

ACCESS TO AND USE OF INFORMATION AND COMMUNICATION TECHNOLOGY AND TASK PERFORMANCE

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Abstract

The study investigated the relationship between access to and use of information and communication technology and task performances of library personnel in public university libraries in South West Nigeria. The total enumeration technique was used to cover 330 library professionals working in public university libraries in the zone. A self-developed questionnaire was used to obtain data. Out of the 330 copies of questionnaire administered 248 (76.6%) copies were found useable. The findings revealed that the level of task performances of the respondents was high, and the level of access to ICT was high, while the frequency of ICT use was moderate. The results indicated that there was a positive relative effect of ICT access and use on task performances. The study also found a significant relationship between the access to ICT, ICT use and task performances of respondents, while there was a significant joint effect of access to ICT and ICT use on the task performances of library personnel. The study recommended the constant development of personnel regarding job knowledge and skills, the promotion of creativity and adaptability skills to enhance personnel task performances, while library managers should continue to make ICT tools accessible for library personnel to allow their use in improving the workflow in the library.

Keywords: task performance; ICT access; ICT use; library; library personnel; university libraries

INTRODUCTION

The function of a university library is to support the vision and mission of its parent body. Its major preoccupation is the provision of resources in print and electronic format to enhance teaching, learning and research within the university community (Larson 2017). The responsibility of a university library is to meet the diverse information needs of its staff and students through dynamic, qualified and competent personnel. Every organisation expects its personnel to put up good performances on the job that would enable the achievement of its objectives. This is because the performances of the workforce determine an organisation's fate in terms of success or failure. Library personnel are therefore expected to set goals and targets that will propel their actions to achieve the goals and objectives of the university library. In order to achieve the goals and targets high performance is expected from every staff member through the provision of the necessary tools and facilities (Kotteeswari and Sharief 2014). Nickols (2016) attributes effective performance to goal clarity, knowledge repertoire, feedback, incentives, and an environment which comprises tools and equipment. Effective performance by library personnel depends on their individual ability and capacity, the nature of tasks assigned and resources available to execute tasks. Library personnel perform a series of tasks such as the acquisition, cataloguing and classification of organisation serials, advisory services, dissemination of information, answering of reference queries, providing media services, and other sub-tasks which require access to and use of information and communication technology (ICT).

A task is defined as a discrete unit of action that has a beginning, an end, and an observable and measurable behaviour or activity that can be broken into a step-by-step procedure (Hatzell 2006). Task performance is a dimension of job performance which has to do with the core requirement of any job. Peng (2011) describes task performance as discrete action and behaviour that are under the influence of an employee and which are officially recognised as being contributors to organisation goals. Job performance on the other hand is a generic term which consists of task, contextual and counterproductive performance (Rotundo 2002). Contextual performance is regarded as helping behaviour which is discretionary in nature and which supports the organisation's social and psychological environment (Aboazoum, Nimran, and Al Musadieq 2015). Counterproductive behaviour refers to intentional acts and behaviour which are inimical to organisation success and survival (Rotundo and Spector 2010).

Extant literature has been critical about the performances of library personnel on the job (Akor 2009; Oyewole and Popoola 2013). The need to determine the performances of library personnel has become highly imperative because the teaching faculty has always berated the lack of library impact on faculty publishing (Osinulu and Oyedipe 2016). This and many other challenges facing university libraries in Nigeria have necessitated the need to constantly assess the library performance on one hand and individual employee performance on the other hand to ensure that library personnel

deliver on their mandate. In this paper, the performances of library personnel were quantified through self and supervisor's ratings to ensure objectivity. This enables the identification of gaps in personnel knowledge, skills and effectiveness on the job. While the assessment of individual task performances in the library setting assists in the determination of the overall effectiveness of the library, the provision of access to and use of ICT to actualise and ease operations is very vital to task performance outcomes.

ICT has been found to play a crucial role in actualising the task performances of library personnel in the twenty-first century. It enables them to carry out assigned tasks and functions expeditiously. ICT is capable of helping personnel achieve high levels of task performance efficiency and a systematic workflow in the university library. The use of ICT to enhance task performances of library personnel is dependent on the ease of access and the access level to ICT facilities provided for personnel to carry out their daily tasks. The provision of access to ICT is therefore a precursor of ICT use. Access is an important factor of usage. The inability of library management to provide adequate ICT facilities and the non-use of ICT by library personnel to execute needed tasks will have a negative impact on library personnel performances. This was attested to by Smith (2005) and West (2015) who stated that inadequate capacity and non-affordability of facilities at individual or institutional levels constitute hindrances to access to ICT and its use. Access to ICT will have a positive impact on use and this can result in high task performances. The use of ICT enables libraries to have quicker and global access to information, to improve the speed of working, to deliver accurate results, and to develop innovative library services. Library resources and services should be accessible remotely in spite of distance by users. This was attested to by Eze and Uzoigwe (2013) when they stated that "Library services in this age are in the cyber space and are not affected by opening and closing hours".

STATEMENT OF PROBLEM

Task performances of library personnel have been consistently criticised by different stakeholders within the university community as being below expectation. One of those factors that could be responsible for this might be the state of technology prevailing in public university libraries which may hamper the use of ICT in carrying out the essential duties of providing accurate, relevant and timely information to users. The lack of access to ICT and non-use of ICT will affect synchronous and asynchronous communication with library users. Most university library personnel do not have access to ICT tools and other electronic devices needed to carry out effective task performances in most university libraries, which affect their job outcomes. The lack of access to ICT would prevent ICT use in the library while non-use of ICT in the delivery of library functions and services would lower efficiency and effectiveness of the delivery of just-in-time and just-in-need services. In this era of information explosion both human resources and ICT tools are very important to task performances in the library. Both access to

ICT and its use can be combined to predict the level of task performance among library personnel. It is in the light of this that this study attempted to investigate the relationship of access to and use of ICT and task performances of library personnel in a public university library in South West Nigeria. Literature that correlates access to and use of ICT and task performances is limited and this study is an attempt to bridge such a gap.

AIMS AND OBJECTIVES OF THE STUDY

The aim of this study is to investigate the relationship between access to ICT, ICT use and task performances among library personnel in public university libraries in South West Nigeria. The specific objectives will be to

- determine the level of task performances of library personnel in public university libraries in South West Nigeria;
- identify the level of access to ICT tools available to library personnel in public university libraries in South West Nigeria;
- determine the frequency and use of ICT tools by library personnel in public university libraries in South West Nigeria;
- determine the relative effects of access to and use of ICT among library personnel in public university libraries in South West Nigeria; and
- determine the composite effect of access to and use of ICT on task performances of library personnel in public university libraries in South West Nigeria.

HYPOTHESES

1. There is no significant relative effect of access to and use of ICT on task performances of library personnel in public university libraries in South West Nigeria.
2. There is no significant relationship between access to ICT, ICT use and task performances of library personnel in public university libraries in South West Nigeria.
3. There is no significant joint effect of access to and use of ICT on task performances among library personnel in public libraries in South West Nigeria.

LITERATURE REVIEW

Personnel performance is a crucial factor in the any organisation. This is because the purpose of establishing any organisation is to achieve specific goals and objectives. Salleh, Yakubu, and Dzulkifli (2011) associated good performance with quality,

quantity, cooperation, dependability and creativity. Sonnentag, Volmer and Spychalla (2010) emphasised the relevance of individual performance to an organisation's success. They described performance as a goal-oriented behaviour expressed by individuals on behalf of an organisation. The extent to which individual personnel responds to task execution must be determined both for the advantage of the individual as well as that of the organisation. Curral (2013) described individual performance as the unique contribution of an employee to the achievement of an organisation's goals. Campbell (1990) conceptualised performance as behaviour rather than outcome. Outcome of behaviour has to do with job productivity while behaviour deals with effectiveness. He referred to task performance as comprising task-specific proficiency and non-task-specific proficiency of personnel. Borman and Motowidlo (1993) define task performance as "the proficiency with which job incumbents perform activities that are formally recognised as part of their job: activities that contribute to the organisation technical core either directly or indirectly by implementing a part of its technology process or indirectly by providing it with needed materials or services" (Borman and Motowidlo 1993, 73). Technology plays an important role in harmonising personnel performances; therefore access to relevant ICT tools is important for effective performance of duties and responsibilities.

Possession of access to ICT by library personnel would have a positive impact on library task performances. Access to ICT, according to Adeoye and Popoola (2011), is the degree to which a particular system is available to users for the purpose of achieving efficiency, effectiveness and satisfaction. Olatokun (2009) associated access to ICT with possessing physical access. According to him physical access can be associated with the availability of a computer that is connected to the Internet. The provision of access to ICT by library management would go a long way in enabling library personnel to have access to both immediate and remote information resources that meet the needs of library professionals. Access to ICT enables access to global information resources. The ability of the university library to enable access to resources would result in users' satisfaction. ICT infrastructure and facilities must be readily accessible to library personnel in order to facilitate and impact positively on the performance of job tasks. Library personnel can become disillusioned and frustrated if the necessary resources are not deployed to facilitate the achievement of set goals and objectives.

Clark and Perry (2015) regarded access to ICT as part of the solution to digital inclusion and empowerment. Kyakulumbe, Olobo and Kisenyi (2013) argued that members of a social system would utilise ICT only when they are allowed to have access to such facility. Tiwari and Sahoo (2013) also regarded access to ICT as very significant to the achievement of library goals, information management and effective services delivery. Bello, Emmanuel and Busari (2013) conducted a study on the "availability, accessibility to ICT facilities by librarians in some selected Nigerian universities", and the findings revealed that in selected libraries, the majority of ICT facilities were available

but not accessible. A multimedia projector, Internet facilities, and office equipment were the only facilities that were accessible to librarians. Ansari (2013) reported that in spite of the high level of skills possessed by library professionals, most of them could not use ICT to perform necessary tasks owing to the inaccessibility of ICT infrastructure.

A study by Ademodi and Adepoju (2009) revealed that the level of computer access provided by libraries to library personnel was very low because only a few computers were installed to execute tasks. Access to technology offers a lot of benefits to library personnel and the users of the library because access to ICT will culminate in benefits such as access to information, education, commerce, and e-government. Kadiri quoted by Olatoye (2009) agreed that the lack of access to computers at home and in the workplace could be a hindrance to their usage. Rosenberg (2005) in her study titled "Towards the Digital Library in Africa" found that in the majority of libraries, e-resources were available but that facilities were poor.

ICT use in university libraries has cut across all the sections: acquisitions, technical resources, serials, readers, references and administration. ICT has changed the working patterns of library personnel which necessitated a change in the perception of library personnel towards ICT use. This was buttressed by Akpomi and Ordu (2009) who noted that technology innovations had the capability to change working patterns in many organisations. Technology innovations transformed the entire library landscape and brought about new roles for information professionals. Erasto (2013) studied the impact of ICT use on service delivery and found that ICT has improved efficiency and effectiveness by improving service delivery, enhancing the speed of delivery, increasing flexibility, and providing access to unlimited information. The use of ICT to engender task performances offers overwhelming benefits to the library. Even though it has the capacity to have an impact on individual performance by increasing individual effectiveness, the library managers must provide the enabling environment for its use.

The use of ICT to carry out tasks in university libraries could have a positive impact on task performances of library personnel. Inyang and Inyang (2015) investigated ICT use as a correlate of job effectiveness among library staff in the University of Calabar, Nigeria. The study involved 225 respondents and the findings indicated that staff use of the Internet, email, PowerPoint and computers was significantly related to staff effectiveness. Bamigboye, Buraimo and Ajani (2008) in their study on the use of ICT to improve efficiency and effectiveness in library use reported that ICT was needed to improve efficiency and performance. They identified an unstable power supply, the lack of skills by librarians and the high cost of ICT as constraints to the use of ICT for performing tasks. Findings by Haliso (2011) also indicated that ICT is beneficial in measuring staff work performances, and reducing costs of information provision, in enhancing service delivery and improving productivity. Omosor's (2014) study revealed

that the adoption and use of ICT in cataloguing, classification and acquisitions led to improved performances.

Edna, Gikandi and Solomon (2014) regarded access to ICT as an important criterion that could hinder the use of ICT in service delivery. According to them access to ICT enables access to global resources beyond library stock in terms of e-resources, e-journals, e-books and online databases. Various studies in literature confirmed the application and use of ICT in libraries but have not related this with performance, most especially in the library thus creating a gap in the literature.

METHODOLOGY

The study aimed at finding the relationship between ICT access and use and task performances of library personnel. The study employed the descriptive survey of the correlation design. The population was made up of 330 library professionals selected through the total enumeration method from 13 public university libraries in South West Nigeria. A questionnaire was used to collect data while task performance indicators were adopted from a review of the literature and adapted to suit the work. The questionnaire was divided into two categories: the Library Personnel Task Performance Questionnaire (LPTPQ), and the Supervisors' Ratings of Library Personnel Task Performance Questionnaire (SRLPTPQ). The LPTPQ was divided into four categories covering demographics, the ICT Access Questionnaire (ICTAQ), the ICT Use Questionnaire (ICTUQ) and the SRLPTPQ. Data on self-assessment and supervisors' ratings were added together and divided by two to arrive at the average ratings of task performances of respondents. The study had a response rate of 76.6 per cent. The data were analysed using frequency and percentages. Correlation and regression were used to answer the research questions and the hypotheses while the test of norm was used to categorise the level of task performances and access to and use of ICT.

PRESENTATION AND DISCUSSION OF FINDINGS

Figure 1 indicates that 25 (1.1%) respondents are within the age group of 36–45 years and 125 (50.4%) respondents within the age of 26–35 years. Inference from this study indicated that the ages between 26–35 years constitute the majority. The inference that can be deduced from the data is that young professionals constitute the majority of the personnel in the university library studied.

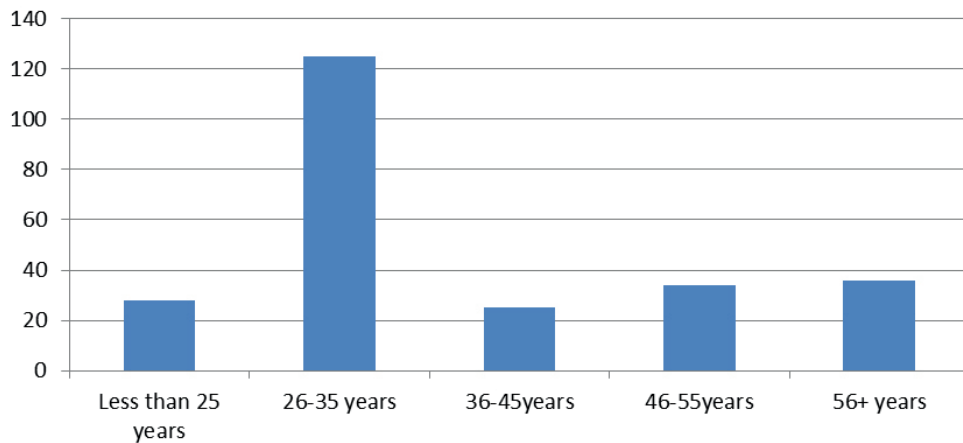


Figure 1: Distribution of respondents by age

Figure 2 shows the distribution of respondents by gender. A total of 163 (66%) of the respondents were male and 85 respondents (34.3%) were female.

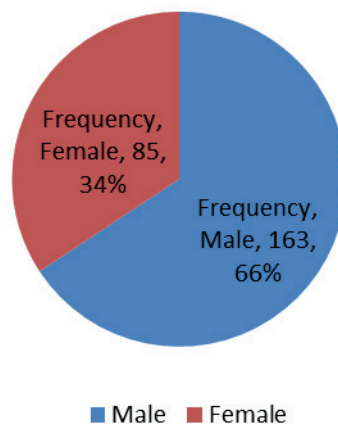
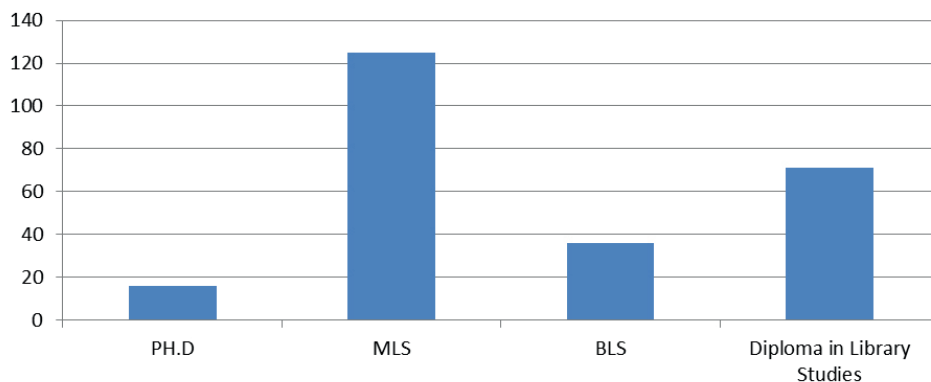


Figure 2: Distribution of respondents by gender

Figure 3 indicates that 16 (6.5%) of the respondents are PhD holders, 125 (50.4%) are MLS holders, 36 (14.5%) are BLS holders, and 71 (28.6%) are holders of a Diploma in Library Studies. Findings showed that the majority of the respondents had master's degrees in Library Studies.



Key: *PhD* = Doctoral; *MLS* = Master in Library Studies; *BLS* = Bachelor degree in Library Studies

Figure 3: Distribution of respondents by educational qualification

Figure 4 indicates that 11 (4.4%) respondents are Deputy University Librarians, 33 (13.3%) are Principal Librarians, 32 (12.9%) are Senior Librarians, 35 (14.1%) are Librarian I, 30 (12.1%) are Librarian II, 31 (12.5%) are Assistant Librarians, 21 (8.5%) are Library Officers, 16 (6.5%) are Higher Library Officers, 15 (6.0%) are Senior Library Officers, 4 (5.6%) are Principal Library Officers, 6 (2.4%) are Chief Library Officer I and 4 (1.6%) are Chief Library Officer II. The drawing of inferences from Figure 4 indicates that the majority of the respondents are in the Librarian I category, followed by Principal Librarians, and Senior Librarians. The majority of the respondents (56.9%) are Librarians while the rest (43.1%) are Library Officers.

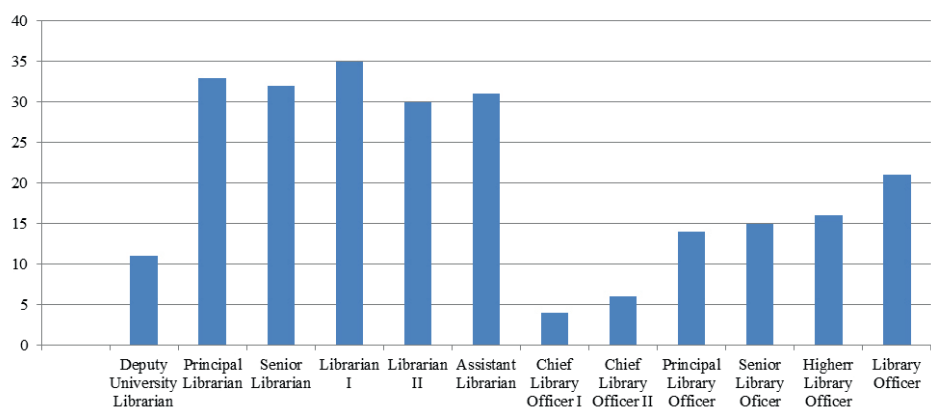


Figure 4: Distribution of respondents by job status of professionals and paraprofessionals

Figure 5 shows that the least of the respondents are 6 (2.4%) from the administrative section while the majority, 98 (39.5%), are from the technical section of the library. This finding from the data implies that the majority of the respondents worked in the technical section of the library.

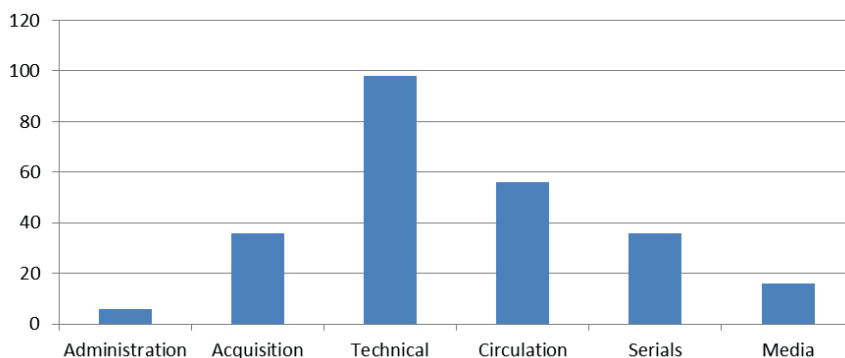


Figure 5: Distribution of respondents by departments in the library

Table 1: Task performances of respondents at universities in South West Nigeria

S/N	Items	Mean of self-assessment	Mean of supervisor's assessment	Overall average
1.	Job knowledge	21.35	20.18	20.77
2.	Job skills	21.33	20.54	20.44
3.	Task quality	21.39	19.88	20.53
4.	Task quantity	21.24	19.98	20.62
5.	Planning and organising	20.99	19.49	20.25
6.	Supervisory/Management	21.04	19.48	20.27
7.	Communication	21.00	19.41	20.21
8.	Creativity	20.95	19.43	20.20
9.	Timeliness	20.02	19.66	20.34
10.	Adaptability	21.02	19.54	20.29

Table 1 presents the overall average of the levels of task performances of self-assessment and supervisor's ratings of respondents. The overall mean score of task performances of library personnel is 222.68. The test norm was used to determine the level of library task performances of the respondents.

Each of the items under the task performance scale has five items each which have been compressed to give the 10 sub-items with a total mean score for each sub-group. From the analysis of the data in Table 1, the self-assessment and the supervisor's ratings are added together to arrive at the average ratings of the task performances of the respondents. The analysis reveals that job knowledge had the highest mean score of 20.77 followed by task quantity of 20.62 and task quality with a mean score of 20.53. Creativity has the lowest mean score of 20.20 followed by communication which has a mean score of 20.21 and planning and organising 20.25. The implication of these findings is that the respondents had high job knowledge and job skills. This might perhaps be owing to the impact of seminars and workshops, funded by ETF interventions for personnel development, on library personnel. While creativity has the least mean score, the overall mean score still remains very high.

Table 2: Level of access to ICT facilities used by library personnel in public universities in South West Nigeria

S/N	Items	VEA	EA	OA	NA	Mean	SD
1	Personal computer/desktop computer/laptop	186 75.0%	46 18.5%	11 4.4%	5 2.0%	3.67	.66
2	Printer	130 52.4%	73 29.4%	32 12.9%	13 5.2%	3.29	.88
3	CD/DVD	118 47.6%	76 30.6%	25 10.1%	29 11.7%	3.14	1.01
4	Internet facilities	123 49.6%	65 26.2%	24 9.7%	36 14.5%	3.11	1.08
5	Telephone/iPad/smartphone	117 47.2%	73 29.4%	24 9.7%	34 13.7%	3.10	1.05
6	Photocopier	106 42.7%	68 27.4%	42 16.9%	32 12.9%	3.00	1.06
7	Scanner	99 39.9%	56 22.6%	51 20.6%	42 16.9%	2.85	1.13
8	Television	80 32.3%	53 21.4%	52 21.0%	63 25.4%	2.60	1.18
9	Multimedia projector	68 27.4%	55 22.2%	62 25.0%	63 25.4%	2.52	1.15

10	Digital camera	53 21.4%	73 29.4%	54 21.8%	68 27.4%	2.45	1.11
11	Barcode reader	52 21.0%	62 25.0%	51 20.6%	83 33.5%	2.33	1.15
12	Interactive whiteboard	49 19.8%	61 24.6%	59 23.8%	79 31.9%	2.32	1.12
13	Barcode scanner	55 22.2%	54 21.8%	53 21.4%	86 34.7%	2.31	1.17
14	CCTV	55 22.2%	51 20.6%	49 19.8%	93 37.5%	2.27	1.18
15	Videoconferencing	46 18.5%	58 23.4%	45 18.1%	99 39.9%	2.21	1.16
16	Fax machine	46 18.5%	35 14.1%	50 20.2%	117 47.2%	2.04	1.17

VEA = very easily accessible; EA = easily accessible; OA = occasionally accessible; NA = not accessible

Table 2 presents the responses on the ease of access to ICT tools used by library personnel in public university libraries in South West Nigeria. Based on the items in the table, the results show that 186 (75%) respondents regarded personal computers, desktop computers or laptops to be very easily accessible, 46 (18.5%) considered them easily accessible, with a mean score value of $\bar{x} = 3.67$, SD .66. A total of 130 (52.4%) respondents indicated that printers were very easily accessible, 73 (29.4%) indicated they were easily accessible, with a mean score of $\bar{x} = 3.29$, SD .88, CDs or DVDs were regarded by 118 (47.6%) respondents as very easily accessible, and 76 (30.6%) regarded them as easily accessible, with a mean score of $\bar{x} = 3.14$, SD 1.01. The accessibility ratings of Internet facilities indicate that 123 (49.6%) respondents regarded them as very easily accessible, 65 (26.2%) respondents regarded them as easily accessible, with a mean score of $\bar{x} = 3.11$, SD 1.08. A total of 117 (47.2%) respondents considered telephones, iPads or smartphones to be very easily accessible, while 73 (29.4%) found them easily accessible, with a mean value of $\bar{x} = 3.10$, SD 1.05. Photocopiers were regarded by 106 (42.7%) respondents as very easily accessible, 68 (27.4%) respondents regarded them as easily accessible, with a mean value of $\bar{x} = 2.30$, SD 1.06.

Of all the ICT facilities accessible to library personnel in a university library, computers, printers, Internet facilities, CDs or DVDs, telephones, smartphones and photocopiers are the most accessible, while videoconferencing, fax machines, barcode scanners and some others were the least accessible.

Table 3: Frequency of ICT use in university libraries by library personnel

S/N	Type of ICT	Never used	Monthly	Fortnightly	Weekly	Daily	Mean	SD
1	Desktop computer/ laptop/tablet	7 2.8%	6 2.4%	4 1.6%	17 6.9%	214 86.3%	4.71	1.85
2	Internet	36 14.5%	7 2.8%	9 3.6%	28 11.3%	168 67.7%	4.15	1.46
3	Telephone/iPad/ smartphone	40 16.1%	10 4.0%	12 4.8%	33 13.3%	153 61.7%	4.00	1.51
4	Printer	25 10.1%	24 9.7%	10 4.0%	68 27.4%	121 48.8%	3.95	1.35
5	Photocopier	41 16.5%	32 12.9%	14 5.6%	47 19.0%	114 46.0%	3.65	1.55
6	CD/DVD	65 26.2%	24 9.7%	18 7.3%	45 18.1%	96 38.7%	3.33	1.67
7	Television	85 34.3%	37 14.9%	4 1.6%	33 13.3%	89 35.9%	3.02	1.76
8	Scanner	74 29.8%	46 18.5%	23 9.3%	57 23.0%	48 19.4%	2.83	1.54
9	Digital camera	107 43.1%	40 16.1%	13 5.2%	30 12.1%	58 23.4%	2.56	1.66
10	Multimedia projector/projection screen	112 45.2%	49 19.8%	20 8.1%	20 8.1%	47 19.0%	2.36	1.56
11	Interactive whiteboard	111 44.8%	45 18.1%	24 9.7%	27 10.9%	41 16.5%	2.36	1.53
12	Videoconferencing	124 50.00%	38 15.3%	16 6.5%	26 10.5%	26 10.5%	2.31	1.58
13	Barcode reader	131 52.8%	25 10.1%	24 9.7%	27 10.9%	41 16.5%	2.28	1.57
14	CCTV	137 55.2%	28 11.3%	7 2.8%	33 13.3%	43 17.3%	2.26	1.62
15	Barcode scanner	134 54.0%	35 14.1%	21 8.5%	29 11.7%	29 11.7%	2.13	1.46
16	Fax machine	152 61.3%	21 8.5%	19 7.7%	23 9.3%	33 13.3%	2.05	1.50

Table 3 presents responses on the frequency of ICT use by the library personnel. The results show that 214 (86.3%) respondents use desktop computers, laptops or tablets daily, with a mean score of $\bar{x} = 4.71$, SD 1.85. The Internet daily use has 168 (67.7%) responses, with a mean score of $\bar{x} = 4.15$, SD 1.46. A total of 153 (61.7%) respondents use telephones, iPads or smartphones daily, with a mean score of $\bar{x} = 4.00$, SD 1.51. The daily use of printers has 121 (48.8%) responses, with a mean score of $\bar{x} = 3.95$, SD 1.35. A total of 114 (46.0%) respondents use photocopiers daily, with a mean score of $\bar{x} = 3.65$, SD 1.55. The daily use of CDs or DVDs has 96 (38.7%) responses, with a mean score of $\bar{x} = 3.33$, SD 1.67. The daily use of televisions has 89 (35.9%) responses, with a mean score of $\bar{x} = 3.02$, SD 1.76.

In addition, Table 3 reveals that 134 (54.0%) respondents never use barcode scanners, with a mean score of $\bar{x} = 2.13$, SD 1.46. A total of 152 (61.3%) respondents never use fax machines, with a mean score of $\bar{x} = 2.05$, SD 1.50. The low response obtained on the use of scanners and fax machines might be owing to the fact that they are becoming obsolete as a result of the new technology of SMSs. Inference from Table 3 indicates that the use of desktop computers, laptops or tablets ranked the highest with a mean score of $\bar{x} = 4.71$, followed by the use of the Internet which has a mean score of $\bar{x} = 4.15$, and the use of telephones, iPads or smartphones with a mean score of $\bar{x} = 4.00$. The results indicate that the ICT facilities mostly used by library personnel to perform daily tasks are desktop computers, laptops, tablets, the Internet, telephones, iPads, smartphones, printers and photocopiers. These ICT facilities are regarded as very important tools that could enhance performances of library personnel on the job. The test of norms was used to determine the level of use of these ICT facilities in the university libraries studied and the results obtained indicate that the level of ICT use by the respondents is moderate.

HYPOTHESIS 1

There will be no significant relative effect of the independent variables (access to ICT facilities and ICT use) on task performances of the respondents.

Table 4: Relative contribution of the independent variables (access to ICT facilities and ICT use) and task performances

Model	Unstandardised coefficient		Stand. coefficient	T	Sig.
	B	Std. error	Beta contribution		
(Constant)	203.578	7.674		26.529	.000
Access to ICT facilities	0.273	0.117	0.107	2.333	.010
ICT use	0.350	0.115	0.169	3.044	.018

Predictor: (constant) ICT use and skills

Dependent variable: Task performance

One could deduce from Table 4 that access to ICT facilities ($\beta = 0.273$, $t = 2.333$; $P < 0.05$) and ICT use ($\beta = 0.350$, $t = 3.044$; $P < 0.05$) independently has a positive significant effect on the task performances of the respondents.

HYPOTHESIS 2

There is no significant relationship between access to ICT, ICT use and task performances of library personnel in a public university in South West Nigeria.

Table 5: Significant relationships between variables (task performance, ICT access and ICT use)

Variables	\bar{X}	SD	Task performance	ICT access	ICT use
Task performance	222.68	30.96	1.000		
ICT access	43.58	12.17	($P < .05$) 0.349	1.000	
ICT use	47.97	14.280.132	($P < .05$) 0.674	–	1.000

* $P < 0.05$ significant

Table 5 presents a summary of the test of significant relationships between ICT access, ICT use and task performances of the respondents. It can be seen from the table that there is a significant relationship between ICT access and task performances of the respondents ($r = 0.349$, $P < 0.05$). Similarly, there is a significant relationship between ICT use and task performances of the respondents ($r = 0.432$, $P < 0.05$).

HYPOTHESIS 3

There is no significant joint effect of access to ICT facilities and ICT use on task performances.

Table 6: The joint effect of the independent variables (access to ICT facilities and ICT use) on task performances

Adjusted R		Adjusted R ²	Std. error of the estimate			
.462		0.2134	30.6746			
ANOVA						
Model	Sum of squares	DF	Mean square	F	Sig. P	Remark
Regression	6233.264	2	3116.632	3.312	.038	Sig.
Residual	230527.43	245	940.928			
Total	236760.69	247				

Table 6 shows that the joint effect of the independent variables (access to ICT facilities and ICT use) on task performances is significant. The table also shows a coefficient of multiple correlation adjusted ($R = .462$) and a multiple adjusted (R^2 of 0.2134). This means that 21.34 per cent of the variance was accounted for by the predictor variables when taken together. The significance of the composite contribution was tested at $p < 0.05$. The table also shows that the analysis of variance (ANOVA) for the regression yielded an F-ratio of 3.312. This implies that the joint contribution of the independent variables to the dependent variable is significant and that other variables not included in this model may have accounted for the remaining variance.

DISCUSSION AND FINDINGS

The study revealed a high level of task performances among library personnel in public university libraries in South West Nigeria. This finding is in consonance with the study by Oyewole and Popoola (2013) whose findings revealed high job performances among librarians in colleges of education. The high level of task performances recorded from this study can also be associated with the high level of job knowledge of library personnel identified in this study coupled with good planning and adequate supervision of subordinate staff by their supervisors.

Furthermore, the findings from this study indicated that the level of access to ICT facilities by library personnel was high. This is contrary to Ademodi and Adepoju's (2009) findings which indicated that the level of access to ICT provided for library personnel was low. This study identified computers, the Internet, printers, photocopiers, and iPads as ICT facilities that were easily accessible to library personnel in public university libraries in South West Nigeria. This is in affirmation with Bello, Emmanuel and Busari (2013) who reported that computers, multimedia projectors, Internet facilities, and office equipment were the ICT facilities that were accessible to librarians

in some selected university libraries in Nigeria while telephones, video tapes, and digital photocopiers were not accessible.

The outcomes of this study equally revealed that there was a positive relative effect of access to ICT and ICT use on task performances of library personnel. Access to ICT is very crucial to task performances. It is regarded as being of immense benefit to library personnel, as well as the users of the library in their attempt to meet the challenges of the twenty-first century library services. Access to ICT has been found to affect task performances. It is referred to as the driver of ICT use and its usefulness in improving the workflow in the library cannot be overstated.

Furthermore, the study revealed that ICT use by library personnel in public university libraries was moderate. This might be owing to the fact that most libraries are hybrid in nature, and executing tasks involves the combination of both traditional and electronic methods. The most frequently used ICT facilities in university libraries were computers, the Internet, iPads, smartphones, telephones, printers and photocopiers. It was also found that ICT use had a positive relative effect on the task performances of library personnel in university libraries in South West Nigeria. This is in consonance with Omosor (2014) who associated improved performances among library personnel with the adoption and use of ICT in cataloguing, classification and acquisition. Inyang and Inyang's (2015) findings indicated that staff use of the Internet, email, PowerPoint and computers was significantly related to staff effectiveness.

The study also found the relationship between access to ICT, ICT use and task performances of library personnel in public university libraries in South West Nigeria. This finding was corroborated by findings by Ansari (2013) who reported that access to ICT facilities enabled the library to offer quality service. Nebeolise (2013) and Husain and Nazim (2015) also reported that inadequate access to ICT facilities hindered the effective use of ICT in library practice. The findings from this study indicated that there is a positive significant relationship between ICT use and task performances of library personnel in universities in South West Nigeria. Similar results by Priver (2013) stated that ICT use led to high employee performances in Indian libraries.

The study also revealed that there is a significant joint relationship between access to and use of ICT and task performances of library personnel in public university libraries in South West Nigeria. Haliso (2011) found that ICT provides benefits in work measurement, is able to reduce costs of production, and promotes enhanced productivity which results in better services to users. Edna, Gikandi and Solomon (2014) found that access determines ICT use, noting that access to ICT will enable libraries to have global access to resources beyond the library stock in the form of e-resources, e-journals, e-books, online databases, CD-ROMs, and online publishers' catalogues. Since access to ICT has been found to affect use, both have the capacity to improve library personnel's task performances. Maximum access to ICT facilities would promote unhindered workflow within the university library by improving the

level of accuracy of work done, speed of delivery and flexibility in meeting needs. The functionality of library personnel would promote a positive image of the library which can spur the global ratings of the parent institution.

CONCLUSION AND RECOMMENDATIONS

The study revealed that access to ICT facilities and their use facilitate effective task performances among library personnel in university libraries in South West Nigeria. High task performances are considered very strategic to the achievement of the goals and objectives of the university libraries. The high level of task performances recorded from the study resulted from adequate job knowledge, job skills, coupled with the ability of library personnel to plan, organise and supervise work procedures. This led to library personnel being able to produce quality and quantifiable tasks timely. Communication competence, creative and adaptability skills must be enhanced for effective task performances in university libraries. Computers, the Internet, printers, photocopiers, iPads, and smartphones, which were found to be most accessible to library personnel, resulted in a high level of access which by implication led to a high level of task performances. Moreover, having access to ICT tools would facilitate ICT use and this has the capacity to smoothen and ease the workflow in university libraries. Access to and use of ICT will equally help library personnel to deliver optimal services of the twenty-first century.

RECOMMENDATIONS

- The university libraries must provide maximum access to required ICT facilities that will ease the execution of required tasks in the library.
- Library management should endeavour to provide an enabling environment for its personnel to deliver on library goals. In the light of this, the university and the library managers should train their personnel in the handling, use and maintenance of ICT facilities so that they can perform job tasks creditably.
- The use of ICT in the performance of tasks should be mandatory for all library personnel. As middle level manpower they must be conversant with ICT in service delivery.
- As facilitators of change in an academic environment, library personnel have to be able to access ICT tools and use them conveniently to execute tasks.

REFERENCES

- Aboazoum, H. M. E., U. Nimran, and M. Al Musadieq. 2015. "Analysis Factors Affecting Employees Job Performance in Libya." *IOSR Journal of Business and Management* 17 (7): 42–49.
- Ademodi, D. T., and E. O. Adepoju. 2009. "Computer Skill among Librarians in Academic Libraries in Ondo and Ekiti State Nigeria." *Library Philosophy and Practice* 1–7. <http://digitalcommons.unl.edu/libphilprac/274>.
- Adeoye, M. O., and S. O. Popoola. 2011. "Teaching Effectiveness, Availability, Accessibility and Use of Library and Information Resources among Teaching Staff of School of Nursing in Osun and Oyo State, Nigeria". *Library Philosophy and Practice* 1–20. <http://digitalCommons.unl.edu/libphilprac/525>.
- Akor, P. U. 2009. "Influence of Library Leadership on the Job Performance of Professional Librarians in North Central Zone." PhD thesis, University of Nigeria.
- Akpomi M. and P. Ordu. 2009. "Modern Office Technology and the Secretary's Productivity in Private Business Organisations." *African Journal of Business Management* 3 (8): 333–39.
- Ansari, M. 2013. "ICT Skills Proficiency of Library Professionals: A Case Study of the Universities in Karachi, Pakistan." *Chinese Librarianship: International Electronic Journal*.36. www.iclc.us/cliej/cl36ansari.pdf.
- Bamigboye, O. B., O. K. Buraimo, and F. A. Ajani. 2008. "Job Satisfaction and Performance of Academic Librarians in Nigerian Universities in Southwest Nigeria." *Information Technologist* 5 (2): 91–100. <http://dx.doi.org/10.4314/ict.v5i2.32032>.
- Bello, I. O., S. O. Emmanuel, and I. T. Busari. 2013. "Availability and Accessibility to ICT Facilities by Librarians in Some Selected Nigeria Universities." *International Research: Journal of Library and Information Science* 3 (3): 517–31.
- Borman, W. C., and S. J. Motowidlo. 1993. "Expanding the Criterion Domain to Include Elements of Contextual Performance." In *Personnel Selection in Organizations*, edited by N. Schmitt and W. C. Borman, 71–98. San Francisco: Jossey-Bass.
- Campbell, J. P. 1990. "Modelling the Performance Prediction Problem in Industrial and Organisational Psychology." In *Handbook of Industrial and Organisational Psychology*, edited by M. D. Dunnette and L. M. Houghs, 687–747. Palo Alto: Consulting Psychologists Press.
- Clark, L., and K. A. Perry. 2015. "After Access: Librarians and Digital Empowerment: Building Digitally Inclusive Communities." American Library Association. Digital Inclusion Summit.
- Curral, L. 2013. Core Performance Measures. In *Encyclopedia of Quality of Life and Well-Being Research*, edited by A. C. Michalos. Dordrecht: Springer.
- Edna, J. M., J. W. Gikandi, and K. N. Solomon. 2014. "Determinants of E-Services Use in Higher Education: A Case of a Kenyan University Academic and Non-Academic Staff." *International Journal of Education and Research* 2 (5): 71–80.
- Erasto, K. 2013. "Impact of Information and Communication Technology on Library Operations and Service Delivery in Private University in Tanzania."

- Eze, J. U., and C. U. Uzoigwe. 2013. "The Place of Academic Libraries in Nigerian University Education: Contributing to the 'Education for All' Initiative." *International Journal of Library and Information Science* 5 (10): 432–38.
- Haliso, Y. 2011. "Factors Affecting Information and Communication Technologies (ICTs) Use by Academic Librarians in Southwestern Nigeria." *Library Philosophy and Practice*.
- Hatzell, D. 2006. *Dictionary of Management*. New Delhi: Academic India.
- Husain, B., and M. Nazim. 2015. "Use of Different Information and Communication Technologies in Indian Academic Libraries." *Library Review* 64 (1–2): 135–53. <https://doi.org/10.1108/LR-06-2014-0070>.
- Inyang, A. L., and C. N. Inyang. 2015. "Utilization of Information and Communication Technology (ICT) Resources and Job Effectiveness among Library Staff in the University of Calabar and Cross River University of Technology, Nigeria." *Journal of Education Practice* 16 (6): 102–105.
- Kotteswari, M., and S. T. Sharief. 2014. "Job Stress and Its Impact on Employees' Performance: A Study with Reference to Employees Working in BPOS." *International Journal of Business and Administration Research Review* 2 (4): 18–25.
- Kyakulumbe, S., M. Olobo, and V. Kisenyi. 2013. "Information and Communication Technology Utilisation in Private University in Uganda: Exploring Strategies to Improve Information: A Case of Uganda Christian University." *Technology and Investment* 4:8. <http://dx.doi.org/10.4236/ti.2013.41004>.
- Larson, A. G. 2017. "Faculty Awareness and Use of Library Subscribed Online Databases in the University of Education, Winneba, Ghana: A Survey." *Library Philosophy and Practice*. <http://digitalcommons.unl.edu/libphilprac/1515>.
- Nebeolise, L. N. 2013. "The Impact of Information and Communication Technology (ICT) Compliant Librarians on Library Services Delivery in Academic Library: The Case of National Open University of Nigeria (Noun) Library." *International Journal of Engineering and Science* 2 (8): 37–43.
- Nickols, F. 2016. "Factors Affecting Performance." Accessed 16 July 2018. <http://www.nickols.us/factors.pdf>.
- Olatokun, W. 2009. "Analysing Socio-Demographic Differences in Access and Use of ICTs in Nigeria Using the Capability Approach." *Issues in Informing Science and Information Technology* 6:479–96. <https://doi.org/10.28945/1075>.
- Olatoye, R. A. 2009. "Gender Factor in Computer Anxiety, Knowledge and Utilization among Secondary School Students in Ogun State, Nigeria." *Gender and Behaviour* 7 (2): 2429–42. <http://dx.doi.org/10.4314/gab.v7i2.48696>.
- Omosor, U. A. 2014. "Effect of Technology on Librarians in Academic Libraries in Nigeria." *Journal of Information and Knowledge Management* 5 (2): 1–27.
- Osinulu, L. F., and W. J. Oyedipe. 2016. "An Investigation into the Perception and Expectation of the Faculty Teaching Staff on Library Resources and Services: A Case Study Approach." *Journal of Library Educational Media and Information Studies* 8:93–104.

- Oyewole, G. O., and S. O. Popoola. 2013. "Effects of Psycho Social Factors on Job Performance of Library Personnel in Federal Colleges of Education in Nigeria." *Library Philosophy and Practice* 872:1–26.
- Peng, Y. P. 2011. "Which Job Satisfaction is more Important? The Relative Contributions of Intrinsic and Extrinsic Job Satisfaction to Contextual and Task Performance of University Librarians." Paper presented at Asian Conference on Literature and Librarianship Official Conference *Proceedings Osaka Japan LibriAsia* 127–39.
- Priver, A. 2013. "ICT Utilization on Employee Performance: A Case Study of Uganda Christian University." Thesis, Uganda Christian University.
- Rosenberg, D. 2005. "Towards the Digital Library in Africa." *Electronic Library* 24 (3): 289–93. <https://doi.org/10.1108/02640470610671150>.
- Rotundo, M. 2002. "Defining and Measuring Individual Level of Job Performance: A Review and Integration." *Journal of Applied Psychology* 87 (1): 66–80.
- Rotundo, M., and P. E. Spector. 2010. "Counterproductive Work Behaviour and Withdrawal." In *Handbook of Employee Selection*, edited by J. L. Farr and H. T. Tippins, 489–511. New York: Routledge/Taylor and Francis Group.
- Salleh, F., N. Yakubu, and Dzulkifli. 2011. "The Influence of Skill Level on Job Performance of Public Service Employee in Malaysia." *Business and Management Review* 1 (1): 31–40.
- Smith M. Q. 2005. "The Impact of Information Technology Change on the Management and Operations of Academic Library." Research project, University of the Western Cape.
- Sonnentag, S., Volmer, and Spychalla. 2010. "Job Performance." In *The Sage Handbook of Organizational Behaviour – Volume 1: Micro Perspectives*, edited by J. Barling and C. L. Cooper, 427–50. London: Sage.
- Tiwari, B. K., and K. C. Sahoo. 2013. "Infrastructure and Use of ICT in University Libraries of Rajasthan (India)." *Library Philosophy and Practice*. <http://digitalcommons.unl.edu/libphilprac/883>.
- West, D. M. 2015. "Digital Divide: Improving Internet Access in the Developing World through Affordable Services and Diverse Content." B Center for Technology Innovation at Brookings. Accessed 17 July 2018. https://www.brookings.edu/wp-content/uploads/2016/06/West_Internet-Access.pdf.