in federal university libraries in Nigeria. The result showed that respondents indicated high influence to fourteen statements out of the twenty-seven items listed on the influence of ICT skills possession on job performance of librarians as the  $f_x \geq M$  of 2194 (greater than or equal to 2194). This is corroborated by the respondents' affirmative responses to the questionnaire items. The finding is supported by a similar study by Seena and Pillai (2014) that, ICT skills are the overall competencies (skills, knowledge, attitude and technical know-how) needed to create, save, analyse, organise, retrieve and disseminate digital information such as images, text, sounds and graphics in digital libraries or any type of information. Consequently, in line with the opinion of Abba (2017), to increase the ICT skills of the information professionals, there is need for continuous training and orientation program. Although computer is becoming popular, still we lack computer literate professionals, many senior and old information professionals do not know how to operate computer effectively. On the other hand, respondents indicated low influence to other thirteen statements as the  $f_x < M$  of 2194 (less than 2194). This is in line with the finding of Yisadoko et. al. (2017) who reported that possession of some listed ICT skills by postgraduate students in Nigerian universities is at low extent. Similarly, Ugwuoke (2012) opined that any worker, who is not adequately equipped with ICT skills for operating in the new environment, automatically becomes a misfit. Ugwuoke (2012) further asserted that the introduction of ICT to the workforce using the Digital Nervous System (DNS) approach has necessitated re-training of workers.

## **Conclusion**

Based on the major findings, the study concluded that Research question one showed that level of job performance of librarians is moderate as this could be attributed to poor working environment, insufficient ICT skills possession or low quality of ICT facilities to functional well. Research question two revealed that influence of ICT skills possession is high. Thus, the provision of good working environment, sufficient possession of ICT skills, high quality of ICT facilities and training and re-training of librarians in the aspect of ICT to acquire more ICT skills especially the advanced ICT skills would no doubt enhance librarians job performance.

## Recommendations

1. Federal university libraries in South-West, Nigeria should make their libraries more conducive for both staff and users.
2. Federal university libraries in South-West, Nigeria should organise training and re-training for librarians to acquire more ICT skills especially the advanced ICT skills. More opportunities should be given to librarians to attend conferences, workshops and seminars in the area of ICT.

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