
Predicators of Electronic Information Resources Seeking Behavior among Patrons of North Central Universities in Nigeria: A descriptive survey

Thomas Akinbayo Adigun (PhD)

University Librarian, University of Jos, Nigeria

Gilbert Paul Igboechesi

Assistant Librarian, University of Jos, Nigeria

doi: <https://doi.org/10.37745/ijirm.14/vol11n12840>

Published February 24,2024

Citation: Adigun T.A. and Igboechesi G.P. (2024) Predicators of Electronic Information Resources Seeking Behavior among Patrons of North Central Universities in Nigeria: A descriptive survey, *International Journal of Interdisciplinary Research Methods*, Vol.11, No.1, pp.28-40

ABSTRACT: *The study is a descriptive survey on the predictors of electronic information resources seeking behavior among patrons of north central universities in Nigeria. The study adopted a quantitative methodology; questionnaire-based survey design method administered on registered patrons of the sampled North Central Universities in Nigeria. Three hypotheses on the correlation between the predicating determinants were tested to reveal their relationships. Descriptive statistics was used for the analysis/interpretation of the collated data. Findings of the study showed that all the determinants of Information Seeking Behavior (ISB) on EIRs together made Information Search effectiveness on EIRs The findings in this study implies that information Seeking Behaviour of library users in this era of Information and Communication Technology (ICT) has modified the mode and services based on the obvious developments The study suggested that the university library management should intensify efforts and be more creative on their process of awareness on EIRs and also introduce compulsory advanced courses on library and information Science on all levels, different from the regular GST course on use of Library.*

KEYWORDS: information communication technology, electronic information resources, information seeking behavior, patrons, North central universities in Nigeria.

INTRODUCTION

University libraries are the hub of academic activities in their higher institutions of learning, an indispensable tool in academics. The importance of equipping them with quality information resources cannot be over emphasized as the community depends on it for proper access and use of information. They are the first gateway of call in Universities, virtually everyone in the community depends heavily on library and information centers for fulfilling their information needs; using the

Publication of the European Centre for Research Training and Development -UK platform to access relevant and current information for various needs especially for teaching, research and learning as it provides easy and fast access to information at a reduced cost. Across the world, University libraries invest a lot of money to enhance the availability of resources to users. Today, we live in an information-driven society; the unusual development in modern information communication technologies and its massive acceptance have revolutionized information users all over the world; digital environment has drastically changed the information seeking behaviours of information users of everywhere, it is now the life-blood of modern times. As a result, Electronic Information Resources (EIR) play a vital role in promoting patrons learning capacity and quality in their University education, it has a profound impact on all aspects of a digital citizenry.

The advent of Internet infrastructure and the World Wide Web (WWW) in Nigerian universities has enabled the provision of EIR facilities in their libraries to augment teaching, learning and research activities. With the help of EIR, patrons can access library resources and services online from their homes, classes or offices without visiting the library physically. Millions of end users search for information themselves as a result of the emergence WWW. Surfing the internet and searching for information resources to tackle given assignments and research is now a common phenomenon among university students at all levels. Most of these students now depend largely on Web for accessing, retrieval and dissemination of information. Users of EIR have cited several motivations for its use; these include: speed, easy search function, ease of use, flexibility, convenience, and portability (Aregbesola & Oguntayo 2014). EIR can simply be defined as a digital/softcopy of a concept, an idea, a discovery or a process that accomplishes the quest towards increase in knowledge acquisition, leading to developments and inventions. According to Ruzegwa and Msonde (2021), the explosion of e-resources has created the need for library users to have a sound level of awareness of e-resources availability and the way they can be accessed. Obviously, the nature of this kind of information is different from the traditional methods that have been in practice over the years. It has gone through a change with modern information communication technologies (ICTs) at the core of it all. Studies about Patrons information seeking behaviour (ISB) in different university libraries across Nigeria is one pertinent aspect needed to understand the spur for the use on EIRs because preliminary observation by the researchers shows that sometimes there is a mismatch between Patrons' awareness and ISB in the usage of e-resources. Factors such as Information Retrieval Tools (search skills) and low/lack of ICT knowledge have been pointed out as preliminary factors that influence ISB of patrons. This proves that patrons information seeking behaviour must have changed too since university libraries are shifting from traditional to electronic modes of operation to support the inevitable ICT inclined system. Thus, ICT-augmented information seeking behaviour will naturally become increasingly more prevalent, more daunting to some and more inviting or encouraging to others. The ICT-

Publication of the European Centre for Research Training and Development -UK

Inclined pattern involves an extensive array of patrons information seeking behaviour concerned with activities ranging from how to generate information, the need to seek information, and how to use such information for effectively. Bashorun, Isah and Adisa (2011) found computer skills and users attitudes towards computing applications were important factors for effective accessibility and usage of e-resources. Natarajan, Suresh, Sivaraman, Nd Sevukan (2010) pointed out that accessibility and retrieval of e-resources requires one to have computer skills and networked electronic information resources. This makes it imperative to investigate EIR seeking behaviour of patrons as it is a necessity in understanding the extent at which EIRs are utilized because the enormous amount of digital information accessible today poses a great challenge to information retrieval systems in effectively meeting the information needs of the users. Within this dynamic and vastly diverse searching environment, traditional search systems are not able to provide mechanisms for rich information retrieval to users as compared to searching through the Web (Martzoukou, 2005). To understand EIR effectiveness better, there is need to understand the predictors that promote or influence such effectiveness. However, in spite of the general preference for EIR, individual differences exist among the patrons in different disciplines. It therefore prompts the present study to investigate the EIR seeking behaviour among Patrons of North Central Universities in Nigeria.

Research Objectives

The goal of this study is to explore the predictors of information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria. To establish the following research specific objectives:

1. The correlation among the predictors identified as determinants of information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria
2. Ascertain the correlation among patrons computer self-efficacy, Internet self-efficacy, information literacy skills, use of Electronic Databases, and use of Appropriate Search Technique (AST) for Information search effectiveness.
3. Ascertain the contributions of computer self-efficacy, Internet self-efficacy, information literacy skills, use of Electronic Databases, and use of Appropriate Search Technique (AST) for Information search effectiveness on the information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria

Hypotheses

To achieve the specific objectives outlined, the following research null hypotheses were formulated and tested at 0.05 level of significance:

Publication of the European Centre for Research Training and Development -UK

1. There is no significant correlation among the predictors identified as determinants of information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria
2. Predictors of information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria will not significantly determine their use of EIR effectiveness.
3. Predictors of information seeking Behavior (ISB) among Patrons of North Central Universities in Nigeria will not significantly contribute to their use of EIR effectiveness.

LITERATURE REVIEW

The rise in the adoption of electronic information resources (EIR) birthed the need for patrons to have a sound level of approach to electronic resources. The sound level suggests that the predictors influencing their approach to their ability to use EIR are essential. Ruzegea and Msonde (2021) opines that students' competence in the use of information and communication technology (ICT) has become a necessary component in promoting learning. Effective access to and usage of EIR is the outcome of students' being competent in using computers. There is therefore a positive correlation between adequacy in patrons information seeking behaviour (ISB) and usage/frequency of library visits by the patrons. According to Das and Jadab (2017), ISB has been a user-centered ethos that has been much-analyzed in library and information science. ISB can be defined as users' purposive behaviour in finding relevant and useful information in their interactions with the information retrieval systems (Knight, & Spink, 2008).

There have been several studies that have focused on understanding the information seeking behavior of University students in digital environments. On the other hand, Ranasinghe, Wickramasinghe, Pieris, Karunathilake and Constantine (2012) noted that recent technological development has made information literacy (IL) a necessary element for students... As such, there is the need to have knowledge of common software packages, operating systems, database management, and Internet usage. Their findings suggest that computer and information literacy skills influence the usage of e-resources.

Among the many reasons or factors that influence ISB and utilisation of EIRs and makes them more desirable and necessary, self-efficacy for technology use may be an important factor information seeking effectiveness. Yemisi and Mostert (2013) as cite by Das and Jadab (2017), undertook a study on information seeking behavior and ICT utilization skills of undergraduate law students in Adekunle Ajasin University. The study found that most students preferred both print and electronic sources. They also noted that the Internet is the only used tool... and the Internet was mainly used through mobile phones. Yemisi and Mostert (2012) also observed that students

Publication of the European Centre for Research Training and Development -UK
seem not to have been exposed to the core information retrieval tools required... therefore, they are not skilled enough to use gadgets such as computers, the Internet, and information databases available. As a result, they do not fully utilize ICT resources when seeking information in the library. The case is opposite on the part of Rai's (2013) as cite by Das and Jadab (2017) study towards the use of electronic legal resources examined the information seeking behaviour of legal researchers of academic law libraries in Delhi. The study shows that most legal researchers (almost 97%) preferred legal databases and computer aided legal research to fulfill their information needs.

According to Tella, Oyeniran and Ibiroinke (2021), a number of researchers (Russell-Rose, 2011; Tella, 2011a; Tella & Oyedokun, 2014; Tella, et al., 2017; Khan & Muaz, 2018) have shown a growing interest in the ISB of undergraduate students. These scholars emphasise that people want information at the point they need them but do not bother about the necessary skills they need to develop to access the needed information. Students, when confronted with a decision-making situation (such as seeking for information to satisfy a need), they must decide when and where to search for information, when to rely on their own expertise or intuition, and when to rely on the advice of others. Time and resource constraints also undoubtedly influence their ISB as well as the importance they place on different issues.

METHODOLOGY

This study adopted a quantitative methodology; questionnaire-based survey design method, as many similar studies conducted on this aspect has also used this method for data collection. More importantly, the survey design was chosen because it enabled the researchers to cover a substantial percentage of patrons to enable a generalisation of the findings to the entire patrons population (Babbie, 2014). The method is also preferred because it was less time consuming and economical for a scattered population of patrons in the library.

The questionnaires structured by the researchers were distributed with the help of research assistants to registered patrons which include Lecturers, Researchers, students (Undergraduates and Postgraduate) of University of Jos, Federal University, Lafia, Nassarawa State and Benue State University, Makurdi, Benue State. Registered Patrons who participated in the study voluntarily did so and at the same time, they were educated on the benefits of the research to them. The researchers distributed 50 questionnaires in each university (totaling 150) to the randomly selected sample present at the university library at the time of distribution. From the distributed questionnaires, all 150 were filled. Out of 150 questionnaires, 146 (97%) qualified for proper examination and usage as data collated while 4 (3%) questionnaires were rejected because of inaccurate and or incomplete response from the respondents. The reason for choosing the studied universities in North-Central Nigeria is because they have updated records of registered library users, their libraries are Information Communication Technology (ICT) compliant with numerous

Publication of the European Centre for Research Training and Development -UK electronic databases for patrons to use which include: AGORA, AJOL, EBSCOhost, JSTOR, Encyclopaedia Britannica, EBSCOhost Professional Development, Science by McGraw Hill, GALE SCIENCE, EMERALD; ACCESS and University institutional repository. Another cogent reason is the close proximity of the universities to the researchers.

DATA ANALYSIS AND RESULTS

Descriptive statistics including percentages and frequency count together were used for the analysis/interpretation of the collated data in tables. The results obtained are presented hereunder

Table 1: Demographic Information

N0	DEMOGRAPHICS	FREQUENCY	PERCENTAGE
1	Gender		
i	Male	55	37%
ii	Female	95	63%
	TOTAL	150	100
2	DESIGNATION		
i	Students	102	68%
ii	Lecturers	37	25%
iii	Researchers	11	7%
	TOTAL	150	100
3	AGE		
i	20-25	70	47
ii	26-30	32	21
iii	30 and above	48	32
	TOTAL	150	100

The respondents' demographic information on this study is summarised in Figure 1 above. Findings reveal that females were more than male students. On the designation of the patrons, students were much more than the lecturers and researchers. In addition, the study also revealed that the majority of the respondents fall between the ages of 20-25 years, followed by those between 30 and above because they are mostly postgraduate students, researchers and lecturers, while the least respondents are those who are 26-30 years of age and above.

In all the tables presented below, data was analyzed based on the number of valid questionnaires qualified for proper examination and usage as data collated which are 46.

Table 2: Inter-Correlation Framework among the Variables (N = 146)

Determinants of ISB	Computer Self-Efficacy	Internet Self-Efficacy	Information literacy Skills	Use of Electronic Databases	Use of Appropriate Search Technique	Information Search Effectiveness
Computer Self-Efficacy	1000					
Internet Self-Efficacy	0.115*	1000				
Information literacy Skills	0.076	0.211*	1000			
Use of Electronic Databases	0.062	0.023	0.121*	1000		
Use of Appropriate Search Technique	0.008	0.0199	0.176*	0.234*	1000	
Information Search Effectiveness	0.871*	0.889*	0.761*	0.702*	0.421*	1.000

** Correlation is significant at the 0.05 level.

In Table 2 above, the inter-correlation between ISB and computer self-efficacy, Internet self-efficacy, information literacy skills, use of Electronic Databases, and use of Appropriate Search Technique (AST) and Information search effectiveness showed that a significant relationship exists between the variables, proving that the identified ISB variables for this study are significantly connected in relationship in terms of effective utilization of EIR. A multiple regression analysis was conducted to buttress averred position. Figure 3 below presents the findings:

Table 3: Representation Summary

Multiple R					.434
R Square					.611
Adjusted R Square					.531
Std. Error of the Estimate					.73549
Log-likelihood Function Value					-
362.211					
ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Regression	213316.327	4	53,329	17.47	.185
Residual	431892.351	141	3,053.1		
Total	645,208.678	145			

Table 3 suggests that the R square = 0.61, R value adjusted = 0.53, and the overall correlation of all the Determinants of Information Seeking Behavior (ISB) yielded an R = 0.43, while the standard error of the estimate yielded 531. In the second step, the analysis of variance performed on multiple regressions yielded an F-ratio value of 17.47. This was found to be significant at 0.05 levels. These results suggest that all the determinants of Information Seeking Behavior (ISB) together made 61% of Information Search effectiveness on EIRs. This strongly suggests that all the determinants of Information Seeking Behavior (ISB) jointly influence information search effectiveness of patrons in North-Central Nigeria.

Table 4: Amount of the Effect of each factor

	Unstandardized Coefficients		Standardized Coefficients		T	Sig.
	B	Std. Error	Beta	Std. Error		
(Constant)	16.777	3.452			7.542	.000
CSE	.072	.205	.653	.087	3.789	.334
ISE	.456	.222	.412	.085	.411	.012
ILS	.421	.114	.532	.078	1.286	.999
UED	.356	.176	.427	.066	1.112	.005
UAST	.562		.416	.045	2.257	.651

Key:

CSE: Computer Self- efficacy

ISE: Internet Self-efficacy

ILS: Information Literacy Skills

UED: Use of Electronic Databases

UAST: Use of Appropriate Search Technique

Table 4 shows that each of the independent variables studied has significant effect on Information search effectiveness. In terms of the Vastness, Computer Self- efficacy (CSE) had the most significant impact with (Beta, .653, $t = 3.789$), followed by information literacy skills with (Beta = 0. 532, $t = .1.286$). The next contributing value was exerted by Use of Electronic Databases (UED) with (Beta = 0.427, $t = 1.112$; followed by Internet Self-efficacy (ISE) with (Beta = 0. 416, $t = .2.257$) while Use of Appropriate Search Technique (UAST) made the least contribution with (Beta = 0.412; $t = 0.411$). This proves that all the studied factors are good ISB determinants on EIR search effectiveness.

Table 5: Relationship among stud parameters (N =146)

Paired Variables	Mean	N	Std. Deviation	Correlation
Computer Self- efficacy	20.34	146	10.22	0.789**
Internet Self- efficacy	18.44	146	9.33	0.411**
Information Literacy Skills	18.34	146	8.43	0.286**
Use of Electronic Databases	18.11	146	8.12	0.112**
Use of Appropriate Search Technique	18.02	146	8.01	0.257**

Significant Correlation**

Figure 5 showed the mean and standard deviations for each of the independent variables. Furthermore, it posited that all the studied parameters significantly relates with users' ISB determinants on EIR search effectiveness.

DISCUSSION OF FINDINGS

This study examined the Predicators of Electronic Information Resources Seeking Behavior among Patrons of North Central Universities in Nigeria. The findings of the study showed that computer Self- efficacy, internet self-efficacy, Information Literacy Skills, Use of Electronic Databases and Use of Appropriate Search Technique significantly correlate with ISB determinants on EIR search effectiveness. Additionally, the results avers that all that all the determinants of Information Seeking Behavior (ISB) on EIRs together made Information Search effectiveness on EIRs. Independent variables studied have significant effect on Information search effectiveness. In terms of vastness of individual study components, computer self- efficacy had the most significant impact, followed by information literacy skills, then use of electronic databases, internet self-efficacy and the least was the use of appropriate search technique on the determinants of Information Seeking Behavior (ISB) on EIRs. This findings agree with the study of Nwabueze, Emuchay and Ogaraku (2022) on Information Search Skills as Predictors of Library and

Publication of the European Centre for Research Training and Development -UK
Information Science Students' Use of Online Information Resources in University of Benin, Edo State, Nigeria. The study concluded that there is significant relationship between Library and Information Science students' information skills and their extent of use of online information resources. In addition, Afebende (2019) discovered that there is a significant positive relationship between knowledge of information search strategies and utilizations of library resources. It is also in line with the assertion of Ekenna and Mabawonku (2013) that library students with information retrieval skills should be able to recognize information need for learning and research, distinguish ways of addressing gap and locating information stored in electronic resources. However, Quadri (2013) lamented that acquiring information search skills for online information resources can be challenging for students. This according to the author may be the reason why there is low usage of EIRs for academic purposes by undergraduates in Nigeria despite the increase in provision of EIRs in Nigeria and the world at large.

CONCLUSION

The information Seeking Behaviour of library users in this era of Information and Communication Technology (ICT) and its inherent facilities and services have been modified based on the obvious developments. Predicators influencing patrons' capacity in North Central Universities in Nigeria have been identified as expressed in this study with significant impact on patrons' ability to use EIRs. Hence, North Central universities libraries in particular and all universities in Nigeria in general need to intensify efforts in educating patrons' on the requisite skills they need to enable them make effective use of the EIRs.

Recommendations

Based on the findings, the following suggestions were recommended:

1. The advent of ICT and its facilities has made EIRs highly significant to patrons.' There is therefore the need for the university library management to intensify and be more creative on their process of awareness on EIRs that are available, especially on the ones not being utilized by the patrons. The availability of new databases and search engines in university library should be creatively brought to the knowledge of the university community to enhance the utilization the library's EIRs. Such aspects can come up through the introduction of unique University Apps for each institution. Such awareness/adverts can be done in creative ways.
2. With the new technologies integrated into the university curricular, there is need for university students to have compulsory courses on library and information Science, different from the regular GST sectional course on "use of Library." As ICT advance all the time, so it is with the operations

Publication of the European Centre for Research Training and Development -UK
of the library. Relentless efforts is needed with the right intentionality to ensure that patrons are
always in tune with the right and modern ways to accessing EIRs

REFERENCE

- Afebende, G. R. (2019). Information search strategies as correlate of information resource utilization by undergraduate students in federal universities in South South, zone, Nigeria. *International Journal of Library and Information Science Studies*, 5(5), 34-42.
- Aregbesola, A. & Oguntayo, S. (2014). Use of electronic resources by faculty members in Landmark University. *Computing, Information Systems, Development Informatics & Allied Research Journal*, 5(2), 53-58.
- Babbie, E. (2014). *The Practice of Social Research*. (10th Ed.). Belmont, CA: Thomson/Wadsworth.
- Bashorun, M.T., Isah, A. and Adisa, M.Y. (2011). User perception of electronic resources in the University of Ilorin, Nigeria (UNILORIN). *Journal of Emerging Trends in Computing and Information Sciences*, 2(11), 554-562
- Das, R. K. & Jadab, A. (2017). Patterns of Information Seeking Behaviour of Law Students in Digital Environment: A study. *Journal of Information Science Theory and Practice*, 5(1), 15-25. <http://dx.doi.org/10.1633/JISTaP.2017.5.1.2>
- Ekenna, M. M. & Mabawonku, I. (2013). Information retrieval skills and use of library electronic resources by university undergraduate in Nigeria. *Information and Knowledge Management*, 3(9), 112-119.
- Knight, S.A. & Spink, A.H. (2008). Toward a web search information behaviour model. in A. Spink & M. Zimmer (Eds.) *Web Search: Multidisciplinary Perspectives*, Berlin, Springer, 209-234.
- Martzoukou, K. (2005). A review of Web information seeking research: considerations of method and foci of interest. *Information Research*, 10(2), 1-19.
- Natarajan, K., Suresh, B., Sivaraman, P. and Sevukan, R., 2010. Use and user perception of electronic resources in Annamalai University: a case study. *Annals of Library, and Information Studies*, 57(1), 59-64.
- Nwabueze, N. O. Emuchay, B. N, Ogaraku, D.N. (2022). Information search skills as predictors of library and information science students' use of online information resources in university of Benin, Edo State, Nigeria. *Journal of Applied Information Science and Technology*, 15(2), 30-36.
- Quadri, G. O. (2013). Influence of demographic factors on use of online library resources by undergraduate students in two private Nigerian university libraries. *Library Philosophy and Practice*, 976. Retrieved from <http://digitalcommons.unl.edu/libphilprac/976>

Publication of the European Centre for Research Training and Development -UK

Ranasinghe, P., Wickramasinghe, S.A., Pieris, W.R., Karunathilake, I. & Constantine, G.R., (2012). Computer literacy among first year medical students in a developing country: A cross sectional study. *BMC research notes*, 5(1),1-8.

Ruzegwa, M. & Msonde, S. (2021). University students' e-resource usage: predictors, problems and practical implications. *International Journal of Education and Development using Information and Communication Technology*, 17(2), 104-119.

Tella, A., Oyeniran, S. & Ibronke, E.S. (2021). Determinants of web search effectiveness from the perspective of library and information science students. *Regional Journal of Information and Knowledge Management*, 6(2), 36-53.