

A STUDY OF ICT LITERACY SKILLS AND INTERNET USAGE PATTERN OF LIBRARY USERS IN OSUN STATE COLLEGE OF EDUCATION, ILA-ORANGUN, NIGERIA

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Abstract

This study examined ICT literacy skills and internet usage patterns of library users in Osun State College of Education Ila-Orangun, Nigeria, evaluating the purpose and frequency of Internet use, and identifying the barriers to ICT and library resources utilization among library users. It also established the relationship between ICT literacy skills and internet usage patterns of library users. The study adopted survey research design. A total of 92 library users including students, lecturers and other categories of users were selected by means of simple random sampling technique. The instrument was validated by means of Crombachs' co-efficient alpha (α) values with the following α scores: ICT Competence = 0.857, Frequency of ICT use = 0.946, Purpose of using the library = 0.300, Barriers to the use of ICT resources = 0.822. Data gathered were analyzed using descriptive and inferential statistics. Findings from the study revealed a moderate level of ICT competency among library users. The findings also showed that the respondents used ICTs at least once in a month while a few reported daily use. The top notable barrier to ICT literacy pattern was inadequate electricity supply. Besides, the findings showed a significant relationship between ICT literacy skill and internet usage pattern of library users in the college ($r = .498, p < 0.05$). The study concluded that more still needs to be done by the authority of the college in ensuring that the state of the heart ICT resources are deployed into the library for enhanced library use among its community.

Keywords: *library user, ICT literacy skills, internet usage*

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1. Introduction

Information Communication Technology (ICT) has become part of everyday life making human lives more comfortable and easy. ICT can be described as the convergence of computers and communication technologies which makes processing, storage, and retrieval faster, instant and effective. With the introduction of information and communication technology in Nigerian higher institutions, information dissemination among the academic communities has been tremendously enhanced.

1.1 Historical overview of Osun State College of Education, Ila - Orangun

The College came into existence as a campus of Oyo (now Osun) State College of Education, Ilesa in 1979 during the tenure of the then Military Administrator, Major General

Paul Tarfa. Academic activities started with 150 students and five (5) staff members comprising three academic and two administrative staff. The official opening ceremony was performed on the 25th September, 1979 by Chief Ayantayo Ayandele, the then Honourable Commissioner for Education. On 1st January, 1981, the College gained autonomy and consequently was affiliated to the University of Ile-Ife (now Obafemi Awolowo University, Ile-Ife). On 1st of March, 1983, the civilian administration of Oyo State transferred St. Andrew's College campus, Oyo and Wesley College Campus, Ibadan from Oyo to Osun State College of Education, Ila-Orangun for more effective supervision and coordination.

The College is geared towards the training and production of well-informed, mature and responsible middle level man-power in the teaching profession. The concept of "The Exemplary Teacher" underlines and permeates all academic and social programmes of the College. The College has as its motto "*Academic and Moral Excellence*".

The college started with a school-based Library System, that is, each school of the College having a library of its own. In all, there are four school-based libraries namely:

- (a) School of Science Library
- (b) School of Arts and Social Sciences Library
- (c) School of Agric. And Education Library
- (d) School of Vocational and Technical library

A central library was subsequently constructed for the College at the permanent site in 2000. Thereafter, all the school-based library materials were packed and organized at the central College library. As at today, the College Library has in stock over 35,000 books (Reserved inclusive) and about 9,800 serial titles including Government Publication and Annuals. The Collection is growing steadily and gradually in order to meet the needs of all departments. Furthermore, with the automation of the library services, the library had to convert all its collections to a machine readable data that can be search by all the library users. The library at present can boast of about 350 work stations in the e-library section.

1.2 ICT Literacy

ICT literacy refers to the ability to use digital technology communication tools and networks appropriately to solve information problems. ICT literacy includes the ability to use technology as a tool for researching, organizing, evaluating and communicating information, and the possession of a fundamental understanding of the ethical and legal issues surrounding access and the use of information. In skip (2014) observed that most users tend to begin information searches on the web, using popular search engine such as Google rather than in the library catalogue. For such users, a visit to their local library is an unnecessary and burdensome pass time. It has been argued that libraries are the crucible of genius, and fundamental to the intellectual experience and natural activity of the human mind (Kyrellidou, 2008), just as there are no great institutions without great libraries across the globe.

ICT literacy among library users is significant for effective information search. Katz (2007) advocates that ICT literacy must bridge the ideas of information literacy and technology literacy. Hence, users need training and practice in ICT literacy skills and this can be done through general education or within discipline coursework (Rockman, 2004). In a related study, Katz & Macklin (2006) reports that ICT literacy education is of great importance in

today's contemporary environment due to the rapid technological changes and proliferation of information resources. Besides, Ishola & Obadare (2014) affirms that in recent times, the new modes of universal access have tended to challenge the claim of the library and the librarian to be the custodians of information and knowledge. ICT literacy has already been identified as relevant to students in colleges of education. People need to be ICT literate in order to be involved in and contribute to the society. This is a basis for a shift among library professionals from the traditional practice of document handling to information literature.

In the current educational system, electronic resources are increasingly becoming popular among Nigerian educational institutions thereby making it possible for students to access and use current and relevant literature for studies and research. In the last decades, a significant transformation has been noticed in collection development policies and practices. Print medium is increasingly giving way to the electronic form of materials (Sharma, 2009). Lukasiewicz (2007) observed that undergraduate students are looking for a convenient, time saving and fast response as they move from using physical collections to the digital library in the various educational institutions.

In an internet-dominated age and information rich culture like today, information literacy skills are of great value. There is a mass of user-created content and collaborative work embedded in the digital technology that aids students to achieve their academic relevance and pursuit. The growth of research in all fields of human endeavour is becoming increasingly detailed and sophisticated. Faculty members and students have realized that the library has great roles to play in the provision of information necessary for their day to day research. The Internet has provided universal access to information. Technological innovation has dramatically increased the rate of conversion of knowledge, information and data into electronic format. Developments in the software arena have generated powerful knowledge management software which has transformed the way knowledge is organized, stored, accessed and retrieved (Sharma, 2011). The Internet is one of the most important and complex innovations of mankind. It is a powerful means for the communication, dissemination and retrieval of information. It is a network of networks, connecting thousands of smaller computer networks together so that other networks may share information present in one network. It is one of the powerful / effective tools or technologies ever produced for getting information on fingertips from any part of the world even sitting at one's own location.

1.3 Internet Usage in Academic Libraries

The Internet has been described as a system for allowing computers to communicate with each other. The Internet is used by millions of people throughout the world for communication, business, research, recreation and browse information for higher studies. There are various national, international / global networks systems, more than 40,000, readily accessible through the Internet. As network bandwidths increases it will become common to have video and animation over networks, thereby challenging the conventional analogue media such as cable TV and videotapes. Now the facility of the Internet has been increasingly used for educational course delivery (Sinha, 2010).

In recent years, the Internet has emerged as the most important and powerful means for information retrieval and dissemination. In today's world, for information transfer, the Internet plays a very significant role in the effective utilization of its resources, thus making

understanding of their structure and formats essential. There is an exponential growth in the number and variety of formal/ informal resources available on the Internet which helps researchers in collecting the right information at right time easily. During the last decade, the open access movement has gained momentum and importance which makes many open access scholarly and peer reviewed journals available on the Internet free of cost and the researchers may download full text research papers for their research work. The researcher may also publish their research findings in open access journals which may have wide visibility for access across the world.

The Internet is emerged as a powerful educational tool. With the increasing impact of information and communication technologies on higher education, all those concerned with higher education are attempting to grasp how ICT could help in modernizing the process of teaching, learning and research. However, Internet use in tertiary institutions has brought about the following dilemma: learners no longer depend on teachers for interaction; and teachers give lectures virtually to unknown learners with little or no face to face contact (Sharma, Chawla and Madaan, 2011). The Internet has come with an evolution that cannot be compared with existing technologies that were before it. Molosi (2001) remarked that the television revolution took 13 years to reach 50 million viewers and the Internet achieved this mark in only 4 years. There is no doubt that the rate of deployment of new technologies in developing countries is low, especially those of sub-Saharan Africa. This is particularly noticeable in the area of telecommunication and computing infrastructure, such as telephones, power supplies, development of appropriate electronic networks, etc. (Naidoo and Schutte 1999). In this internet era, teachers and students can carry forward their work on the Internet in ways that are similar to and tightly intertwined with the traditional ways that they learn, teach and study in libraries, classrooms, laboratories, seminars, conferences, and so on. The Internet can provide access to essentially unlimited resources of information not conventionally obtainable through other means. Today, professional colleges are playing an important role in imparting technical education. The students, who are the outcomes of these colleges, require the latest and pinpointed information in their respective fields. Due to the high cost of information resources, some tertiary institutions cannot provide these resources to their users. But the Internet, with its special features, makes a way for the developing countries to access information at very low cost.

1.4 Statement of the Problem

An increasing decline in the level of library use among the undergraduate students in Nigeria has been observed in recent years owing to the advent of ICT devices particularly the arrival of the Internet-enabled mobile telecommunication devices that have made the use of the library to become boring to the students and other library users within institutions of higher learning. Besides, the ICT competency level of undergraduate has also contributed to low level utilization of the available ICT resources within the library. Hence, the need for a study of this kind to be able to gain an insight into the issues surrounding ICT literacy skills and Internet usage pattern of library users in Osun State College of Education, Ila-Orangun, Nigeria with a view to contributing to existing literature on ICT utilization in tertiary institutions in Nigeria

1.5 Objectives of the Study

The paper examined the relationship between ICT literacy skills and Internet usage pattern of library users in Osun State College of Education, Ila-Orangun. The broad objective has been broken down into the following specific objectives for easy measurement.

- i. To examine ICT literacy skills of the OSSCE library user community;
- ii. Evaluate the purpose and frequency of using Internet;
- iii. Examine the usefulness of Internet / E- Resources;
- iv. Investigate the barriers to ICT and library resources utilization among library users

1.6 Hypothesis

There is no significant relationship between ICT literacy skill and internet usage pattern of library users.

2. Literature Review

The significance of library use pattern of an academic community cannot be over emphasized in the total evaluation of its library services. According to Adewale, Obadare, Akunniyi and Iweha, (2006), the library is the heart of an academic institution and its objectives revolve round the mother institution's objectives. In other words, apart from the fact that academic libraries provide needed information sources and services, they also promote teaching, learning and research in the universities. To Aniebiet (2009), academic libraries assist the institutions in the discharge of their functions by acquiring all the relevant information resources necessary for sustaining the teaching, learning, research and the public service functions of their universities.

In a similar study, Reid (2010) submitted that emerging information and communication technology allows for the virtualization of teaching and learning. The use of information and communication technology in Nigerian institutions makes it possible for courses, modules, art-training programmes that are interactive and multimedia based to be delivered at anytime and anywhere, enabling the institutions' objectives to be expeditiously achieved. Academic libraries are charged with the provision of information services for users, acting in the changing academic environment. Therefore, the librarians need to liaise with library users, faculties, departments and lecturers to support effective teaching, learning, and research in the institutions. These challenges require academic libraries to offer user-friendly facilities. In Nigeria, the use of computer terminals in information searching is gradually gaining popularity and so the students need to be computer literate. Thus, many Nigerian academic libraries are striving to be fully automated while some are still in the process of computerization.

Patterns of information use are dynamic. Every information user or group of users has their peculiar characteristics of information use especially in this modern era of information and communication technology (ICT). ICT has brought about new ways of storing and transmitting information. Information has shifted from print-based formats to electronic-based formats. Many Electronic Information Systems (EIS) abound in every field of knowledge and they are gradually changing the way we think, and perform our daily activities including teaching, learning and research. Okiki and Asiru, (2011); Angello, (2010) and Garuba and Ogunrombi, (2009) defined EIS as information stored and

transmitted in digital, electronic or computerized formats such as diskettes, CD-ROM databases, DVDs, online public access catalogues (OPACs), bibliographic and full-text databases, electronic journals, scholarly databases, information gateways, e-books, the Internet and electronic mails. The rapid growth of information and communication technologies is changing the way academic libraries operate today. Lee (1997) found that a great number of students in colleges of education in Nigeria were not equipped with basic computer operational skills. Also, Ozoemelem's (2010) study revealed that there is a low level of skilfulness in the use of ICT among students of Nigerian tertiary institutions. Hence, a study of this nature will help establish the current state of ICT use among library users in Nigerian colleges of education.

Many studies have been conducted on Internet usage internationally. In Brenner's (1997) survey of Internet use, abuse and addiction by 563 users, the respondents reported having problems of managing time for Internet use which interferes with their normal routine works as well as multiple usage related problems of addictive nature. Ali, Abu-Hassan, Yusof and Mohd (2009) carried out a study on the information literacy of Engineering Students at a Malaysian college and found that the students seriously lacked information skills especially in evaluating Internet information, identifying the most efficient search strategy and using information ethically. Thanuskodi (2011) conducted a study on how Internet usage increases students' social skills and its effects on their scientific success. The results showed a strong correlation between two aspects of social skills and internet usage, that is, Internet usage helps the growth of special aspect of social skills and abilities of students. It is clear from these studies that the Internet plays a key role in human life. Goldfarb and Prince (2008) studied the issues of digital divide in Internet usage in America from 18,439 members of a high income group. Their study showed that there is a well-documented "digital divide" in internet connection and high-income, educated people. They examined four possible reasons for this pattern including differences in the opportunity cost of leisure time; differences in the usefulness of online activities; differences in the amount of leisure time; and selection. The evidence gathered from the study suggests this pattern is best explained by differences in the opportunity cost of leisure time and these results also help to determine the potential effects of internet-access subsidies.

3. Methodology

This study adopted a cross-sectional survey design. The study population comprised students and lecturers of the college that patronized the library within a month of the study and who were willing to participate in the study. Simple random sampling technique was used for the selection of respondents.

Table 1: Test of reliability of the research instrument

Parameters	No of items	Cronbach's Alpha	Cronbach's Alpha co-efficient (r)
ICT Competence	16	0.857	0.860
Frequency of ICT use	15	0.946	0.947
Purpose of using the library	6	0.300	0.450
Barriers to the use of ICT resources	13	0.822	0.824
Overall	52	0.835	0.909

Source: Field Work

The main instrument for data collection was a semi-structured questionnaire comprising four sections (A-D). A total of 130 questionnaires were designed and administered to the participants, out of which 92 were satisfactorily completed for analysis. The test of reliability of the instrument was carried out by means of Cronbach’s Alpha co-efficient (α) as shown in Table 1. Data analysis was done by means of descriptive and inferential statistics where frequency and percentage distribution, mean, standard deviation as well as correlation analysis were carried out on the data collected for the study through the use of the Statistical Package for Social Sciences version 2 (SPSS 2.0).

4. Results and Discussion

Table 2 shows that 56.5% of the respondents were female while their male counterparts accounted for 43.5%. Besides, a little above half (55.4%) of the respondents were in the ages between 20 - 30 years, followed by 41-50 years which accounted for 13%. Others include those in the ages of 31-40 years, 8.7%, while those older than 50 years accounted for 3.3%. As regards library user categories, the table revealed that majority 70.7% were students while lecturers accounted for 6.5% and other category of users accounted for 22.8%. This suggests that the students remain the library’s main patrons with a few lecturers and other staff who and outside the college. This ratio in the category of users also implies that the library collections should be based on students’ educational needs with less emphasis on other library users.

Table 2: Respondents’ Socio-demographic Characteristics

Parameters	Classification (N = 92)	Percentage (%)
Sex	Male	43.5
	Female	56.5
Age in years	<20	19.6
	20-30	55.4
	31-40	8.7
	41-50	13.0
	>50	3.3
	Category of User	Student
Lecturer		6.5
Others		22.8

Source: Field Work

Table 3 shows that majority of the library users were more-than-average ICT users. Considering the mean scores, the least use of OPAC in the library was 2.6 ± 1.1 while the highest for effective communication has the means of $3.4 \pm$ on the scale of 4 points. This implies that the respondents had moderate to high competency level when it comes to ICT use in the library. This means that majority of the users could use ICT for communication, information searching, retrieving and storage $3.4 \pm$ including conversion of information from one media to another. Part of their competency level includes the use of computer packages 3.3 ± 0.8 , participation in online discussion forums 3.3 ± 0.8 , manage and maintain database 3.1 ± 0.8 , use computer to prepare briefs and class work 3.0 ± 0.9 among other ICT skills.

Table 3: Analysis of Respondents' ICT Competencies

Users' ICT competency	N	Minimum	Maximum	Mean (X)	Std. Deviation
For effective communication	92	2.00	4.00	3.4	0.7
Search for, retrieve and store information sources on the database	92	1.00	4.00	3.4	0.7
Can convert/transform information from one place to another	92	2.00	4	3.4	0.7
Can communicate effectively and work collaboratively in groups using computer and telecom	92	1.00	4.00	3.3	0.8
I can effectively participate in online forums and social networks	92	1.00	4.00	3.3	0.8
I can use computer and application software for most of my works	92	1.00	4.00	3.3	0.8
Use of internet for most of my school work	92	1.00	4.00	3.2	0.8
Opening of CD ROM and flash drives	92	1.00	4.00	3.2	0.9
Use of computer hard discs and other devices	92	1.00	4.00	3.2	0.8
I can manage and maintain database	92	1.00	4.00	3.1	0.8
Use computer to prepare briefs and class work	92	1.00	4.00	3.0	0.9
I can conduct a full length research using ICT devices	92	1.00	4.00	3.0	1.0
I can produce visual static materials using ICT	92	1.00	4.00	3.0	0.8
I can produce visual dynamic(animated) slides and presentations	92	1.00	4.00	2.9	0.9
I can use various software for information analysis	92	1.00	4.00	2.9	1.0
Can use OPAC in the library	92	1.00	4.00	2.6	1.1

Key: Means of 1 = Not Sure, 2 = Not Competent, 3 = Averagely Competent, 4 = Highly Competent

As shown in Table 3, it can be concluded that overall, the users were between averagely and highly competent in the use of ICTs.

Table 4 shows that the ICT most frequently used among the users was the Internet with a mean of 3.9±1.1 on the scale of 5 points, followed by e-Newspaper 3.8±1.5, e-Books 3.6±1.3, e-Magazine 3.5±1.4, Online Public Access Catalogue 3.4±1.3, CD-ROM 3.2±1.5, Audio-visuals 3.2±1.5, e-Journals 3.2±1.4, e-Reference Sources 3.1±1.3, e-Research project 3.1±1.3, CD-ROM databases 3.0±1.4, e-abstract 3.0±1.4, e-Journals 2.9±1.4, e-pamphlets 2.9±1.4 and e-indexes 2.9±1.5. The calculated means scores and standard deviation shows that majority of the ICT resources are moderately used on regular basis. Hence, in all, the respondents used ICTs resources at least between monthly and on daily basis.

Table 5 shows that the major reasons for using the library as reflected in the responses were: studying 4.4±0.8, and research 4.4±0.7. Other purposes include information sharing 4.2±0.7, personal reasons 4.0±0.9, and relaxation 3.0±1.3 while other purposes accounted for 2.5±1.6.

Table 4: Frequency of ICT use by Respondents

Frequency of ICT use	N	Minimum	Maximum	Mean (X)	Std. Deviation
Internet	92	1.00	5.00	3.9	1.1
e-Newspaper	92	1.00	5.00	3.8	1.5
e-Books	92	1.00	5.00	3.6	1.3
e-Magazine	92	1.00	5.00	3.5	1.4
Online Public Access Catalogue	92	1.00	5.00	3.4	1.3
CD-ROM	92	1.00	5.00	3.2	1.5
Audio-visuals	92	1.00	5.00	3.2	1.5
e-Journals	92	1.00	5.00	3.1	1.4
e-Reference Sources	92	1.00	5.00	3.1	1.3
e-Research project	92	1.00	5.00	3.1	1.3
CD-ROM databases	92	1.00	5.00	3.0	1.4
e-abstract	92	1.00	5.00	3.0	1.4
e-Journals	92	1.00	5.00	2.9	1.6
e-pamphlets	92	1.00	5.00	2.9	1.4
e-indexes	91	1.00	5.00	2.9	1.5

Key: mean of 5 = daily use, 4 = weekly use, 3 = monthly use, 2 = occasionally use, 1 = never use

Table 5: Purpose of Library Use

Purpose	N	Minimum	Maximum	Mean (X)	Std. Deviation
For studying	92	1.00	5.00	4.4	0.8
For research	92	2.00	5.00	4.4	0.7
For information sharing	92	2.00	5.00	4.2	0.7
For personal reasons	92	1.00	5.00	4.0	0.9
For relaxation	92	1.00	5.00	3.0	1.3
Others purposes	92	1.00	5.00	2.5	1.6

Means of 5 = strongly agreed, 4 = agree, 3 = disagree, 2 = strongly disagree, 1 = not sure.

The result is encouraging as majority visited the library for either studying or for research. Nevertheless, it implies that not all library patrons have equal purposes of visiting the library. From the foregoing, it is clear that the primary purpose of library use among the college community was academic.

Table 6 presents the top barriers to ICT resources utilization among users. They are: high cost of creation, purchase and maintenance of ICT resources 3.3 ± 0.8 , and inadequate provision of basic infrastructure; e.g. electricity 3.3 ± 0.8 . Other barriers include limited wireless internet service for students use 3.2 ± 0.8 , poor internet services/networks, insufficient finance for system update and poor/infrequent and low maintenance of ICT equipment with the mean of 3.2 ± 0.9 , insufficient infrastructure and ICT equipment, hazards arising from the rays of computer monitors and complexities of technologies in the library with the means of 3.0 ± 0.9 , lack of training of students in the use of ICT and unavailability of e-library for students' use 2.9 ± 0.9 and 0.9. The table shows that the barriers with the least mean scores were difficulty in surfing the net 2.8 ± 1.0 , and difficulty locating relevant information with the use of computer system 2.7 ± 1.0 respectively.

Table 6: Barriers to ICT Resources Utilization among Library Users

Barriers to ICT resources utilization among library users	N	Minimum	Maximum	Mean (X)	Std. Deviation
High cost of creation, purchase and maintenance of ICT resources	92	1.00	4.00	3.3	0.7
Inadequate provision of basic infrastructure; e.g. electricity	92	1.00	4.00	3.3	0.8
Limited wireless internet service for students use	92	1.00	4.00	3.2	0.8
Poor internet services/networks in the country	92	1.00	4.00	3.1	0.9
Insufficient finance for system update	92	1.00	4.00	3.1	0.9
Poor/infrequent and low maintenance of ICT equipment	92	1.00	4.00	3.1	0.9
Insufficient infrastructure and ICT equipment	92	1.00	4.00	3.0	0.9
Hazards arising from the rays of computer monitors	92	1.00	4.00	3.0	0.9
Complexities of technologies in the library	92	1.00	4.00	3.0	0.9
Lack of training of students in the use of ICT	92	1.00	4.00	2.9	0.9
Unavailability of e-library for students use	92	1.00	4.00	2.9	0.9
Difficulty in surfing the net	92	1.00	4.00	2.8	1.0
Difficulty locating relevant information with the use of computer system	92	1.00	4.00	2.7	1.0

Mean of 4 = Strong Agree, 3 = Agree, 2 = Disagree, 1 = Strongly Disagree

Table 7: Showing the relationship between ICT literacy skill and internet use pattern of in Osun State College of Education Ila-Orangun

	Mean	Std. Deviation	N	r	p	remark
ICT Competence	50.3	7.3	92	.498**	0.000	significant
Frequency of ICT use	47.9	15.5	92			

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

Table 7 above shows a significant relationship between ICT literacy skill and internet usage patterns of library users in the college ($r = .498$, $p < 0.05$). This implies that users' ICT literacy level has the potential to influence internet usage. Thus, the implication is that the college authorities need to urgently upgrade and deploy more educationally related ICT resources into the library for the various library patrons for enhanced library use in the college.

5. Conclusion

This study uncovered the ICT literacy skills and internet usage patterns of library users in Osun State College of Education, Ila-Orangun, Nigeria. Overall, the findings from this study revealed a moderate level of ICT competency among library users. The findings also showed a significant relationship between ICT literacy skills and internet usage pattern of library users in the college ($r = .498$, $p < 0.05$). This study further indicated that the

respondents used ICTs at least once in a month and daily in some cases. A notable barrier to ICT literacy of the library users was inadequacy of basic amenities such as electricity supply. The study concluded that more still needs to be done by the authorities of the college in ensuring that state of the art ICT resources are deployed to the library and that there is stable electricity supply for effective utilization of ICT resources, thereby enhancing library use.

5.1 Recommendations

The outcomes of this study necessitate the following suggestions for policy implementation:

- a. The College management should emplace regular awareness programmes for students and staff of the college on the significance of ICT competency for effective use of contemporary ICT-driven academic libraries
- b. The government and the authorities of the College should supply adequate electricity to the library, including from alternative energy sources, to enhance students' ICT competency and library usage.
- c. The library personnel should be trained on the use of ICT resources in the library so that they can better assist library patrons on the use of the various ICT facilities in the library for study, learning and research
- d. Government should provide more funding for the deployment of more ICT resources into academic libraries for their effective use.

5.2 Contribution to knowledge and practice

The study showed that there was moderate ICT competency among library users though they had a fairly regular use of ICT. It also revealed that possession of ICT competency can enhance the use of ICT among library patrons. The study underscored the centrality of ICT competency in the effective functioning of library personnel. It also suggests that academic libraries need to be fully computerized to encourage user patronage since online libraries and the Internet are the major players of information dissemination which is available to everyone regardless of location and social status. This study has implication for knowledge and practice; it has highlighted the significance of ICT competency for both library staff and the library patrons.

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