

Undergraduates' Information Literacy on ICT and Utilization of Library Resources in Federal Universities in South-South Zone, Nigeria

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Abstract

The study examined students' information literacy on ICT and utilization of library resources in the Federal Universities of South-South Nigeria. The population of the study comprised 39,980 students who were registered library users in 2017/2018 academic session. The ex-post facto design was adopted for the study, while stratified random sampling technique was used to sample 1,995 undergraduate students for the study. A structured questionnaire was used for collection of data, while ANOVA and multiple regression analysis used to analyze the hypothesis. The findings revealed that student's information literacy on ICT influence utilization of library resources in the Federal Universities in the South-South, Nigeria. The researchers recommended among others that library use education should be shifted from traditional methods of instruction to computer-based skills on ICT to guide on the use of library.

Keywords: ICT skills, utilization, library resources, Nigeria.

Introduction

Today, the introduction and application of Information and Communication Technology (ICT) in all aspect of library services, has created greater attention and focus on how to equip users with new and relevant information literacy skills as opposed to the traditional methods. Academic librarians and lecturers in the field of librarianship have made it a point of duty to teach students the use of internet platforms to empower them in becoming knowledgeable in using e-books, electronic and reference resources in the library. These help students to engage in a self-directed learning; as a continuum of skills, behaviors, attitudes and value which enable them to navigate the ever-changing information environment.

To ensure that students effectively utilize library resources, User education was inculcated in the university curriculum by the National University Commission in 2007, thereby directing all university libraries to explain the various complexities associated with their operation which an average user may not comprehend without proper guidance.

Acquainting students with the basic historical information concerning their various libraries, the library's rule and regulations which include the general behavior and conduct in and around the library, most especially the readers' services department and in the use of library information material such as electronic, references and textbooks might significantly improve utilization of information resources. Library use instructions may be tailored to suit the needs of users in order to equip them with necessary skills required. It is expected to cover the following: history and origin of libraries, library service; purpose of programme; organization of library resources, different classification schemes and subject classes, reference sources and services, Information and Communication Technology, (ICT) application in libraries, electronic resources and other services, such as serials, bibliographies, abstracts, indexes, the cataloging and circulation services.

Library orientation for new students is organized yearly for the benefit of the newly admitted students who are potential users. It is an activity organized by the university in collaboration with the University library with fundamental objectives of exposing them to basic knowledge and skills which are necessary for their study throughout the period of their tenancy. Teaching the use of library within the structure of general studies programme, acquaints users with library rules and regulations, providing the much needed leverage for student understanding of the corpus of knowledge, its interdisciplinary nature, dissemination and above all useful application in research (Aguolu, 2002).

Presently, the use of library education taught to newly admitted students alongside a tour around the library seem to have a considerable effect on library patronage. Library users are taken around to acquaint themselves with the environment, management staff, library staff, units and other library resources. Guided tour of the library with new students is an annual function which is held in academic libraries. Students are organized in groups and shown around the library building and facilities which include; the catalogue cabinet and shelves section housing the books. This formal introduction may likely reduce reading and inquiry phobia on new and prospective library users. On the account of the forgone argument or scenario, it is obvious that the traditional methods of library use education may no longer be appealing to users in this current information age. It is on this backdrop that this study is carried out to investigate the influence of information literacy on ICT and utilization of library resources by undergraduate students in Federal Universities in South-South Zone, Nigeria.

Statement of the Problem:

The deteriorating state of the use of library by students particularly the undergraduates seems to be a perennial issue in Nigerian universities. Researchers' observations have indicated that many students lack the basic skills and competencies required for utilization of information

resources especially on their entrance into universities. This situation does not stop at this level, but may affect the future of these students if something is not done.

It has also been observed by many scholars that the fast speed upon which students need to draw information resources from a wide range of sources and the frustration caused by several failure to retrieve the right information sources in the library compel them to patronize commercial vendors and cyber-café even at a glare that same materials used by such centers was provided in the library electronically or in print formats. This situation has led students to believe in the use of smart android phones which does not give in-depths information as a database in the library.

Obviously, students may as a result lose some important skills and behaviour which could have assisted them in the production of good research reports, good writing, presentation of seminar papers, good performances in class works, as well as developing the requisite skills for accessing and using library catalogue, bibliographies, internet sites, online databases, reference materials, electronic resources, textbooks and ease of retrievals of available library materials. It is against this backdrop that this study is carried out to assess the influence of students' information literacy on ICT and utilization of library resources in the Federal Universities of South-South.

Purpose of the Study

The purpose of the study is to examine the influence of information literacy on ICT and student's utilization of library resources in Federal Universities of South-South. Specifically, the study sought to find out the influence of information literacy on ICT and students' utilization of library resources.

Research Question

To what extent does information literacy on ICT influence students' utilization of library resources?

Statement of Hypotheses:

H₀₁: Information literacy on ICT has no significant influence on students' utilization of library resources

Literature Review

A survey of literature shows that a great deal of research has been done regarding information literacy on ICT and students' utilization of library resources. Unfortunately, many Nigerian scholars have not flooded this topic extensively with much write up. However, literature in the area appear to fall in line with dictum which says 'if anything is constant its change'. In the past literature on ICT has not flooded the world as does now.

Madu *et al.* (2018), in their study investigated the availability and utilization of information and communication technology (ICT) for information retrieval in Ramat Library University of Maiduguri, Borno state, Nigeria. The study was guided by four objectives and four research questions. 400 registered users were used through convenience sampling technique out of 10,600 registered users in 2016/2017 academic session. The findings revealed that low level of computer skill affect the utilization of information retrieval in the library under study. Also, it revealed that the utilization of CD-ROM as well as internet usage are low among the students in the library study.

Lawal (2016) also employed a survey method on the use of ICT at Covenant University, Nigeria and the findings showed that Covenant University library has an abundance of computers connected to the internet with web base millennium software, where students and faculty members make use of online public access catalogue(OPAC) to locate materials on the shelves. It further revealed that constant instructions on use of ICT in information retrieval in Covenant University enhanced the utilization of library resources. More so, Ntui and Inyang (2015) investigated Information and Communication Technology (ICT) resources and job effectiveness among library staff in University of Calabar and Cross River State University of Technology, Nigeria. The findings of the study revealed that, staff use internet, e-mail and PowerPoint that are significantly related with their works. In another study, Mamman (2015) investigated the utilization of information and communication technologies (ICTs) in public library services in Nigeria. Twelve public libraries from the six geopolitical zones of the country comprised the sample of the study. The findings revealed that the commonly available ICT facilities in public libraries were computers, UPS, video tapes, televisions sets, photocopiers and printers; the study revealed that users were not satisfied with ICT facilities available in public libraries, some of the barriers to effective utilization of ICTs in public libraries were inadequate funding, staff low level of computer literacy, inadequate ICT infrastructure and low level of ICT awareness among users.

Alakpodia (2010) in his study investigated the use of internet skills among library and information science students, in Delta State University, Abraka. The main objective of the study was to investigate the extent of internet utilization among students in the university. The findings revealed that more students were engaged in the use of internet noting that such skills were acquired through the help of skilled library acquisition. Ottong *et al.* (2010), conducted a study on “information literacy and knowledge utilization for national development”, the study examined the extent of information and knowledge organized by the university library, and extent of utilization by the lecturers and the factors affecting proper information and knowledge utilization, as well as implication of knowledge utilization for national development. The findings revealed that the library use instructional programmes is useful to undergraduate students in utilizing the library resources. However, it further revealed that a closer attention is required by the management to enhance the effectiveness of the programme in order to improve

on it. Ladele *et al.* (2022) on a similar note asserted that information literacy skill is a good predictor of library use, which equips students with the necessary skills that can help them identify and locate relevant information sources and its subsequent utilization satisfactorily. Fajonyomi, Bukar, & Ambali (2021) in their investigation of influence of information literacy skills and use of library resources by post graduates students in the University of Ilorin Library revealed that information literacy had a positive and a significant influence on the use of library information resources by the post graduates students in the University of Ilorin. Universities are to re-enforce the programme to enable students enjoy the many benefits it offers.

Odusanya, (2001) argued that majority of the students are not well skilled in the use of catalogues as information retrieval tools. As a result, user education becomes important to educate students to be proficient on the use of library catalogue and other library retrieval tools. According to Iyishu (2016), students cite resources, specifically those highlighted during classroom instruction sessions in their assignment. Bello (2003) stressed that library use education is a device by the librarians to educate users on how to use the resources available in the library in most efficient way. According to Osagie (2003) the objective of the library use education are to enable the user to know how to use the library catalogue independently in any library with particular reference to the author/title and subject catalogue; to enable users understand the classification scheme in any library so as to be able to locate materials(books & journals) with little or no problem; to be able to see library catalogue as indexes to the entire collection and use them effectively; and to see the library as a repository of knowledge that determines the success of the students' academic programme.

Methodology

The study employed the survey research design. The survey design was used because it encourages the administration of questionnaire to respondents in order to obtain data on the information literacy on ICT and utilization of library resources in Federal Universities in South-South. The study area was South-South Nigeria covering five academic libraries within the study area which include University of Uyo, University of Calabar, University of Port-Harcourt, Federal University of Otuoke, and University of Benin, Benin City.

The population of this study which was 39,968 comprised of all undergraduate students who were registered library users in 2017/2018 academic session in the five Universities selected for the study. The sample of this study consisted of 1,995 registered library users within the selected Federal University libraries in South-South Zone. Essentially, these students engaged in different academic programmes and have been introduced to the use of library. Questionnaire were used as the main instrument for data collection and was tagged library use education and students' utilization of library resource questionnaire (LUESULRQ). The statistical methods used in answering the research question was descriptive statistics while ANOVA was used in analyzing the hypothesis at .05 alpha leave. The criterion mean for

decision for the research questions was set aa; score of 24.00 and above were taking as high influence, score of 12.00 to 23.00 were average influence and score of 11.00 and below were low or No influence.

Presentation of Findings

The findings of the study are presented in this section.

Research Question: To what extent does information literacy on ICT influence students' utilization of library resources?

Table 1: Descriptive Statistics of Information Literacy on ICT) Influence on Students' utilization of Library Resources (N=1983)

Variables	N	\bar{X}	SD	Decision
References	1983	18.198	1.378	Average
Electronic resources	1983	18.133	1.363	Average
Textbook	1983	17.617	1.763	Average
Total		53.948	4.504	Average
Utilization	1983	69.793	5.035	Average

Table 1 shows the mean responses of information literacy on ICT influence on students' utilization of library resources in Federal Universities in South-South. The data on table 1 revealed that the entire calculated mean of the three variables that make up information literacy on ICT (Reference: 18.198; Electronic resources: 18.133 and Textbook: 17.617) are all in average influence range. it therefore means that information literacy influence on utilization of library resource are average in the study area.

Null Hypothesis 1: Information literacy on ICT has no significant influence on students' utilization of library resources

Table 2: Analysis of variance on influence of information literacy (ICT) on students' utilization of library resources (N=1983)

Utilization	Variance	Sum of Square	Df	Mean square	F-ratio	Sig.
Reference	Between Groups	382.959	2	191.489	112.184*	.00
	Within groups	3379.550	1980	1.707		
	Total	3762.509	1982			
Electronic Resource	Between Groups	578.560	2	289.280	184.554*	.00
	Within groups	3103.559	1980	1.567		

	Total	3682.1109	1982			
Textbooks	Between	361.953	2	180.975	61.733*	.00
	Groups					
	Within	5804.537	1980	2.932		
	groups					
Total utilization	Within	9925.490	2	4962.960	243.757*	.00
	groups					
	Between	40313.310	1980	20.360		
	Groups					
	Total	50239.229	1982			

The result of ANOVA that compared the three mean values is shown on Table 2. The comparison yielded F ratios of 112.184 for reference resources, 184.554 for electronic resources, 61.733 for textbooks and 243.757 utilization of library resources in the Federal University libraries in South-South Nigeria. The F ratios for reference resources, electronic resources, textbooks and utilization of library resources are significant at .05 level of significance with 2 at 19.80 degrees of freedom. Meaning that with these results the null hypothesis is rejected in each of the four categories of information resources in the library. This implies that there is a significant influence of information literacy (ICT) on students' utilization of library resources in the Federal Universities in the South-South Nigeria.

In order to understand the pattern of the significant influence of information literacy (ICT) on students' utilization of library resources in terms of reference resources, electronic resources, textbook and total utilization of library resources, a post-hoc multiple comparison analysis was carried out as shown in Table 3 using fisher's least significant deference (LSD) test. The result of these analysis is shown on Table 3 above.

Table 3: Fisher's least significant difference (LSD) multiply comparison analysis of the significant influence of information literacy (ICT) on students' utilization of library resources.

	(I) Class. Lectures	(J) Class. Lectures	Mean Difference	(I- Std. J) Error	Sig.
Reference	1.00	2.00	-.09821	.06506	.131
		3.00	-1.36345(*)	.09644	.000
	2.00	1.00	.09831	.06506	.131
		3.00	-1.26524(*)	.09064	.000
	3.00	1.00	1.36345(*)	.09644	.000
		2.00	1.26524(*)	.090644	.000
Electronic res.	1.00	2.00	.26383(*)	.06235	.000
		3.00	-1.40304(*)	.09242	.000

	2.00	1.00	-.26383(*)	0.8686	.000
		3.00	-1.66687(*)	.08686	.000
	3.00	1.00	1.40304(*)	.09242	.000
		2.00	1.66687(*)	.08686	.000
Textbook	1.00	2.00	.03348	.08527	.695
		3.00	-1.25022(*)	.12639	.000
	2.00	1.00	-.03348	.08527	.695
		3.00	-1.28370(*)	.11879	.000
	3.00	1.00	1.25022(*)	.12639	.000
		2.00	1.28370(*)	.11879	.000
Total utilization	1.00	2.00	.25363	.22471	.000
		3.00	-6.49331(*)	.31306	.259
	2.00	1.00	-.25363	.22471	.000
		3.00	-6.74694 (*)	.33307	.000
	3.00	1.00	6.49331(*)	.31306	.000
		2.00	6.74694(*)	.31306	.000

**The mean difference is significant at the .05 level.*

The post-hoc test result presented in Table 3 shows that students whose level of information literacy (ICT) is low are significantly different in their utilization of library resources from those whose level of information literacy (ICT) is either moderate or high. Also, student whose information literacy (ICT) is moderate are significantly different in their utilization of library resources from those whose information literacy (ICT) is high

Discussion of Findings

Information literacy on (ICT) influenced by students' utilization of library resources

The result of the findings indicated that information literacy on (ICT) is significantly influenced by students' utilization of library information resources. This finding is in line with the view of Oyedum (2012) who investigated on relative effect of information literacy and resources available to students' use in University libraries in Nigeria. Data was collected from 1,453 undergraduate students from Arts, Education, Engineering, law, science and social faculties in the selected universities. The findings revealed that the rating level for information literacy among undergraduate students was low, hence recommended that information literacy skills should be included in the undergraduate students' curriculum in order to help them access information in their academics.

Information literacy programme is seen as a planned activity aimed to teach users the necessary skills on how to optimally utilize library resource. How and the extent this is achieved is a matter of argument by authors. Bruce and Chittine (2004) asserted that information literacy forms the basis for lifelong learning. It is common to all discipline, to all learning environment and to all level of education. It enables learners to master content and extent their investigation, become more self-directed and assume greater control over their own learning. Bhatti (2003) also revealed that the library and information skills tend to improve when those skills are course related. The benefit is that the students may be led to earn high grade as they will know how to find relevant and suitable information resources to support their research papers, research proposals and their assignment. The reality is that many come to the university unprepared and unequipped to handle the demand of their course work primarily they have no experience with large research libraries, and do not understand how libraries work and have not acquired enough skills needed to do meaningful research work. It therefore means that libraries are called upon to teach students necessary skills to enhance them to utilize the library resources.

Conclusion

The study examined undergraduate student's information literacy on ICT and utilization of library resources in the selected Federal Universities in South-South Nigeria. Based on the findings of this study, it is concluded that student with high rate of information literacy on ICT could assess the library resources more efficiently than those with less ICT skills. Hence with ICT skills, they exploit the library resources for their academic activities. Information literacy on ICT significantly influenced students' utilization of library resources in the Universities in South-South Nigeria. The study, hence recommends the following:

Recommendations

1. The use of library education should include information and communication technology skills in their course outline.
2. There should be a shift from mere user instruction to computer literate in their course outline for all level of undergraduate students.
3. Information literacy on ICT should be compulsory for all undergraduate students
4. Infrastructure in the university should be improved especially those that has to do with internet connectivity.

5. To enhance internet and use of online materials among the undergraduate students, orientation and user education programmes on ICT literacy skills should be practical and should be included in their curriculum and students should be encouraged to actively participate to acquire the necessary literacy skills to support their study in the universities.
6. Inclusive information literacy skills should be included in the undergraduate students' curriculum in order to help them access online information resources.
7. University authorities should improve on power supply to the university libraries or provide them with standard standby generating plant for regular power supply.

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