Information Impact

**Information Impact:** 

Journal of Information and Knowledge Management 2018, Vol. 9 (2) Pg 82 - 97 ISSN: 2141 – 4297 (print)

ISSN: 2360 – 994X (e-version)

Janet W. Oyedipe

Olabisi Onabanjo University, Ago – Iwoye, Ogun State, Nigeria

ICT Skills, Use and Task Performance among Library

Sunday O. Popoola

University of Ibadan, Ibadan, Nigeria

Personnel in Public University Libraries

#### **Abstract**

The study investigated ICT skills, use and task performance among library personnel in university libraries in the South-west, Nigeria. The study adopts descriptive survey research design where a structured and validated questionnaire was employed for data collection. Total enumeration technique was used to cover 330 library personnel in public university libraries in the South-west Nigeria. Data collected was analysed using descriptive statistics (mean and standard deviation) as well as OLS (Ordinary Least Square Method) at 0.05 level of significance. Test of norm revealed that tasks performance, ICT skills of respondents were high while ICT use was moderate. Further findings indicated that there was significant relative contribution of ICT skill and use on task performance of library personnel in the South-west, Nigeria. The result also revealed that ICT skills and ICT use had significant relationships with task performance of the respondents. Other finding revealed that there is joint effect of ICT skills and use on task performance (F=2.247) adjRsq=11.2%. The study recommended among others the need for library personnel to acquire adequate ICT skills in database management, trouble shooting and web 2.0 for effective *task performance*.

Keywords: ICT skills, ICT use, task performance, library personnel, university

## Introduction

We live in an era where interaction between man and machine are essential for organizational success and personal survival. The application of information and communication technology (ICT) equally plays crucial roles in determining work processes in organizations today. Its influence cut across every sphere of human endeavour such as education, governance, medicine, marketing, including library services. Library services generally are becoming largely technology driven and require personnel who possess relevant ICT skills to operate optimally. Library personnel should be able to use ICT with ease and to perform optimally on their jobs. Technological changes being recorded in libraries today in terms of deploying ICT to improve work process requires adaptive and sophisticated workforce (Francis & Kabir, 2008). Human resources in the library must be highly skilled to influence the delivery of accurate and timely library services to their clientele hence the need to possess relevant and up to date ICT skills. Possession of relevant ICT skills would impact

positively on ICT use which will have consequential effect on individual task performance in the library.

Task performance which has to do with result of personnel input for the purpose of achieving library goals and objectives is important for overall library effectiveness. This is because library personnel are fundamental to the achievement of library goals and objectives. Also, high quality performance is expected from its personnel if university libraries were to achieve its mandate of information provision and dissemination. It therefore means that, conscious effort must be made by management to assess the performance of personnel on the job for developmental purposes. Monitoring the developmental effort of individual staff on the job enables the determination of skill gaps among library personnel. ICT plays significant role in improving and enhancing library personnel task performance. This is why Koelinger (2006) referred to ICT as enabler of performance. ICT tools have to be deployed and maximally used by the staff to achieve efficiency and effectiveness in task performance. The ability of library personnel to efficiently utilise ICT successfully in carrying out the necessary tasks such as, acquisitions of resources and facilities, cataloguing and classification etc require the deployment of appropriate tools, resources and facilities including those of ICT by the university library management. Development in information and communication technology has witnessed the use of web 2.0 in library practices. Web 2.0 facilitates information provision, dissemination and collaboration. The use of e-mail, facebook, twitter, Linkedln, instragram, whatsapp and a host of others has helped to improve the level of synchronous and asynchronous communication with library users. There is no doubt that when ICT is maximally use by staff, it will impact positively on individual performances and this also will have consequential effect on their task performance.

## **Research Questions**

This study will be guided by the following research questions:

- 1. What is the level of task performance of library personnel in public universities in the South-west, Nigeria?
- 2. What is the level of ICT skills of library personnel in public universities in the South-west, Nigeria?
- 3. What is the level of ICT use by library personnel in public universities in the South-west?
- 4. What is the relative effect of ICT skills and use on task performance of library personnel in public universities in the South-west?

## **Research Hypothesis**

The following null research hypotheses will be tested at 0.05 levels of significance:

HO<sub>1:</sub> There is no significant relationship among ICT skills and use on task performance of library personnel in public universities in South-west, Nigeria.

HO<sub>2:</sub> There is no significant joint effect of ICT skills and use on task performance of library personnel in public universities in South-west, Nigeria.

## **Literature Review**

Task performance which is the result of personnel inputs to achieve the goals and objectives of organisation is the main element in any job and is mandatory in nature. Miao (2011) described it as a set of obvious responsibilities expected of an employee in order to stay on a job to earn an income. Rotundo (2002) identified three broad domains of performance as task performance, organisation citizenship behaviour (OCB) and counterproductive work behaviour. Task completion at the appropriate time, in the right quality, and quantity is essential and expected from library personnel if the library were to achieve its mandate of information provision and dissemination. The speed with which tasks are carried out by library personnel has important role to play in the smooth running of the library. Studies had attempted to determine the state of task performance of employees. Maripaz, Ombra and Osman (2013) studied employability skills and task performance of employees was satisfactory.

In spite of the popularity of ICT in this millennium, it has been observed that most library personnel cannot make appreciable use of ICT due to inadequate ICT skills (Sankari & Chinnasamy, 2014). Abass (2014) in an empirical study equally found out that lack of ICT skills prevent librarians from using ICT facilities. This could debar users from enjoying the needed library support. An empirical study conducted by Islam and Islam (2006) in selected libraries revealed lack of skilled manpower as the bane of application of ICT in libraries in Bangladesh. Babu, Vinayagamoorthy and Gopalakrihnan (2007) in a study on the level of ICT skills among librarians in Engineering related institutions in Tamil Nadu revealed that respondents had considerable ICT skills but not in network based services and digital library.

ICT skills can be described as the capacity to make appreciable use of information and communication technology, without third party intervention. Katz (2007) defined ICT skills as the ability to use digital technology communication tools and networks to access, manage, integrate, evaluate and create information in a knowledge driven society. ICT skills required by library personnel for execution of tasks in the university libraries include, word

processing skills, Internet navigation skills, networking skills and others under which there are other sub skills (Nonthancumjane, 2011). It is highly essential for library personnel to possess the right ICT skills so as to be able to carry out ICT-based functions and services which would impact positively on service delivery to the university community. This is in consonance with Knolding and Kroa (2007) who asserted that ICT skills are very important prerequisite for succeeding at work whatever the nature of the organisation. Library personnel need adaptability skills for them to be able to use ICT tools effectively in performing duties and responsibilities most importantly since core functions, such as online acquisition, online classification and others require the use of ICT.

Possession of appropriate skills would enable library personnel carry out seamless tasks within the library that will enhance users' access to required information. The changing roles of librarians from information gatekeepers to information facilitators require high level knowledge, skills and expertise in the use of ICT for effective performance of library tasks, (Nath, Bahl,& Kumar 2007). Nonetheless, Seena and Pillar (2014) findings indicated that library professionals in Kerala Universities had average skills. Vijayakimar, Sweety and Antony (2015) reported above average skills among women library professionals in SSUS and Cusat university libraries. Library professionals as information providers should be well positioned knowledge wise, both in theory and in practice regarding ICT because they are the vanguard of information literacy in their respective institutions. Librarians, most especially must be experts to teach navigation skills to others while both librarians and library officer must be able to assist library users with ICT appropriately (Philip, 2004; Nath, Bahl & Kumar 2007). The possession of high level ICT skills by library personnel has the capacity to influence the task performance of staff positively.

One of the most important skills required by library personnel for efficient performance of library tasks is computer literacy. Computer literacy skills remain one of the most fundamental skills required by all the personnel in the library. Therefore, the non possession of right ICT skills by library personnel cannot but affect the workflow in the library negatively.

In this era of information explosion, librarianship practice requires the use of ICT to ensure optimum effectiveness by its personnel. The use of ICT tools to bring about effective task performance in the library has pervaded all the various units in the library from acquisition to administration. According to Anunobi and Edoka (2010) it was noted that cataloguing and classification were presently ICT driven in most units of university libraries, but low use of ICT was recorded in the Serials section. Bhangu (2013) indicated that the use

of ICT tools in academic libraries had been slow in majority of the libraries sampled in India. As a matter of fact, the use of ICT is capable of enhancing efficient performance of library operations and services. This was buttressed by Ghaeni, Talab and Tahjafari (2012) who concluded in their study that the use of ICT enhanced librarians' performance.

In spite of the prevalence in using ICT to carry out library functions, study by Magara (2002) on ICT use revealed low level of ICTs utilisation by the library professionals in Uganda. Bahnabhai and Patel (2013) recorded slow usage of ICT in developing countries.. Corroborating this, Saka and Abdurahman (2008) revealed that library personnel do not use computer extensively in carrying out library tasks, all though, some of the library personnel partially used computer to perform their personal tasks. This is evidently indicating that most university libraries are not using ICT adequately for efficient performance of duties and responsibilities in the university libraries.

The use of ICT in libraries would enable library personnel achieve optimum performance because as professionals, they have fundamental roles to play in the handling, use and maintenance of ICT tools. Non-use of ICT tools by library personnel in this century would result in low performances, poor services (quality), lack of effectiveness and lack of user satisfaction. For library personnel to make judicious use of ICT for effective performance of duties and responsibilities, they must possess relevant skills needed to exploit ICT in practice. Possession of adequate level of ICT skills would impact positively on ICT use and task performance in the library and this would bring about library effectiveness. Al Challaf (2006) conducted a study on librarians and technology use in academic libraries in Kuwait with respect to their 'perceptions, performance, workloads and rewards effect'. Findings indicated that the use of technology in the library has improved task performance, increased productivity as well as accuracy of work while majority of the respondents indicated that technology enabled them to have control over their daily tasks. Venkatesh, Bala and Skyes (2010) carried out a longitudinal field study on the impact of ICT implementation on employees' jobs in services organizations in India and findings revealed that though ICT enriched employee job characteristics, lower job performance was however recorded among the employees surveyed. A study by Oguche (2017) found positive/significant relationship between ICT skills, use and job performance.

## Methodology

The study is a descriptive survey of the correlational design. The population consists of 330 library professionals from 13 public university libraries in the Southwest, Nigeria. Total enumeration was used to select the sampled population used. Out of the 330 questionnaire distributed, 248 were found useful with the response rate of 76.6%. The questionnaire used to collect data from the respondents was grouped into 2 categories: (LPTPQ) Library Personnel Task Performance Questionnaire which comprised of questionnaire on demographics, Frequency of ICT use and self evaluation of task performance of library personnel and Supervisor's Ratings of Library Personnel (SRLP). Both self and supervisors ratings has 10 items with 5 sub divisions each. The data was analysed using frequency and percentages while correlation and regression were used to answer the research questions and the hypotheses.

#### **Findings and Discussion**

**Table 1. Demographics of Respondents** 

Demog	raphics	Frequency	Percentage
Gender	Male	163	65.7
	Female	85	34.3
	Total	248	100.0
Age	Less than 25 years	28	11.3
	26-35 years	125	50.4
	36-45years	25	10.1
	46-55years	34	13.7
	56+ years	36	14.5
	Total	248	100
Educational	PH.D	16	6.5
Qualification			
	MLS	125	50.4
	BLS	36	14.5
	DLS	71	28.6
	Total	248	100

Table 1 presents the gender distribution of respondents, 13(65.7%) of the respondents were male while 85(34.3%) were female. This showed that majority of respondents that constitute the population sampled are male. The table shows that respondents aged between 36-45 years are 125(50.4%) followed by respondents who are 56 years and above constitute 36(14.5%) while respondents between the ages 36-45 years 25(10.1%) are the lowest. This implies that majority are young adults. The table reveals the distribution of respondents by their

educational qualifications. The least of the respondents 16(6.5%) are holders Ph.D qualification while the majority 125(50.4%) are holders of Masters in Library studies (MLS).

Research question 1: What is the level of task performance of library personnel in public university libraries in South-west?

Table 2: Level of Task Performance of library personnel in Public Universities in South West, Nigeria

S/ N	Items	Mean of self	SD	Mean of supervisor	SD	Overall Average	SD
		assessment		's		<b>g</b> -	
				assessment			
1.	Job knowledge	4.27	.78	4.04	.87	4.16	.85
2.	Job Skills	4.27	.78	4.11	.89	4.19	.84
3.	Task Quality	4.28	.79	3.96	.86	4.19	.83
4.	Task Quantity	4.25	.84	3.99	.91	4.12	.88
5.	Planning and	4.2	.83	3.9	.89	4.12	.86
	Organising						
6.	Supervisory/Managem	4.21	.85	3.89	.85	4.05	.85
	ent						
7.	Communication	4.2	.86	3.88	.87	4.04	.87
8.	Creativity	4.19	.85	3.88	.92	4.03	.89
9.	Timeliness	4.04	.93	3.93	.91	3.98	.92
10.	Adaptability	4.04	.89	3.91	.89	3.97	.89

Each of the items under task performance scale has five items each totaling 50 sub items. This has been compressed to give us the 10 items with average mean score of sub categories. From the analysis on table 2, data on self assessment and supervisors ratings were added together and divided by 2 to arrive at the average ratings of task performance of respondents for objectivity. The analysis revealed that job skills and task quality had the highest mean score of 4.19, job knowledge a mean score ratings of 4.16. Adaptability skills and timeliness had the lowest mean score of 3.98; 3.97 respectively. The overall mean score  $\overline{X}$  =40.85 SD=8.68. The result of test norm revealed high task performance among library personnel. The implication of these findings is that respondents are very effective in task performance based on high job knowledge and job skills displayed by respondents.

**Research Question 2:** What is the level of ICT skills of library personnel in public university libraries in the Southwest, Nigeria?

Table 3: Level of ICT skills of library personnel in universities

S/N	e 3: Level of ICT skills of library per	VH	H	M	L	VL	Mean	S.D.
DI11	Computing Skills	7 4 4		17.8		7 11	man	, , <u>, , , , , , , , , , , , , , , , , </u>
1.	Word Processing	66	26	50	22	13	3.73	1.11
1.	Word Frocessing	26.6%	10.5	20.2	8.9%	5.2	3.73	1,11
		20.070	%	%	0.570	%		
2.	Printing, editing	46	15	82	26	14	3.48	1.08
2.	Timenis, carring	18.5%	6.0%	33.1	10.5	5.6	3.10	1.00
		10.570	0.070	%	%	%		
3.	Scanning and Uploading	59	27	76	26	19	3.49	1.18
	Standard of the standard	23.8%	10.9	30.6	10.5	7.7		
			%	%	%	%		
4.	Ability to download and save	88	22	52	15	13	3.87	1.12
	, , , , , , , , , , , , , , , , , , , ,	35.5%	8.9%	21.0	6.0%	5.2		
				%		%		
5.	Powerpoint presentation skills	62	61	84	27	14	3.52	1.15
	r r r	25.0%	24.6	33.9	10.9	5.6		
			%	%	%	%		
6.	Fomatting and document proceesing	74	78	62	22	12	3.73	1.13
	skills	29.8%	31.5	25.0	8.9%	4.8		
			%	%		%		
	Internet Navigation Skills							
7.	Browsing and navigating the	93	70	57	15	13	3.87	1.14
	Internet	37.5%	28.2	23.0	6.0%	5.2		
		27.270	%	%	0.070	%		
9.	Ability to use different online	42	76	70	35	25	3.30	1.20
	search engine	16.9%	30.6	28.2	14.1	10.1		
			%	%	%	%		
	Information sources evaluation	98	76	47	13	14	3.93	1.14
	skills	39.5%	30.6	19.0	5.2%	5.6		
			%	%		%		
10.	Web creation skills	28	70	42	40	28	3.12	1.16
		11.3%	28.2	33.1	16.1	11.3		
			%	%	%	%		
11.	Ability to partake in online	52	94	61	211	20	3.55	1.15
	discussion	21.0%	37.9	24.6	8.5%	8.1		
			%	%		%		
	Computing Management Skills							
12.	Trouble-shooting skill	46	87	49	38	28	3.34	1.26
		18.5%	35.1	19.8	15.3	11.3		
			%	%	%	%		
13.	Database creation and management	23	57	85	48	35	2.94	1.17
	skills	9.3%	23.0	34.3	19.4	14.1		
			%	%	%	%		
14.	Ability to install and activate anti-	48	84	56	37	23	3.39	1.22
	virus	19.4%	33.9	22.6	14.9	9.3		

			%	%	%	%		
15.	E-mail management skills	53	103	50	23	19	3.60	1.15
	_	21.3%	41.5	20.2	9.3%	7.7		
			%	%		%		
16.	Managerial skills	43	75	73	36	21	3.33	1.17
		17.3%	30.2	29.4	14.5	8.5		
			%	%	%	%		
G17	Ability to use OCLC	56	90	61	15	26	3.54	1.21
-		22.6%	36.3	24.6	6.0%	10.5		
			%	%		%		
	Computing Application Skills			T-				
18.	Information storage and	48	80	69	30	21	3.42	1.18
	preservation skills	19.4%	32.3	27.8	12.1	8.5		
			%	%	%	%		
19.	Barcoding skills	50	81	67	27	23	3.44	1.20
		20.2%	32.7	27.0	10.9	9.3		
			%	%	%	%		
20.	Virtual learning skills	46	99	65	18	20	3.54	1.12
		18.5%	39.9	26.2	7.3%	8.1		
			%	%		%		
21.	Ability to use OPAC for retrieval	93	90	33	16	16	3.92	1.16
		37.5%	36.3	13.3	6.5%	6.5		
			%	%		%		
22.	Ability to use web 2.0 in library	88	88	60	49	25	3.17	1.16
	services	35.5%	35.5	24.2	19.8	10.1		
			%	%	%	%	2.50	^ <b>=</b> ^
23.	Digitisation skills: Information	9	177	46	11	5	3.70	0.70
	capturing, classification	3.6%	71.4	18.5	4.4%	2.0		
2.4	***	50	%	%	10	%	2.60	1.10
24.	Library automation	59	103	52	19	15	3.69	1.10
		23.8%	41.5	21.0	7.7%	6.0		
			%	%		%		

Overall mean 80.91 and SD 19.60

Table 3 presents the descriptive analysis using frequency, percentages, mean score and standard deviation of ICT skills of respondents in university libraries in Southwest. On sub items under computing skills, ability to download and save had the highest mean score ratings of  $\overline{X} = 3.87$ . This is followed by formatting and document processing skills as well as word processing skills with a mean score ratings of  $\overline{X} = 3.73$  respectively. On Internet Navigation skills: The sub item information sources evaluation skills has highest mean score ratings of  $\overline{X} = (3.93)$ , followed by browsing and navigating skills with a  $\overline{X} = 3.87$ 

On Computing Management skills: E-mail management skills, has the highest mean score ratings of  $\overline{X} = 3.60$ ; On Computing Application skills: the ability to use the OPAC for

<sup>\*\*</sup>VH=Very High; H=High; M=Moderate; L=Low and VL=Very low

information retrieval, has the highest mean score rating of  $\overline{X}=3.92$  among the sub items. This is followed by digitization skills, with a  $\overline{X}=3.70$  and library automation skills, equally has a  $\overline{X}=3.69$ ; Inference from the above indicates that information sources and evaluation skills has the highest mean score rating while database creation skills has the lowest mean score ratings. The test norm revealed high ICT skills among respondents. The reasons being that majority of the respondents claimed that they possessed word processing skill, ability to download and save, formatting and document processing skill among others.

Table 4: Frequency Distribution of ICT Tools Used in University Libraries in Southwest Nigeria by Respondents

	west Nigeria by				1	T		
S/N	Type of ICT	Never	Monthly	Fortnightly	Weekly	Daily	Mean	S.D.
	Tools Used	use						
1	Computer	7	6	4	17	214	4.71	1.85
		2.8%	2.4%	1.6%	6.9%	86.3%		
2	Internet	36	7	9	28	168	4.15	1.46
		14.5%	2.8%	3.6%	11.3%	67.7%		
3	Telephone/Ipad	40	10	12	33	153	4.00	1.51
	phones/Smart	16.1%	4.0%	4.8%	13.3%	61.7%		
	Phones							
4	Printer	25	24	10	68	121	3.95	1.35
		10.1%	9.7%	4.0%	27.4%	48.8%		
5	Photocopier	41	32	14	47	114	3.65	1.55
	1	16.5%	12.9%	5.6%	19.0%	46.0%		
6	CD/DVD	65	24	18	45	96	3.33	1.67
		26.2%	9.7%	7.3%	18.1%	38.7%		
7	Television	85	37	4	33	89	3.02	1.76
		34.3%	14.9%	1.6%	13.3%	35.9%		
8	Scanner	74	46	23	57	48	2.83	1.54
		29.8%	18.5%	9.3%	23.0%	19.4%		
9	Digital camera	107	40	13	30	58	2.56	1.66
	C	43.1%	16.1%	5.2%	12.1%	23.4%		
10	Multimedia	112	49	20	20	47	2.36	1.56
	Projector	45.2%	19.8%	8.1%	8.1%	19.0%		
11	Interactive white	111	45	24	27	41	2.36	1.53
	board	44.8%	181%	9.7%	10.9%	16.5%		
12	Videoconferencin	124	38	16	26	26	2.31	1.58
	g	50.00	15.3%	6.5%	10.5%	10.5%		
	8	%						
13	Barcode Reader	131	25	24	27	41	2.28	1.57
		52.8%	10.1%	9.7%	10.9%	16.5%		
14	CCTV	137	28	7	33	43	2.26	1.62
		55.2%	11.3%	2.8%	13.3%	17.3%		
15	Barcode Scanner	134	35	21	29	29	2.13	1.46
		54.0%	14.1%	8.5%	11.7%	11.7%		
16	Fax machine	152	21	19	23	33	2.05	1.50
-		61.3%	8.5%	7.7%	9.3%	13.3%		

Table 4 presents frequency distribution of ICT tools used by library personnel. Computer daily use is 86.3%, with a mean score of (4.71; SD = 1.85). Daily use of the Internet is 67.7% with a mean score of (4.15, SD = 1.6). Daily use of the telephone/ipad phones/smart Phones is 61.7% with a mean score of (4.00, SD = 1.51). Daily use of printer is 48.8% with a mean score of (3.95 SD1.1.35). Daily use of photocopier is 46.0% with a mean score of (3.65, SD = 1.55) CD/DVD daily use is 3.33% with a mean score of (3.33 SD1.67). Inference from the table indicated that computer devices ranked highest with the mean of 4.71 and was followed by Internet which had a mean of 4.15. The result however indicated that the ICT facilities frequently used by library personnel to perform daily task were the Computer devices, Internet and telephone/ipad/smart phones, printers and photocopiers CD/DVD. These ICT tools are regarded as very important facilities that can enhance task performances of library personnel on the job. The study however revealed that ICT use of the respondents was moderate.

Table 5: Correlation Matrix Showing Test of Significant Relationship Among Variables of Interest of the Respondents

Of Theelest o	T the ites	pomacines			
Variable	$\overline{X}$	SD	1	2	3
Task Performance	222.68	30.96	1.000		
ICT Skills	80.91	19.60	0.336	1.000	
			sig. P=		
ICT Use	47.97	14.28	0.132	0.187	1.000
				sig.	P=
sig. P=				_	

## \*P<0.05 significant

Table 5 presents summary of test of significant relationship among ICT skills, ICT Use and Task performance of the respondents. It is clearly seen from the table that there is a significant relationship between ICT skills (r = 0.336, P < 0.05) and task performance; similarly there is a significant relationship between ICT Use and task performance (r = 0.132, P < 0.05)

Research question 3: What is the relative effect of ICT skills on task among library personnel in public University Libraries in the Southwest?

Table 6: Regression Analysis Showing Relative Contribution of ICT Skills on Task Performance of Library Personnel

Model	Un-standardiz	Un-standardized Coefficient		T	Sig.
	В	Std. Error	Coefficient Beta		
			Contribution		
(Constant)	173.229	9.276		18.675	.000
ICT literacy skills	.506	.096	.321	5.252	.000
ICT use	.177	.132	.082	1.335	.183

- a. Predictor: (constant) ICT use and skills
- b. Dependent Variable: Task Performance

Table 6 reveals that ICT Skills had a significant positive effect on task performance of library personnel in public university libraries in the Southwest ( $\beta$  = .321, p<.05). This implies library personnel needed ICT skills to succeed in this technological age. Also, ICT use had a significant positive effect on task performance of library personnel in public university libraries in the South-west ( $\beta$  = .082, P>.05). This implies that individual efficiency and effectiveness need to be enhance through appropriate use of ICT in the university libraries.

 $HO_1$ : There is no significant effect of ICT skills and ICT use on task performance of library personnel in universities in the South-west.

Table 7: The Joint Effect of the Independent Variables (ICT Skills, ICT Use and Task Performance of Library Personnel in Universities the South-west.

R	R Square	R Square			Std. E Estimat		the
.345	.119			.112	29.1752		
		A	NOVA				
Model	Sum of	DF	Mean	F	Sig.	Remark	
	Squares		Square				
Regression	28218.711	2	14109.355	16.576	.000	Sig.	
Residual	208541.98	245	851.192				
Total	236760.69	247					

Table 7 shows the joint effect of the independent variables (ICT literacy skills and ICT use) to the prediction of task performance was significant. The table also shows a coefficient of multiple correlation (R = .345 and a multiple  $R^2$  of .119. This means that 11.9%

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 a F-ratio of 16.576. This implies that the joint contribution of the independent variables to the dependent variable was significant and that other variables not included in this model may have accounted for the remaining variance.

## Discussion

The test of norms indicated that the level of task performance of library personnel in public university libraries was high. This was supported by findings of Maripaz, Ombra and Osman (2013), Islam and Islam (2006) found task performance in the government sector to be satisfactory. The high task performance recorded in this study is attributable to the level of job knowledge and skills, quality and quantity of each individual output, coupled with effectiveness in planning, organisation and supervision in the university libraries investigated. Findings revealed that by library personnel had high skills. The high level of ICT skills revealed by this study indicated that majority of library personnel are paying more attention to acquisition of desirable ICT skills and competence. A larger percentage of the respondents indicated that they possessed some ICT skills which had very high mean score. The low mean score recorded on the ability to trouble shoot, database management and the use of web 2.0 in carrying out library services are indications of skill gap among respondents. Ability to trouble shoot the computer when there is problem would reduce time wasting as a result of dependent on the third party for problem resolution. Lack of data management skill would hamper retrospective conversion of existing traditional database to electronic one while inability to use web 2.0 in library practice would impact negatively on user satisfaction. personnel need to acquire trouble shooting skills, web management skills and database management skills in order to carry out effective task performance in the library. It is therefore highly imperative for library personnel to equip themselves adequately with necessary ICT skills so that they can operate effectively in this technological age.

The result of the study showed that there is significant relationship between ICT skills use and task performance. This is in line with the findings of Oguche (2017) which reported a positive/significant relationship between ICT skills/use and job performance. Possession of relevant ICT skills using computer and its accessories will impact on the ICT use and this will ensure speedy response to users' demand. It will equally have positively impact on library personnel effectiveness. This is in consonance with one of Raganathan 5 laws of library science "save the time of the reader". Gaps in knowledge and skills have been major

# ICT Skills, Use and Task Performance among Library Personnel in Public University Libraries

challenges in university libraries in Nigeria. Ability to use the computer for retrievals, document processing by each personnel will hasten and ensure speedy workflow within the library as well enables the provision of just in time and in need services while application of web 2. 0 in library practice will improve users' response to the library. Having adequate skills will equally empower personnel on information archiving, manuscript submission, publishing and others. The study further revealed that there is significant joint effect of ICT skills and use on task performance. This is indicating that both variables have the capacity to jointly influence task performance of library personnel in university libraries.

#### **Conclusion and Recommendations**

This study indicated that task performance, ICT skills of library personnel were high while ICT use was moderate. It revealed further that ICT skills and use had significant relationship with task performance. ICT skills and use was found to have relative effects on task performance. There was equally significant joint effect of ICT skills and use on task performance among library personnel. Most work procedure in the library are presently being redesign as a result of being ICT driven, therefore the onus rest on library personnel to possess comprehensive skills that will enable them operate optimally with ICT. Lack of ICT skills by personnel would hinder creativity, innovation and timely delivery of information to those in need. It could equally discourage ICT use in practice while non-utilisation of ICT by library professionals in this century will result in low task performance, low output and lack of effectiveness in terms of service quality and user satisfaction. Therefore it is recommended that library management must periodically train library personnel to acquire relevant skills in trouble shooting, database management, web management and applicability of web 2.0 so as to enhance the capacity of individual personnel to perform at optimal level.

#### References

- Abass K. D. (2014). From techno illiterate to techno literate era. Nigeria academic librarians perspectives. *International Journal of Humanities and Social Science* 4.51 211-224
- Awuor F. M., Rabah K., & Maake B. M. (2013). Hinderances to ICT adoption to library services in Higher Institution of learning. *Computer Science and Information Technology*. 1.(4): 252-256. DOI:1013189/csit.2013.01043.
- Al Qallaf C. L. (2006). Librarians and Technology in Academic and Research Libraries in Kuwait: Perceptions Performance Workload and rewards effects. *Libri* 56, 168-179.

- Annuobi C. V. & Edoka B., E. (2010). Use of ICT facilities for serial functions in Southern Nigeria Federal University Libraries. *Library Philosophy and Practice digital commons. unl. edu/cgi/viewcontent.cs17. article,* =1363&cntext.
- Babu B, R.,, Vinayagamoorthy P. & Gopalakrishan S. (2007). ICTS skills among librarians in engineering education institutions in Tamil Nadu. *DESIDOC Bulletin of Information Technology* 27(6): 55-6.
- Bahnabhai B. N. & Patel M. G. (2013). Role of human resources development in Library Organisation. Research Paper. *International Journal of Scientific Paper* 2(2): 227-228.
- Bhangu A. K. (2013). Use of ICT in libraries. *International Journal of Scientific Engineering* and Technology. 2(11):1162-1167.
- Francis A. T., & Kabir S. H. (2008). Re-engineering of library and information services (RE-LIS). Paper presented at National Conference on Re Engineering of Library and Information Science Feb. 1&2, at Institute of Management, Combatore, India.
- Gunjal B. A & Sangeeta N. D. (2013). Application of Information and Communication Technology in libraries. *International Journal of Computing and Networking*. 1-11.
- Sankari R. L., & Chinasammy K. (2014). ICT skills in Engineering colleges in Salem and Namakkal Districts: A case study. *International Journal of Humanities and Social Sciences*. 3.12: 9-17
- Seyed M. G., Talab, G & Tahjafari M. (2012). Impact of ICT technology on library staff training: A comparative study. *Annals of library and Information Studies* 59: 07-15.
- Islam S. & Islam N. (2006). Use of ICT in Libraries: An empirical study of selected libraries in Bangladesh. *Library Philosophy and Practice*. 1-8
- Katz. I. R. (2007). Testing Information Literacy in Digital Environment. ETS's skills assessment. *Information Technology and libraries* 1. 1-12.
- Knolding M. & Kroa V. (2007). E- Skills the key to employment and inclusion in Europe. *White paper Microsoft.* www.idc.com.
- Koellinger P. (2006). Impact of ICT on corporate and employment dynamics. *Paper/Report e-business watch*. Available at. https://semanticscholar.org/6900/e751d0dc3610cdc9f8ef4b62c6570049pdf
- Magara E. (2002). Applications of digital libraries and electronic technologies in developing countries: Practical Experiences in Uganda". *Library Review* 51(5 & 6): 241–255.http:Available @www.emeraldinsight.com/doi/10.1108/00242530210428746
- Maripaz A.M., Ombra A. I. & Osman S. (2013)). Employability skills and task performance of employees in government sector. *International Journal of Humanities and Social Sciences*. 3. (4): 150-162.

- Miao R.T. (2011). Perceived organisational support, job satisfaction, task performance and organisational citizenship behaviour in China. *Institute of Behavioural and Applied Management* 105 127.
- Nath A., Bahl G. & Kumar P. (2007). Information and communication Tehnology and skills of librarian in the Chandigar city libraries. *International Caliber www.ite.org/journals/Index.php/IKM/article/download/22292/22797*
- Nonthacumjane P. (2011). Key skills and competencies of a new generation of LIS Professionals. *IFLA* 37(4): 280-288. <a href="https://www.ifla.org/past-wlic/2011/97-nonthacumjane-en.pdf">https://www.ifla.org/past-wlic/2011/97-nonthacumjane-en.pdf</a>
- Oguche D. (2017). Impact of information and Communication technology (ICT) literacy competence on job performance. *The Information Technologists* 13.1. 1-22.
- Rotundo M. (2002). Defining and measuring individual level of job performance: A review and Integration. *Journal of Applied Psychology*. 87(1): 66-80. Doi.=10.1.1.129.729.7597&rep1...
- Saka K. A (2008). Use of computer among library staff in four universities of technology libraries in Northern Nigeria. *Information Technology* 5(2): 55-61.
- Saka K. A., Oyedum G. U. & Song I. S, (2016). Influence of continuing professional development and skills acquisition on librarians performance in two state capitals in Northern Nigeria. *Journal of Balkan Libraries*. 4.(1): 1-7.
- Seena S. T.& Sudhier P. K. G. (2014). A study of ICT skills among library professionals in the Kerala University library system. *Annals of Libraries and Information Studies* 61. 132-141.
- Venkatesh V. & Bala H. & Skyes T. A. (2010). Impacts of information and communication technology implementation on employees jobs in service organisations in India- a multi-method longitudinal field study. *Production and Operation Management Society*. 9(5): 591-613.
- Vijayakumar A. & Antony S. M (2015). ICT skills among women library professionals in SSUS and CUSAT. *Asian Journal of Multidisciplinary Studies*. 3 (5): 142-148.