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IMPACT OF INFORMATION AND COMMUNICATION TECHNOLOGY LITERACY SKILLS ON LIBRARY USE AMONG STUDENTS OF TERTIARY INSTITUTIONS IN BORNO STATE

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Abstract
Despite the long-time existence of information and communication technology (ICT) in and around library services, its literacy and skill among students of higher institutions especially, in Nigeria are still not fully ascertained. This, therefore, necessitate the need to investigate the level and impact of ICT among students of tertiary institutions in Borno State. The study is guided by three objectives with their corresponding three research questions. A survey research design was adopted for the study and seventeen thousand five hundred and seventeen (17,517) registered library users were used as target population. While, the sample size for the study was one thousand and eighteen (1,018) users drawn from the target population using Krejcie, and Morgan (1970) table for determining sample size. Systematic sampling technique was used to ascertain the respective sample of the study. Thus, 1,018 copies of questionnaire were distributed to respondents and response rate recorded was 742 (73%) which was used for data analysis. Data were gathered through a structured questionnaire and were analyzed using descriptive statistics of frequency count and percentages. Findings indicated that the level of information literacy skills among students of tertiary institutions in Borno State is low and majority of respondents agreed that their little ICT skills and literacy are impactful on their library usage. Based on the findings, it is recommended that more ICT awareness and training should be acquired by the students, especially from their institutions.

Keywords: ICT, Literacy Skills, Library Use, Students and Tertiary Institution.

Introduction

The library is one of the functional organs of the tertiary institutions charged with the responsibility of collecting, processing organizing, disseminating and securing all sources of information (print and non-print) to meet the needs of all members of the academic community (staff, student's researchers and those of academic programs) (Aduku, Manuwa and Agboola, 2017). Generally, the tertiary institutions environment is a place where transfer of knowledge and information takes place. The achievements of the goals of the institutions depend to a great extent on the level of services and resources provided by the tertiary institutions' library (Aduku, Manuwa and Agboola, 2017).

Information and Communication Technology (ICT) could be defined as an electronic means of capturing, processing, storing and communicating information. ICT in common parlance could refer to the convergence between computing and communication technologies. With the advent of ICT in library usage, numerous advantages have been brought to achievement over the conventional manual method of operating the library (**Shan, 2013)**. These advantages include proper cataloguing and accessibility of documents using ICT facility in the library. The ease of navigating and searching of relevant library information using exact keywords either related to topics, authors or texts; the speed of using the database for data entry, archiving, saving, retrieving, updating, querying of relevant information on the library books and it allows users to easily retrieve any data to perform analysis, derive findings and history on how well students are making use of the library and the consistency in record keeping without redundancy by the library workers(Nwokolo & Anyachebelu, 2012).

Information literacy skills are the required skills by students and staff of any tertiary institutions in a way to be able to find, evaluate, organize, use and navigate information in all its formats. Information literacy skills on library use can be aided with ICT tools which enable the use of technologies in the specific key information search, provision of relevant resources and proper management of the library system (Waba, 2014). The knowledge of information literacy skills, use of database, networking, communication and retrieval using technologies has become very imperative because the world is evolving at a pace where newer techniques of proffering easier and efficient solutions are being sought out for the purpose of fast and easier retrieval system (Wilson, Tete-Mensah and Boateng, 2014).

Statement of the Problem

Preliminary observation by the researchers revealed that ICT facilities were moderately available in Ramat Library, University of Maiduguri and Ramat

Polytechnic Library Maiduguri, while Ibrahim Musa Library, Sir Kashim Ibrahim College of Education, Maiduguri, Borno State is on the verge of acquiring ICT facility. The libraries with ICT facilities seem not to have regular internet connection for the utilization of electronic resources by library users. The library users seems to have low ICT skills which results in low turnout of the users in the libraries. It is against this background that the researchers choose to study the impact of information and communication technology literacy skills on library use among students of tertiary institutions in Borno State.

Objectives of the Study

The objectives of the study were to determined:

1. The level of literacy skills among students of tertiary institutions
2. The extent of ICT utilization by students of tertiary institutions
3. The Influence of ICT on library use among students of tertiary institutions

Research Questions

The following research questions guided the study:

1. What is the level of literacy skills among students of tertiary institutions?
2. What is the extent of ICT utilization by students of tertiary institutions?
3. What is the Influence of ICT on library use among students of tertiary institutions?

Review of Related Literature

Research carried out by Yusuf (2005) reports that ICTs provide a variety of tools to support and facilitate teachers' professional competence. ICTs transform teaching and help teachers to be more efficient and effective, thereby increasing their interests in teaching. The use of ICTs can assist in the organization and the structure of the course and course materials, thereby promoting rethinking and revision of curriculum and instructional strategies. ICTs increase teachers' emphasis on individualized instruction, and as such enable them spend more time with individual students. This helps students to carry out more independent work and gives the teacher more time to focus on teaching higher-level concepts in the classroom. ICTs provide teachers with opportunities for experimenting with emerging technologies, thereby aiding in the provision of interesting and creative presentations of content. Thus it engenders a multi-media presence in the classroom. ICTs provide teachers with increased opportunities to collaborate and network with colleagues, thereby increasing communication and exchange of linkages among themselves

Study conducted by Israel (2015) on Undergraduates' Computer Skills and

the Use of Online Information Resources revealed that, the study adopted descriptive survey method. Questionnaire was used to collect data for the study, and descriptive statistical method was used in analyzing the data collected and simple random sampling techniques were used to select the sample size for the study. The findings revealed that 98.5% agreed that Computer skills enhances their use of online information resources as well as being confidence in using online information resources due to their level of computer skills respectively. The study also revealed that undergraduate students are computer literate. Also the findings revealed that majority of the participants frequently make use of online resources. The study recommends among others that there should be a conscious effort by the institution to improve the computer skills of its students since it affects their ability to use online resources.

Information and Communication Technology (ICT) literacy skills are set of skills required in using communication tools, digital technology, networks to access database records, manage, interpret, evaluate and create information to function in a knowledge society (Luke, 2015). Proficiency in these skills will make the students to patronize ICT section in the library. A preliminary survey by the researcher reveals that, there are about fifty (50) computer systems at Ramat Library in University of Maiduguri that are not for the purpose of e-resources, but are currently used for the purpose of internet browsing by a few students. Furthermore, there areten (10) computer systems at Ibrahim Musa Library in Kashim Ibrahim College of Education Maiduguri, Borno State which are not also utilized for the purpose of e-library. While at Ramat Polytechnic Library, there are plans on ground presently to acquire new computers for the purpose of e-library in order to support teaching, learning and research activities. Hence, it can be reported that these three libraries under study seems not to have sufficient ICT facilities for the purpose of information resources and utilization by staff and students of the tertiary institutions. The few computer systems available are not used for the intended purpose of e-library system. Very few students of the tertiary institutions in Borno State patronize the libraries and most of the students visit these libraries to either use the library's quiet environment to read their lecture notes without accessing books from the library shelf or only visit the library once in a while for their compulsory final year clearance.

Research Methodology

Survey research design was adopted for the study. The target population comprises of seventeen thousand five hundred and seventeen (17,517) undergraduate and postgraduate students who were registered library users of

the three tertiary institutions libraries in Borno State, Nigeria. The institutions include: Ramat Library University of Maiduguri, Ramat Polytechnic Maiduguri Library and Ibrahim Musa Library, Sir Kashim Ibrahim College of Education Maiduguri, Borno State.

The sample size for the study comprises of one thousand and eighteen (1,018) users drawn from the three tertiary Institutions as presented in table 1. To determine the sample size for the study, the researchers made use of Krejcie, and Morgan (1970) table for determining sample size. According to Morgan table, for a population of 13,293, 2,703 and 1,521 a sample size of 370, 338 and 310 are appropriately determine respectively. Table 1 gave a detailed categorization of the study population and their respective sample size.

The sample size from the three tertiary Institutions are shown below:

Table 1: Population and Sample

S/N	Universities and libraries	Population (registered users)	Sample
1.	Ramat library, University of Maiduguri, Borno State	13,293	370
2.	Ramat Polytechicnic Maiduguri, Library, Borno State.	2,703	338
3.	Ibrahim Musa Library, Sir Kashim Ibrahim College of Education, Maiduguri, Borno State.	1,521	310
	Total	**17,517**	**1,018**

Source: Membership Registration Files of the three tertiary Institutions under study for 2019/2020 academic session.

To draw the sample size from the target population, systematic sampling technique was used to ascertain the respective sample of the study using Krejcie and Morgan (1970) sample size determination table. Data was gathered through the instrument of a questionnaire. Data collected were analyzed using descriptive statistics of frequency count and percentages.

Data Analysis and Interpretation

The response rate indicated that one thousand and eighteen (1, 018) copies of questionnaire were administered to registered library users and the response rate recorded seven hundred and forty-two (742) representing 73%.

Table 2: Level of ICTLiteracy Skills among Students of Tertiary Institutions in Borno State

S/N	Statements	N	HL	ML	LL	NL
1	To what level do you use ICT tools to access and search for information	74	381 (51%)	291 (39%)	57 (8%)	13 (2%)
2	To what level do you use ICT tools to select information		7 (1%)	118 (16%)	408 (55%)	209 (28%)
3	To what level do you evaluate information resources using ICT Tools		106 (14%)	311 (42%)	318 (43%)	7 (1%)
4	To what level do you integrate in your search using ICT tools		117 (16%)	286 (39%)	321 (43%)	18 (2%)
5	To what level do you use library databases (eg, Science Direct, HINARI, ARDI, OARE)		124 (17%)	297 (40%)	304 (41%)	17 (2%)
Total			**735**	**1303**	**1408**	**264**
Average			**147 (20%)**	**261 (35%)**	**281 (38%)**	**53 (7%)**

Keys: High Level (HL), Moderate Level (ML), Low Level (LL)& No Level (NL)

Table 2 shows the level of information literacy skills among students of tertiary institutions in Borno State, where the majority of respondents constituting 381(51%) and 291(39%) acknowledged that their use of ICT tools to access and search information is at high and moderate levels respectively. While minority of them constituting 57(8%) and 13(2%) acknowledged that their use of ICT tools to access and search information is at low and no levels respectively. Similarly, 7(1%) and 118(16%) respondents revealed that the levels at which they use ICT tools to select information are high and moderate respectively which are the minority. While 408(55%) and 209(28%) revealed that their levels of using the ICT tools to select information are low and not at all respectively. In the same vein, 106(14%) and 311(42%) respondents indicated that they highly and moderately use ICT tools to evaluate information resources. While 318(43%) respondents use ICT tools to evaluate information resources which are the majority and 7(1%) are not using ICT tools in evaluating information resources, which are the minority. Furthermore, 117(16%) and 286(39%) respondents revealed that their level of integrating the ICT tools in searching for information is high and moderate respectively. While 321(43%) and 18(2%) revealed that their levels of integrating

the ICT tools in searching for information are low and not at all respectively. Overall, the level ofICT literacy skills among students of tertiary iinstitutions' in Borno State is low represented by 38% which is the highest percentage.

Table 3: Extent of ICT Utilization by Students of Tertiary Institutions in Borno State

S/N	Statement	N	HE	ME	LE	NE
1	To what extent do you utilize ICT for the purpose of assignment	742	128 (17%)	306 (41%)	295 (40%)	13 (2%)
2	To what extent do you utilize ICT for the purpose of information services		96 (13%)	408 (55%)	218 (29%)	20 (3%)
3	To what extent do you utilize ICT for the purpose of reservation services		124 (17%)	295 (40%)	306 (41%)	17 (2%)
4	To what extent do you utilize ICT for the purpose of library databases		106 (14%)	323 (44%)	302 (41%)	11 (1%)
5	To what extent do you utilize ICT for the purpose of Zoom/Social network Services		306 (41%)	384 (52%)	37 (5%)	15 (4%)
Total			**760**	**1716**	**1158**	**76**
Average			**152 (20%)**	**343 (46%)**	**232 (31%)**	**15 (2%)**

Keys: High Extent (HE), Moderate Extent (ME), Low Extent (LE)& No Extent (NE)

Table 3 shows the extent of utilization of ICT by students of tertiary institutions in Borno State, where the majority of respondents constituting 306(41%) and 295(40%) acknowledged that they utilized ICT for the purpose of assignment is at moderate and low levels respectively. While minority of them constituting 128 (17%) and 13(2%) acknowledged that they utilized ICT for the purpose of assignment is at high and no levels respectively. Similarly, 408(55%) and 218(29%) respondents revealed that the levels at which they utilize ICT for information service are moderate and low levels respectively which are the minority. While 295(40%) and 306(41%) revealed that their levels of using the ICT tools for reservation services are moderate and low levels respectively. In the same vein, 124(17%) and 17(2%) respondents indicated that they highly and did not utilize ICT for reservation services. While 323(44%) respondents utilize ICT for the purpose of library databases which are the majority and 302(14%) utilize ICT for the purpose of library databases at low level, which are the minority. Furthermore, 306(41%) and 384(52%) respondents revealed that they utilize ICT for the purpose

of Zoom/Social network services is high and moderate respectively. While 37(5%) and 15(4%) revealed that their levels of utilize ICT for the purpose of Zoom/Social network services are low and not at all respectively. Overall, the extent of utilization of ICT by students of tertiary institutions in Borno State is moderate represented by 46% which is the highest percentage.

Table 4: The Influence of ICT on Library use among Students of Tertiary Institutions in Borno State

S/N	Statement	N	SA	A	D	SD
1	ICT makes retrieval easier		108 (15%)	402 (54%)	219 (30%)	13 (2%)
2	ICT provide speedy and easy access to Information		215 (29%)	289 (39%)	206 (28%)	32 (4%)
3	ICT provide alternative formats	**742**	186 (25%)	268 (36%)	270 (36%)	18 (2%)
4	ICT provides remote access to users		206 (28%)	248 (33%)	277 (37%)	11 (1%)
5	ICT saves time of users		198 (27%)	321 (43%)	215 (29%)	8 (1%)
Total			**913**	**1528**	**1187**	**82**
Average			**183 (25%)**	**306 (41%)**	**237 (32%)**	**16 (2%)**

Keys: Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)

Table 4 shows the influence of ICT on library use among students of tertiary institutions in Borno State, where the majority of respondents constituting 402(54%) and 108(15%) agree and strongly agree that ICT makes retrieval easier. While minority of them constituting 219 (30%) and 13(2%) acknowledged that ICT makes retrieval easier with disagree and strongly disagree respectively. Similarly, 289(39%) and 215(29%) respondents revealed that ICT provide speedy and easy access to Information are agree and strongly agree respectively which are the minority. While 206(28%) and 32(4%) revealed that ICT provide speedy and easy access to Information with disagree and strongly disagree respectively. In the same vein, 186(25%) and 268 (36%) respondents agree and strongly agree that ICT provide alternative formats. While 270 (36%) respondents disagree that ICT provide alternative formats which are the majority and 18(2%) respondents

strongly disagree. Furthermore, 206(28%) and 248(33%) respondents strongly agree and agree that ICT provides remote access to users. While 277(37%) and 11(1%) respondents disagree and strongly disagree respectively. 198(27%) and 321(43%) respondents strongly agree and agree that ICT saves time of users, while 215(29%) and 8(1%) respondents disagree and strongly disagree that ICT saves time of users. Overall, the influence of ICT on library use among students of tertiary institutions in Borno State is agree represented by 41% which is the highest percentage.

Discussion

Level of ICT tools to select information, Level of evaluating information resources using ICT tools, Level of integration of ICT search, Level of use library databases usage (eg, Science Direct, HINARI, ARDI, OARE) all indicated low level. This finding disagreed with the study of Obasuyi (2015) on information and communication technology literacy skills and class instruction: a comprehensive perception survey of University of Benin first year students which revealed that, once students are educated in their first year on library website, online public access and library database, it would improve, promote and enhance their academic performance effectively and efficiently. Influence of ICT literacy skills on usage in the libraries of tertiary institutions in Borno State revealed positive influence. ICT makes retrieval easier, provide speedy and easy access to information, and ICT saves time of users as indicated by respondents. This finding is in line with that of Krubu and Osawaru (2011) on the impact of information and communication technology (ICT) in Nigerian University Libraries which revealed that, the use of ICT for the purpose of information resources retrieval in the libraries has important impact such as multiple used of same information at a time by different users, provide speedy and easy access to information, makes retrieval easier and saves time of users.

Conclusion

The research findings revealed that majority of the respondents indicated that ICT facilities were available in the libraries. It can be concluded that multimedia, online public access catalogue and teleconferencing were not available which if available in the libraries under study would provide smooth and quality services to library users. The study further concluded that with the presence of multimedia such as television, CCTV and bar code for book scanning in the circulation unit would ease and curb library orientation with the fear of thieves during exercise. Finding revealed that the level of information literacy skills among students of tertiary institutions in Borno State revealed low level. The

study concluded that libraries should educate users on information literacy skills with regards to how to use information tools to search, access, select, Online Public Access Catalogue (OPAC) and library databases (eg, Science Direct, HINARI, ARDI, OARE) on how it will improve their academic performance.

Recommendations

Based on the findings of the study, the following recommendations were made for improvement:

1. Tertiary institutions management under study should provide means of educating library users on how to search, select, integrate, access and evaluate information and library databases in order to promote library patronage
2. The library management should organize training each session to library users on how to utilize ICT for academic activities
3. The library management under study should educate library users on the influence of ICT on library use so as to fasten information retrieval system in the library.

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