PROFICIENCY AS CORRELATES OF ELECTRONIC INFORMATION RESOURCES USAGE FOR RESEARCH AMONG POSTGRADUATE STUDENTS IN UNIVERSITIES IN NORTH-WEST, NIGERIA

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Abstract
The study examined the proficiency of postgraduate students as correlates of electronic information resources usage for research in universities in North-west, Nigeria. The study was guided by three research objectives, two research questions and one research hypothesis. The population of the study consisted of 26,531 postgraduate students in 12 universities in North-west, Nigeria. The study employed descriptive correlational research design. Multistage sampling procedure was used to select sample size of 530 postgraduate students. Structured questionnaire was used as an instrument for data collection. Out of 530 copies of structured questionnaire administered 499 copies were filled, returned and found to be usable. Data was I using descriptive and inferential statistics. The study revealed that the proficiency of the postgraduate students to electronic information resources usage for research is high with a weighted mean score of 2.97 and Std= 0.878. it was found that the extent of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria is low with a weighted mean score of 1.99 and Std=0.903. Hypothesis one tested showed that there is significant relationship between postgraduate students' proficiency level and the electronic information resources usage for research with ($r = 0.364$, $Df = 497$, $P<0.05$). The study concluded that postgraduate students in universities in North-West Nigeria have positive perceptions of electronic information resources, which significantly influence their use for research projects, theses and dissertations. Universities and libraries should sensitize postgraduate students about electronic resources, invest in ICT infrastructure, provide reliable internet access, maintain databases, and offer customized support services. Regular monitoring, evaluation, and expanding electronic resource collections can enhance electronic information resources usage for research.
Keyword: Proficiency, electronic information resources**,** usage, research**,** postgraduate students

5.2 Introduction

Advances in Information and Communication Technologies (ICTs) have significantly transformed the way information is gathered, stored, organized, accessed, and used. This has transformed the world into a global village, driven by information. Information is a key resource for organizations, libraries, and students, and good learning relies on adequate information. Information is being defined by Bawden and Robinson (2012) as "all facts, ideas, and creative works of the human intellect and imagination that have been communicated formally or informally in any form". Information and its usage are as old as man. Indeed without information, there cannot be communication (Madhusudhan, 2010; Okiki and Asiru, 2011). Information is a key resource and an essential input for all types of organizations. Libraries provide information through their resources and services. Hence Libraries, particularly university libraries are playing vital role in shaping a future generation of students by providing them Information that is crucial for nation's development.

The development of any nation is not possible until and unless the information is made available at the door steps of those who need it. Students as the largest chunk of library users need information in their daily life. More particularly Post-graduate students in universities need information and course materials for their all-round development which is obtained from the resources of the library. Over the centuries, print materials have been the primary source of information in universities. However, with the advent of ICT and electronic publishing, information now exists in electronic formats, leading to the proliferation of electronic information resources, including e-journals, e-books, online databases, and e-audio formats.

1.2 Statement of the Problem

In recent years, the landscape of research has undergone a profound transformation with the increasing reliance on electronic information resources. As universities in North-west, Nigeria strive to keep pace with the global advancements in research methodologies, it becomes imperative to investigate the proficiency levels of postgraduate students in utilizing electronic information resources for their research endeavors. Despite the growing availability and accessibility of electronic information resources, there exists a notable gap in understanding how postgraduate students in North-western Nigerian universities leverage these resources for their research pursuits. Therefore, this uncertainty prompted the researcher to the investigation of the proficiency as correlates of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria.

1.3   Aim and Objectives of the Study

The aim of the study is to investigate the proficiency as correlates of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria. The specific objectives of the study are to:

1.   ascertain the proficiency level of the postgraduate students to the electronic information resources usage for research in universities in North-west, Nigeria;

2.   find out the extent of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria;

3.   investigate if there is any relationship between postgraduate students' proficiency level and the electronic information resources usage for research in universities in North-west, Nigeria;

1.4   Research Questions

The following research questions guided the study:

1. what is the proficiency level of the postgraduate students to the electronic information resources usage for research in universities in North-west, Nigeria?

2. find out the extent of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria?

1.5 Research Hypothesis

The below null hypothesis was tested at 0.05 level of significance;

H_{01}.   There is no significant relationship between postgraduate students' proficiency level and the electronic information resources usage for research in universities in North-west, Nigeria.

2.1 Literature Review

The term or concept of proficiency has been highlighted by different scholars as follows: Abba and Adamu (2019) defined proficiency as the skills possessed by lecturers in operating and using Internet services and resources for their academic activities. Proficiency is the ability to use information and communication technologies to find, understand, evaluate, create, and communicate digital information.Adeleke and Awogbami (2022) opined proficiency as human competency that involves using one's own knowledge, skills, and abilities of various high-tech hardware and software, including from the wider sphere of ICT, to access information. This

refers to a set of skills or abilities needed for the use of technologies. In the context of this study, proficiency refers to the mastery, ability, or skillfulness of the postgraduate students to locate, identify, evaluate, 88tilizat, use, and communicate electronic information resources.

Amusan and Lawal (2020) assessed the information literacy level and media resource utilization among the secondary school students in Lagos State, Nigeria. Using a survey research design, questionnaire was used as the main instrument for data collection. The finding revealed that secondary school students in Lagos State, Nigeria have moderate information literacy skills. Abba and Adamu (2019) carried out a study on university lecturers' awareness and proficiency of Internet services and resources for academic activities. The study established that the level of university lecturers' proficiency on the use of Internet services and resources for academic activities was moderate. Hemamalini and Shobha (2020) in their study found that the students had the ability to identify different primary, secondary and tertiary sources of information with response. Ray-Ogbonna *et al.* (2022) investigated relationship between ICT competence and the use of digital library among postgraduate students. The result obtained revealed a significant relationship between Internet browsing competence with (R = .841); Electronic Database competence with (R = .713); Social media (LinkedIn and Pinterest) competence with (R = .890); and use of digital library.

On the use of electronic information resources for research, Oladokun and Adeoye (2022) investigated the utilization of digital information resources among undergraduate students. The findings show that there is a low level of digital resources utilization among the undergraduates. Siwach and Malik (2019) studied the use of electronic resources by science faculty and research scholars in five universities of North India. The results obtained from 668 respondents indicated that the usage was highest for e-journals in comparison to other e-resources.

5.2 Research Methodology

This study adopted a descriptive-correlational research design. The population was comprised of 26,531 postgraduate students in universities in north-west Nigeria. Multistage sampling was used for the study. Using the proportionate sampling technique, 530 postgraduate students were taken as the sample size for the study. The study used a self-designed, structured questionnaire for data collection, which was validated by experts and pilot tested. The overall reliability coefficient was found to be reliable. The researcher administered the questionnaire to the respondents at eleven universities, and the data was I using SPSS version 20.0. The research questions were I using descriptive statistics of frequency, percentage, mean, and standard deviation and inferential statistics using Pearson Product Moment Correlation (PPMC).

4.0 Results and Discussion

4.1 Research question one: What is the proficiency level of the postgraduate students to the electronic information resources usage for research in universities in North-west, Nigeria?

Table 1. Proficiency Level of the Postgraduate Students to the Electronic Information Resources Usage for Research

	Statements	VHP 4		HP 3		LP 2		VLP 1		N	X̄	SD	Decision
		Freq.	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)				
1	I have proficiency to locate electronic information resources for my research in the university library website and other portal.	183	(36.7)	188	(37.7)	96	(19.2)	32	(6.4)	499	3.04	0.902	High
2	I have proficiency to locate electronic information resources for my research in storage devices such CD-ROM, hard-drive, floppy disk, DVD, flash drive and memory card among others.	148	(29.7)	213	(42.7)	105	(21.0)	33	(6.6)	499	2.95	0.878	High
3	I am proficient to locate electronic information resources for my research in full text and bibliographic electronic databases.	142	(28.5)	218	(43.7)	117	(23.4)	22	(4.4)	499	2.96	0.833	High
4	I have proficiency to locate electronic information resources for my research via the use of Boolean operators, truncation, wildcard, keyword, author, tittle, ISBN, ISSN or advanced searching.	132	(26.5)	194	(38.9)	117	(23.4)	56	(11.2)	499	2.80	0.954	High
5	I have proficiency to identify and differentiate the primary, secondary and tertiary sources of information so as to use their content for my on-going research.	135	(27.1)	237	(47.5)	99	(19.8)	28	(5.6)	499	2.95	0.832	High
6	I have proficiency to identify the different formats of information sources that can be used for my research.	147	(29.5)	235	(47.1)	88	(17.6)	29	(5.8)	499	3.00	0.839	High
7	I have ability to identify the purpose and target audience of an information source to be used for research.	147	(29.5)	211	(42.3)	101	(20.2)	40	(8.0)	499	2.97	1.241	High
8	I have the proficiency to evaluate electronic information resources that might be useful for research via the criteria of authority and up-to-datedness.	155	(31.1)	211	(42.3)	100	(20.0)	33	(6.6)	499	2.97	0.881	High
9	I have the proficiency to determine the reliability and accuracy of electronic information resources that can be used for research.	144	(28.9)	220	(44.1)	104	(20.8)	31	(6.2)	499	2.95	0.863	High
10	I am proficient to determine the timeliness of electronic information resource that can be used for my research.	143	(28.7)	222	(44.5)	104	(20.8)	30	(6.0)	499	2.95	0.857	High
11	I have proficiency to 90tilization90 electronic information resources that can be used for research.	142	(28.5)	232	(46.5)	97	(19.4)	28	(5.6)	499	2.97	0.839	High
12	I am proficient to 90tilization electronic information resource that can be used for my research.	128	(25.7)	248	(49.7)	93	(18.6)	30	(6.0)	499	2.94	0.825	High
13	I have proficiency to compare and contrast electronic information resources to be used for research.	195	(39.1)	223	(44.7)	62	(12.4)	19	(3.8)	499	3.19	0.795	High
14	I am proficient to sequence electronic information resources that can be used for research.	137	(27.5)	242	(48.5)	95	(19.0)	25	(5.0)	499	2.98	0.816	High
15	I have the mastery to understand ethical, legal and social issues surrounding the use of electronic information resources for research.	144	(28.9)	206	(41.3)	115	(23.0)	34	(6.8)	499	2.92	0.887	High
16	I have proficiency to understand and identify legal issues such as intellectual property, copyright, right to privacy, censorship and freedom of information relating to use of electronic information resources for research.	147	(29.5)	216	(43.3)	102	(20.4)	34	(6.8)	499	2.95	0.878	High
17	I am proficient to acknowledge and document the use of electronic information resources for research by using an appropriate documentation style	143	(28.7)	240	(48.1)	96	(19.2)	20	(4.0)	499	3.01	0.800	High
18	I have proficiency to share content of my research with peers	190	(38.1)	184	(36.9)	99	(19.8)	26	(5.2)	499	3.07	0.884	High
19	I am proficient to communicate the findings of my research to international community.	154	(30.9)	195	(39.1)	108	(21.6)	42	(8.4)	499	2.92	0.926	High
20	I have competency to choose the best communication medium, format and style to publicise the findings of my research	162	(32.5)	224	(44.9)	89	(17.8)	24	(4.8)	499	3.05	0.833	High
	Weighted Mean										2.97	0.878	High

Source: Field survey (2023)

Key: VHP = Very Highly Proficient, HP = Highly Proficient, LP = Low Proficient, VLP = Very Low Proficient, N = Number of Questionnaire retrieved, x = Mean, Standard Deviation and Decision (Weighted Mean 2.50)

The result of the analysis from Table 1 showed that the proficiency level of the postgraduate students to the electronic information resources usage for research is high with a weighted mean score of 2.97 and Standard Deviation of 0.878. This could be due to the proficiency of the postgraduate students' to ability to locate, identify, evaluate, 91tilizat, use and communicate electronic information resources to be used for research. The finding corroborates with the findings of Amusan and Lawal (2020) who assessed the information literacy level and media resource utilization among the secondary school students in Lagos State, Nigeria. The finding revealed that secondary school students have high information literacy skills as the results showed that the respondents possessed high level of identification of information needs and information retrieval. Abba and Adamu (2019) carried out a study on university lecturers' awareness and proficiency of Internet services and resources for academic activities. The study established that the level of university lecturers' proficiency on the use of Internet services and resources for academic activities was moderate.

However, the finding is in contrast with the findings of Pelemo *et al.* (2020) who investigated library orientation, information literacy skills as correlates of scholarly research of postgraduate students. The study revealed that information literacy skills of postgraduate students are still low. Anyim (2018) carried out a study on assessment of ICT literacy skills of digital library users. The study revealed that the respondents have low level of requisite ICT literacy skills in the aspect of information search, program software, using CD-ROM to find information, database navigation and downloading files from databases.

4.2 Research question two: What is the extent of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria?

Table 2. Extent of Electronic Information Resources Usage for Research

	Statements	VHE 4		HE 3		LE 2		VLE 1		N	$\bar{X}$	SD	Decision
		Freq	(%)	Freq.	(%)	Freq.	(%)	Freq.	(%)				
1	I use e-journals to find current articles that will assist me in my project, thesis, and dissertation writing or research work.	9	(1.8)	40	(8.0)	200	(40.1)	250	(50.1)	499	1.62	0.711	Low extent
2	I consult e-books to get relevant information for writing the background to the study of my research.	24	(4.8)	66	(13.2)	211	(42.3)	198	(39.7)	499	1.80	0.769	Low extent
3	I use electronic databases for getting information needed and desired that match my writing of thesis and dissertation	62	(12.5)	152	(30.5)	136	(27.3)	149	(29.9)	499	1.83	0.833	Low extent
4	I use electronic magazines for getting information that is very current and up-to- date for my research.	36	(7.2)	116	(23.2)	175	(35.1)	172	(34.5)	499	2.25	1.018	Low extent
5	I use e-theses and dissertations to identify gap, new research areas and determine method for my on-going research.	36	(7.2)	108	(21.6)	192	(38.5)	163	(32.7)	499	2.03	0.930	Low extent
6	I browse online public access catalogue to search and retrieve bibliographic records of electronic information resources used for my research	34	(6.8)	89	(17.8)	192	(39.3)	180	(36.1)	499	1.95	0.900	Low extent
7	I use electronic reference resources to find information about my topics of research and locate facts.	26	(5.2)	92	(18.4)	179	(35.9)	202	(40.5)	499	1.88	0.886	Low extent
8	I explore e-newspapers to obtain very current information needed for my research.	87	(17.4)	151	(30.3)	144	(28.9)	117	(23.4)	499	2.42	1.030	Low extent
9	I use any other electronic information resources at my disposal in the university library for my research purposes.	71	(14.2)	102	(20.4)	146	(29.3)	180	(36.1)	499	2.13	1.058	Low extent
	Weighted Mean										**1.99**	0.903	Low extent

Source: Field survey (2023)
Key: VHE = very High extent, HE = High Extent, LE = Low Extent, VLE = Very Low Extent, N= Number of Questionnaire Retrieved, X = mean, Standard Deviation and Decision. (Weighted mean = 2.50)

The result of the analysis on Table 2 showed that the extent of electronic information resources usage for research among postgraduate students in universities in North-west, Nigeria is low with a weighted mean score of 1.99 and Standard Deviation of 0.903. This could be due to lack of adequate computers, lack of awareness about availability of e-resources in the university libraries, inability to print from the library, low bandwidth and slow Internet connectivity. The findings are in line with the findings of Onuoha *et al.* (2020) who investigated the availability and utilization of e-resources in university libraries for effective research output by undergraduates of Social Studies in south-east, Nigeria. The results showed that students use e-library resources but not to the maximum because they lack ICT skills and do encounter problems while using them. It is in consonance with the findings of Ojobor *et al.* (2024), Odelami *et al.* (2023), Sritharan (2023), Hotsonyame and Okyere (2023), Adeleke and Nwalo (2017) who found low level of usage of electronic information resources. On the other hand, the findings are in contrast with the findings of Ternenge and Kashimana (2019) who reported that e-books, e-journals, CD-Rom databases, e-newspapers, and e-research reports were utilised for research by students in Francis Sulemanu Idachaba Library to a great extent.

In the same vein, Siwach and Malik (2019) studied the use of electronic resources by science faculty and research scholars in five universities of North India. The results obtained from 668 respondents indicated that the usage was highest for e-journals. Bamigboye *et al.* (2018) carried out a related study and survey method was employed in conducting the research. The study found that academic staff frequently use e-resources for their research interest and also agreed that e-resources contributed to their research output.

4.3 Hypothesis one

H$_{O1}$: There is no significant relationship between proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria.

To test the hypothesis and analyze the data, Pearson's Product Moment Correlation (PPMC) was used. A correlation test was carried out by associating both proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria. The result of the analysis is presented in Table 3.

Table 3. Relationship between Proficiency and the Electronic Information Resources Usage

Variables	N	M	SD	Df	R	p-value
Proficiency	499	59.60	10.1			
Electronic information resources usage for research	499	18.42	4.40	497	0.364	0.001

(r = 0.364, Df = 497, P<0.05)

The result from table 3 shows that there is a significant relationship between proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria with (r = 0.364, Df = 497, P<0.05). Therefore, the null hypothesis which states that there is no significant relationship between proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria was rejected. This indicates that there is significant relationship between the proficiency level of the postgraduate students and the electronic information resources usage for research in universities in North-west, Nigeria. This could be due to the postgraduate students' proficiency to locate, identify, evaluate, organize, use and share the electronic information resources to be used for research. This finding is similar to the findings of

Ray-Ogbonna *et al.* (2022) examined relationship between ICT competence and the use of digital library by postgraduate students of Ignatius Ajuru University of Education (IAUE) in Rivers State, Nigeria. The study adopted a Correlation design. The result obtained revealed a significant relationship between internet browsing competence and use of digital library, the strength of relationship was (R = .841). Similarly, Afolabi *et al.* (2022) reported the information literacy skills, self-efficacy and use of information resources by secondary school teachers in selected secondary schools in Ijebu ode local government, Ogun state. Findings revealed that the major information literacy skills possessed by teachers are using electronic information resources, evaluating WWW sources and using Internet search tools (such as search engines, directories) to high extent. Further, there is significant relationship between information literacy skills and use of information resources among teachers.

The finding is in contrast with the findings of Eravwoke (2021) investigated psychological factors, digital literacy skills and use of electronic information resources by postgraduate students in the faculty of education, Delta State University, Abraka. The findings of the study revealed that: Postgraduate students makes use of all electronic information resources with majority of them using a combination of different electronic information resources, postgraduate students possess the digital literacy skills, and lastly, no significant relationship was found between postgraduate students digital literacy skills and their usage of electronic information resource.

5.0 Conclusion and Recommendations

5.1 Conclusion

In conclusion, it is evident that postgraduate students in universities in North-West Nigeria exhibit a high proficiency level in the usage of electronic information resources for research purposes. However, despite their proficiency, the extent of actual usage of these resources remains low among this demographic. This suggests a gap between proficiency and practical application, indicating a potential area for intervention and improvement in the 96tilization of electronic information resources for research. Furthermore, the significant relationship observed between proficiency levels and usage underscores the importance of enhancing skills and providing support mechanisms to bridge this gap effectively.

5.2 Recommendations

The study suggests addressing gaps in electronic information resource usage among postgraduate students in Nigeria's universities. It recommends enhancing training programs, promoting awareness campaigns, providing accessible support services, integrating electronic resources into the curriculum, fostering collaborative learning environments, and regularly evaluating and updating resources. Training should cover database searching techniques, information evaluation skills, and effective online library usage. Awareness campaigns should emphasize the importance of staying updated with digital resources and encourage active engagement with online databases. Accessible support services should be established to help students overcome challenges.

References

Abba, T. & Adamu, L. G. A. (2019). University lecturers' level of awareness and proficiency of Internet services and resources for academic activities in Adamawa State, Nigeria. *Library Philosophy and Practice (e-journal)2615.* Retrieved from https://digitalcommons.unl.edu/libphilprac/2615.

Adeleke, D.S. & Nwalo, K.I (2017). Availability, Use and Constraints to use of electronic information resources by postgraduate students at the University of Ibadan. *International Journal of Knowledge Content Development and Technology,* 7(4), 51-69. Retrieved from http://ijkcdt.net/xml/12712/12712.pdf

Adeleke, R. & Awogbami, P. A. (2022) Information Literacy as Correlates of Engineering Undergraduates' Use of Electronic Resources in Three Universities in Osun State, Nigeria. *Library Philosophy and Practice (e-journal). 7307.* Retrieved from https://digitalcommons.unl.edu/libphilprac/7307

Afolabi, O. E., Afolabi, O. E. & Aragbaye, M. O. (2022). Information Literacy Skills, Teachers' Self-Efficacy and Use of Information Resources by Secondary School Teachers in Selected Secondary Schools in Ijebu Ode Local Government, Ogun State. *Library Philosophy and Practice (e-journal).* 7001. Retrieved from https://digitalcommons.unl.edu/libphilprac/7001

Amusan, B. & Lawal, O. W. (2020). Information literacy skills and media resource utilisation among secondary school students in Lagos State, Nigeria. *Library Philosophy and Practice (e-journal)4109.* Retrieved from https://digitalcommons.unl.edu/libphilprac/4109

Anyim, W. O. (2018). Assessment of ICT literacy skills of digital library users and staff in Salem University Lokoja, Kogi.*Library Philosophy and Practice (e-journal),* 1801. Retrieved from https://digitalcommons.unl.edu/libphilprac/1801.

Bamigboye, O. B., Odunlade, R. O., Agboola, I. O. & Emmanuel, S. O. (2018). Electronic resources as a panacea for research output of academic staff: A case study of Nigerian University. *Journal of Library and Information Sciences, 6(1), 32-36.*

Daramola, C. F. (2016). Perception and utilization of electronic resources by undergraduate students: The case of the Federal University of Technology Library, Akure. *American Journal of Educational Research*, *4*(5), 366-370.

Eravwoke, E. (2021). Psychological Factors, Digital Literacy Skills and Use of Electronic Information Resource by Postgraduate Students of Delta State University, Abraka. *Library Philosophy and Practice (e-journal), 6519.* Retrieved from https://digitalcommons.unl.edu/libphilprac/6519

Hemamalini, H. C. & Shobha, U. (2020). Information literacy competencies among undergraduate students of Mysore City. *Library Philosophy and Practice (e-journal)*. Retrieved from http://digitalcommons.unl.edu/libphilprac/

Hotsonyame, G. N. & Okyere, S. (2023). Access and Use of Electronic Resources at the University of Health and Allied Sciences' Library: Undergraduate Students' Perspective. *Library Philosophy and Practice (e-journal). 7867.* Retrieved from https://digitalcommons.unl.edu/libphilprac/7867.

Madhusudhan, M. (2010). Use of electronic resources by research scholars of Kurukshetra University. The electronic library, 28(4), 492-506.

Odelami, B.; Folorunso, O.; and Igbinovia, M. O., (2023). Perception of External Control, Effort Expectancy and Use of Electronic Information Resources by Undergraduates in Selected Universities in Nigeria. *Library Philosophy and Practice (e-journal). 7792.* Retrieved from http://digitalcommons.unl.edu/libphilprac/7792.

Okiki, O. C., & Asiru, S. A. (2011). Use of electronic information sources by postgraduate students in Nigeria: Influencing factors. Retrieved from http://unllib.unl.edu/ LPP/okiki-asiru.htm

Oladokun, T. A. & Adeoye, A. A. (2022). Utilization of Digital Information Resources by Undergraduates at Lead City University, Ibadan Nigeria. *Library Philosophy and Practice (ejournal). 6900.* Retrieved from https://digitalcommons.unl.edu/libphilprac/6900

Pelemo, G. D., Onanuga, A. O., Ilori, O. O. & Ugbala, C. P. (2020). Library orientation and information literacy skills as correlate of scholarly research of postgraduate students in Federal University of Agriculture, Abeokuta. *Library Philosophy and Practice (e-journal).4059.* Retrieved from https://digitalcommons.unl.edu/libphilprac/4059

Ray-Ogbonna, K. K., Wiche, H I. & Okwu, E. (2022). ICT Competence and Use of Digital Library by Postgraduate Students of Ignatius Ajuru University of Education Rumuolumeni, Port Harcourt, Rivers State. *Library Philosophy and Practice (e-journal).* 7422. Retrieved from https://digitalcommons.unl.edu/libphilprac/7422

Siwach, A. K. & Malik, S. K. (2019).Use of Electronic Resources by Science Faculty and Researchers in Selected North Indian Universities. *Library Philosophy and Practice (e-journal).* 2506. Retrieved from https://digitalcommons.unl.edu/libphilprac/2506.

Sritharan, T. (2023). Case study of Usage and User satisfaction of Electronic Resources among the Academic Staff Members: special reference to subscribed electronic resources. *Library Philosophy and Practice (e-journal). 7862.* Retrieved from https://digitalcommons.unl.edu/libphilprac/7862.