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Impact of ICT Training on Usage of Online Resources among Undergraduates of Library and Information Science, Delta State University, Abraka

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Abstract

The study was on Impact of ICT Training on Usage of Online Resources among Undergraduates of Library and Information Science, Delta State University, Abraka. Three research questions and objectives were developed in the study. The study is made up of the population of 334 which consisted undergraduate library and information science students. The sample for the study is 181 using a random sampling technique. A structured questionnaire was administered and 162 were retrieved from the respondents. Retrieved questionnaire was analysed using mean with a criterion mean of 2.50. It was found that the frequency of utilization of online library resources was found to be low, the extent of ICT training provided for students was generally low and the study revealed that ICT training have a strong positive influence on usage of online resources. Therefore the study recommends that ICT acquisition skills and practical should be embedded in the curriculum to enhance competence in frequent usage of online library resources.

Keyword: ICT, Training, ICT Training, Usage, Online Resources.

1. Introduction

In today's academic landscape, the usage of online library resources occupies a pivotal role in enhancing students' educational pursuits. As noted by Otunla and Amuda (2018), this development of online resource has been facilitated by the rapid advancement of technology, which has fundamentally transformed the manner in which information is accessed, stored, and disseminated, particularly within the discipline of Library and Information Science (LIS). Igere (2020) also noted that been technologically inclined for easy access to information resources irrespective of location is the only way to be in tune in this modern world. According to Adeniran (2017), online LIS resources refer to web based platforms and tools designed to support learning, research, and professional practice in the field. These encompass digital libraries, scholarly databases, eBooks, e-Journals, open access repositories, and multimedia applications, offering comprehensive access to materials. Also, Jamogha, Jamogha and Godwin (2019) noted that online resources refer to digital tools, platforms, and databases that provide access to information and materials relevant to the LIS field. These resources include e-journals, e-books, online catalogs, open access repositories, research databases, and specialized LIS websites. The utilization of these online information resources has to do with effectiveness and efficiency in the use of digital or electronic materials to access, retrieve, analyze, and apply information for various purposes. The description of

Tariq and Zia (2014) in Faga, (2024) on utilization of electronic information resources was that, it is the use of electronic information resources with full extent for getting needed information through internet. In other words, these online resources are gotten as needed by users from the internet. They are used to support academic and professional activities such as research, teaching, and professional development. Alabi (2020) stated that online library resources are vital for students as they provide quick and convenient access to a vast array of academic materials, including e-books, journals, and research databases. Olorunfemi and Ipadeola (2021) added that online library resources not only enhance students' academic performance but also promote independent learning, critical thinking, and problem-solving skills. Online library resources have revolutionised academic research by providing instantaneous and wide-ranging access to scholarly materials.

Despite the promises of online information resources, it has been revealed that there are under utilization of online resources by students as found by Oyedapo and Ojo (2013) in Faga (2014) at Obafemi Awolowo University Nigeria. On the contrary, it was found by Jogan (2015) in Akinbo and omideyi (2022) that the use and impact of electronic resources in Delhi was on the increase. Some other challenges that hinder the effective utilization of online resources as noted by Dlamini and Tsabedze, (2025) is the inherent complexity and unfamiliarity of many academic databases. Users are often required to grasp advanced search methodologies such as Boolean operators, filters, and controlled vocabularies to retrieve relevant information. Without proficiency, searches frequently yield either an overwhelming surplus or a dearth of pertinent results, thereby complicating and prolonging the research process. Information overload is another pervasive issue affecting the use of online information resources. Agboke and Oladokun (2024) contended that the challenge of assessing the credibility of online resources is further compounded by the proliferation of open-access content. There are also technical and navigational difficulties associated with digital libraries. Users are often faced with obstacles such as complex login protocols, subscription-based access limitations, inconsistent formatting standards, and compatibility issues across devices and software platforms (Ngeme et al., 2023). The students' competencies on how to access these online information resources might be of necessity. In most cases, competencies come through learning known as ICT training.

Adeniran (2017) described ICT training for undergraduates as structured educational programs designed to equip students with essential skills and knowledge in Information and Communication Technology. These programs focus on teaching undergraduates how to use digital tools, software applications, and online platforms effectively for academic, professional, and personal development. According to Osinulu (2020), ICT training serves as a foundation that enables students to develop the requisite skills for accessing, evaluating, and using information effectively. This training goes beyond the acquisition of basic computing skills, encompassing the ability to navigate online platforms, retrieve relevant academic resources, and employ digital tools for research and learning. When individuals are well trained on the use of ICTS, it may influence access to online information resources.

According to Omachonu and Akanya (2019) ICT training of undergraduates educate them on how to effectively use information and communication technologies for learning, research, and communication. It helps students to operate computers, use software applications, access digital resources, and communicate via digital platforms. The goal is to enhance their digital competence, improve academic performance, and prepare them for technology-oriented careers. This training may be integrated into the curriculum or offered through specialized workshops, helping students to navigate digital environments confidently and responsibly in

both academic and real-world settings (Apuke & Iyendo, 2018). In other words, students are taught how to make use of ICT and its facilities to ease access to information resources. Dlamini and Tsabedze (2025) asserted that for LIS students, this training is particularly significant as it equips them with the skills needed to manage, organize, and disseminate information effectively. The relationship between ICT training and the usage of online library resources underscores the importance of a comprehensive approach to digital literacy in higher education. By integrating ICT training into the curriculum, educational institutions can empower students to become proficient users of technology, thereby enhancing their academic and professional capabilities. The impact of ICT training on the usage of online library resources is multifaceted. On one hand, it facilitates access to a wealth of academic materials, enabling students to stay updated with the latest developments in their field. On the other hand, it encourages the development of lifelong learning skills, which are essential for success in the information-driven society of the 21st century. According to Faga and Ihuman (2024), students who receive adequate ICT training are more likely to exhibit a proactive approach to learning, characterized by the ability to identify, locate, and utilize relevant information resources. This proactive stance not only enhances academic performance but also prepares students for the demands of the professional world. Despite the importance of online information resources in the life of students, the reason students still find it difficult to access these online resources has become something of worry hence the study to determine if ICT training would impact effective use of online information resources.

2. Objectives of the Study

The specific objectives of this study are:

1. To determine the frequency of utilization of online resources by undergraduate students of Library and Information Science Delta State University, Abraka.
2. To assess the extent of ICT training provided to undergraduate students of Library and Information Science at Delta State University, Abraka.
3. To examine the influence of ICT training on use of online library resources.

3. Research Questions

The following research questions guided this study:

1. How frequently do undergraduate students of Library and Information Science utilize online resources for academic purposes at Delta State University, Abraka?
2. To what extent is ICT training provided to undergraduate students of Library and Information Science at Delta State University, Abraka?
3. What is the influence of ICT training on use of online library resources?

4. Review of Related Literature

Online library resources represent an important digital platform which holds information for contemporary academic pursuits. These digital platforms encompass a diverse array of scholarly resources which includes peer-reviewed journals, e-books, academic theses, research articles, and multimedia instructional content. The importance of these online sources cannot be overemphasized in academic success as they provide students with immediate access to authoritative, current, and credible information critical for fulfilling assignments, conducting research, and participating meaningfully in classroom discussions. Arowolo et al., (2022), noted that universities around the globe increasingly invest substantial

resources in digital libraries and subscriptions to renowned academic databases such as JSTOR, Science Direct, and EBSCOhost to ensure that students are equipped with cutting-edge learning materials. In the age of rapid technological advancement, these resources offer a dimension of convenience and accessibility unparalleled in traditional library systems. Nkoyo and Egbe (2016) emphasize that the infusion of information and communication technology into higher education has transformed knowledge acquisition by granting students access to vast digital repositories at their fingertips. Nonetheless, the degree to which undergraduate students utilize these online academic tools remains uneven, with usage patterns varying widely across demographic and institutional contexts. The frequency of usage can vary from daily to weekly, especially during periods of heightened academic activity, including the preparation of assignments, seminars, or examinations. Conversely, some students access these resources sporadically, only a few times per semester. Ibrahim and Lawal (2022) contend that attendance at information literacy and library orientation programs significantly correlates with more frequent use, underscoring the importance of institutional efforts to enhance user awareness and skills. Mwalukasa (2022) further noted that academic environments fostering research-oriented learning cultures tend to experience higher frequencies of resource utilization. Okeuhie et al. (2021) explored the utilization patterns of library resources among undergraduate students of Library and Information Science at Michael Okpara University of Agriculture, Umudike. Results demonstrated that students had low usage on online resources and they frequently accessed traditional library materials such as books, journals, reference materials, and indexes or abstracts. Similarly, Okere and Mabawonku (2023) investigated internet and library database usage among undergraduates at Fountain University, Osogbo, Osun State, the study found that electronic resources were the most widely used library databases, with usage frequencies ranging from monthly to several times daily. Oshinaike et al. (2022) also addressed the issue of accessibility of electronic information resources by undergraduates in federal universities in North Central Nigeria and it was found that there was a low level of accessibility and utilization of electronic information resources. Bankole et al. (2024) study on the habits of undergraduates in Kwara State universities revealed that students frequently accessed online resources. A sustained engagement with current scholarly materials ensures that students remain abreast of the latest developments and trends in their respective fields, making their academic contributions more relevant and impactful. In contrast, students who rarely consult online resources often encounter challenges related to the depth and currency of their knowledge, resulting in superficial or outdated content and weaker arguments in their academic submissions (Dlamini & Tsabedze, 2025). Universities that actively promote and facilitate frequent use of digital libraries tend to witness enhanced academic outcomes and foster a stronger research culture. Thus, encouraging undergraduate students to develop consistent habits of utilizing online academic resources is essential and this can be done by creating platforms for training. Ahmed et al. (2019) emphasized that the digitization of education is no longer optional but rather an imperative for national development.

Adedokun and Babalola (2018) define ICT training for undergraduate students as structured instructional efforts that empower students with the ability to efficiently use digital tools, encompassing computer literacy, online communication, data analysis software, and educational platforms. The goal of such training is not only to enhance academic performance but also to cultivate digital fluency and employment readiness in a technology-driven global workforce. According to Alade (2024), ICT training provided to undergraduates spans both formal and informal instruction and includes the use of word processors, spreadsheets, email, multimedia tools, and educational software. These tools empower learners to engage deeply with academic content, streamline communication, and participate in digitally mediated

knowledge exchange. Israel and Edesiriu (2017) described the extent of ICT training as the breadth and depth of exposure students receive to digital skills throughout their university programs. This comprises the frequency of training, the sophistication of tools introduced, and the overall integration of ICT into the academic curriculum. David-West and Akameze (2022) added that assessing the extent of ICT training also involves evaluating how practical sessions, digital resources, and instructor guidance coalesce to develop digital competence. When comprehensively applied, such training becomes instrumental in producing technologically adept graduates ready to thrive in complex and competitive environments. Simon and Ogom (2015) conducted a study titled "Evaluation of the Extent of Utilization of Electronic Library Resources and Services by Undergraduate Students in University of Calabar Library, Calabar – Nigeria, The findings indicated that the extent of utilization by undergraduates was moderate. Oguguo et al. (2020) also reported that there is a low extent of training on ICT which is as a result of limited access to instructors and ICT infrastructure across Nigerian universities. On the other hand, Tunde et al. (2024) found that there was a high ICT literacy among LIS students in Kwara State. This disparity could be as a result of stronger institutional investment and better infrastructure. A great extent of access to information resources is usually seen among those who are knowledgeable on how to navigate these technologies.

According to Folorunso and Ohwofasa (2021) that ICT training is not merely about basic computer skills but it encompasses digital literacy competencies that enable students to navigate complex digital environments. This training provides essential skills such as how to proficiently search academic databases, critically evaluate the reliability of online sources, and manage digital information efficiently. Without such instruction, many students may struggle to locate pertinent information or fall prey to using unreliable or irrelevant content, which can severely undermine their academic performance. Thus, ICT training serves as a crucial bridge connecting students to the vast academic knowledge repositories housed within digital libraries. Jamogha et al. (2019) conducted a study investigating the influence of ICT skills on the utilization of library information resources among undergraduates and found that high levels of ICT proficiency has a significant positive correlation on resource utilization, thereby leading to better engagement with digital academic materials. Babalola (2019) also found that ICT competence improved e-resource use at Covenant University, but infrastructural limitations constrained the full impact. On the contrary, Udoh et al. (2020) found that the actual use of electronic resources iss not proportionate to the skills of the students.

5. Methodology

The study adopted a descriptive design of the co-relational type. This design is appropriate for examining the relationship between variables. The population of the study is 334 students which consisted 200l to 400l undergraduate students of library and information science. The sample size for the study is 181 undergraduates, representing approximately 54% of the total population. This simple random sampling technique was used in alignment with Krejcie and Morgan's (1970) sample size table, which recommends a sample size of 181 for a population of 334. Questionnaire was used to extract information from the respondents. The questionnaire was structured into four sections of four Likert scales, administered to the respondents and 162 questionnaire were retrieved. The retrieved questionnaire was analysed using descriptive and influential statistics such as mean with a criterion mean of 2.50.

6. Results

Results were presented and findings discussed in this section.

Research Question One: How frequently do undergraduate students of Library and Information Science utilize online library and information science resources for academic purposes?

Table - 1: Frequency of Usage of Online Library and Information Science Resources

Item	Often	Sometimes	Rarely	Never	($\bar{x}$)
I use online library databases for academic research.	22	34	58	48	2.19
I access electronic journals and e-books through the university library portal.	19	31	56	56	2.08
I utilize online theses and dissertations for assignments and projects.	21	30	57	54	2.11
I participate in online academic forums or discussion groups.	17	29	60	56	2.04
I download research articles from online repositories for study purposes.	20	33	59	50	2.14
I use digital reference tools such as online encyclopedias and dictionaries.	24	32	54	52	2.17
I frequently use e-resources recommended by my lecturers or librarians.	18	28	62	54	2.06
I search for information using academic search engines like Google Scholar.	26	35	52	49	2.23
I regularly update myself on new digital resources available in the library.	16	27	63	56	2.02
I use online citation tools to help with referencing and bibliography.	21	31	58	52	2.13
Average Mean					**2.12**
Criterion Mean					**2.50**

Data in Table 1 presents the frequency with which undergraduate students of Library and Information Science utilize online library and information science resources for academic purposes. The individual mean scores for all items range from 2.02 to 2.23, with an overall average mean of 2.12, which falls below the criterion mean of 2.50. Specifically, the students' use of online library databases ($\bar{x}$ = 2.19), access to electronic journals and e-books ($\bar{x}$ = 2.08), utilization of online theses and dissertations ($\bar{x}$ = 2.11), participation in academic forums ($\bar{x}$ = 2.04), and other items assessed were all rated below the criterion. This indicates that the frequency of online library and information science resource usage among the undergraduates is low. this finding is in relation to Okeuhie et al. (2021) who found that the students of Michael Okpara University of Agriculture had low frequency online resource usage. Also, Oshinaike et al. (2022) assessed accessibility of electronic information resources by undergraduates in federal universities in North Central Nigeria and it revealed a low level of utilization of electronic information resource. Conversely, Bankole et al. (2024) found frequent utilization of online resources among undergraduates in Kwara State universities

Research Question Two: To what extent is ICT training provided to undergraduate students of Library and Information Science at Delta State University, Abraka?

Table - 2: Extent of ICT Training Provided to Undergraduates

Item	VGE	GE	LE	VLE	(x̄)
I have received formal ICT training in computer use.	18	30	58	56	2.06
I have been trained on how to search online library databases effectively.	20	33	55	54	2.12
I received training on the use of digital library management systems.	22	28	60	52	2.12
I received training on how to evaluate digital information sources.	19	31	59	53	2.10
ICT training covers the use of office software relevant to academic work.	34	36	55	37	2.41
Training includes use of cloud storage and online collaboration tools.	21	29	61	51	2.12
I have been taught how to access e-books and online journals.	25	34	54	49	2.22
I have been taught how to troubleshoot basic computer and network issues.	17	27	64	54	2.04
I was trained on the use of reference management software (e.g., Zotero, Mendeley).	16	30	63	53	2.06
ICT training includes instruction on digital copyright and ethical use of resources.	23	32	58	49	2.18
Average Mean					**2.14**
Criterion Mean					**2.50**

Data in Table 2 provides insight into the extent of ICT training provided to undergraduate students of Library and Information Science at Delta State University, Abraka. The table shows that most items scored below the criterion mean of 2.50, with individual mean scores ranging from 2.04 to 2.41, and an overall average mean of 2.14. Specifically, training on formal computer use ($\bar{x}$ = 2.06), searching online library databases ($\bar{x}$ = 2.12), use of digital library management systems ($\bar{x}$ = 2.12), evaluation of digital information sources ($\bar{x}$ = 2.10), office software ($\bar{x}$ = 2.41), and other items assessed rated below the criterion. This indicates that the extent of ICT training provided to undergraduates is low. This finding is in consonance with Oguguo et al. (2020) who reported that there is a low extent of training on ICT which is due to limited access to instructors and ICT infrastructure across Nigerian universities. On the other hand, Tunde et al. (2024) found that there was a high ICT literacy among LIS students in Kwara State. This disparity could be as a result of stronger institutional investment and better infrastructure.

Research Question Three: What is the influence of ICT training on use of online library resources?

Table - 3: Influence of ICT Training on Use of Online Library Resources

Item	VHE	HE	LE	VLE	(x̄)
ICT training can improve ability to locate relevant online resources.	78	62	15	7	3.30
Students will be confident in using online library databases because of ICT training.	74	68	13	7	3.29
ICT skills can help individual evaluate the	66	71	18	7	3.21

credibility of digital information sources.					
ICT training enables students to download and save academic materials efficiently.	71	65	18	8	3.23
Academic performance will improve due to ICT training	A	67	19	6	3.24
ICT training will make students more independent in conducting academic research.	82	60	14	6	3.35
Students can easily use digital reference management tools after ICT training.	63	72	19	8	3.17
ICT skills will enable students to collaborate with peers using online platforms.	68	65	20	9	3.19
ICT training will enhance students ability to access updated academic materials.	62	61	29	10	3.08
ICT competence will boosts students confidence in using various online academic resources.	76	69	12	5	3.33
			Average Mean		**3.24**
			Criterion Mean		**2.50**

Data in Table 3 shows the influence of ICT training on undergraduate students of Library and Information Science in using online library resources. The table reveals that all items scored above the criterion mean of 2.50, with individual mean scores ranging from 3.08 to 3.35 and an overall average mean of 3.24. The findings indicate that ICT training has a strong and positive influence on students' ability to effectively access and utilize online library and information resources. This finding is in line with Babalola (2019) who found that ICT competence improved e-resource use at Covenant University, but infrastructural limitations constrained the full impact. Similarly, Jamogha et al. (2019) found that the influence of ICT skills on the utilization of library resources among undergraduates was high indicating a positive correlation on resource utilization. On the contrary, Udoh et al. (2020) reported that the actual use of electronic resources was not proportionate to the skills of the students.

7. Conclusion

The findings of this study provide a valuable insights into the role of ICT training in shaping the academic experiences of undergraduate students in online usage. The results revealed that the frequency of utilization of online library resources was found to be low, indicating that students are not consistently engaging with available digital platforms, databases, and academic tools. The study also found that the extent of ICT training provided to students was generally low, with limited exposure to essential digital skills such as database searching, reference management, and ethical use of information resources. it was equally found that ICT training exerts a strong positive influence on students' competence on usage of online resources.

8. Recommendations

Based on the finding from the study, the study recommends that:

i. Management should provide reliable internet access, functional ICT laboratories, and updated digital facilities to encourage consistent engagement with online resources.

ii. The university should intensify ICT training for LIS students, focusing on practical modules such as advanced database searching, reference management tools, and digital copyright awareness.
iii. ICT skill acquisition together with practical engagement should be embedded into LIS courses to ensure sustained training and continuous exposure throughout the program.

References

1. Adeniran, P.O. (2017). *Information literacy skills, computer self-efficacy and e-resources use by postgraduate students in private university libraries in South-west, Nigeria*. [Master's thesis, Babcock University]. Department of Information Resources Management.
2. Agboke, A.L., & Oladokun, B.D. (2024). Emerging technologies in academic libraries: Prospects and challenges in Nigeria. *Journal of Library and Information Science, 26*(2), 1-11.
3. Akinbo O.T. & Omideyi D.A. (2022). Levels of awareness and use of electronic information resources by Pharmacy undergraduate students at the university of Ibadan, Nigeria. *International Journal of Education, Library and Information Communication Technology. 1*(1).
4. Alabi, S.O. (2020). ICT skills and use of electronic resources by undergraduates in selected faith-based private university libraries in South-West, Nigeria. *The Information Technologist: An International Journal of Information and Communication Technology (ICT), 17*(2), 163-177.
5. Apuke, O.D., & Iyendo, T.O. (2018). University students' usage of the internet resources for research and learning: Forms of access and perceptions of utility. *Heliyon, 4*, e01052. https://doi.org/10.1016/j.heliyon.2018.e01052
6. Babalola, O. (2019). Influence of ICT skills on the utilization of electronic information resources (EIRs) among undergraduates of Covenant University, Ota, Ogun State, South West Nigeria. *Library Philosophy and Practice*, 2239. https://digitalcommons.unl.edu/libphilprac/2239
7. Bankole, Q.A., Adelodun, A.F., Sulaiman, K.G., & Saliu, A. (2024). Accessibility, utilisation and perceived usefulness of library resources on the study habits of undergraduates in Kwara State universities. *Inkunabula: JurnalIlmuPerpustakaan dan Informasi*, *5*(1), 1-15.
8. Dlamini, T., & Tsabedze, V. (2025). Empowering student success: Exploring the awareness and utilization of library electronic resources at the University of Eswatini. *The International Information & Library Review*, 1-11. https://doi.org/10.1080/10572317.2025.2453806
9. Faga, A., & Ihuman, R.Y. (2024). Awareness and use of electronic information resources by undergraduates in public university libraries in Nigeria. *The Catalyst Journal of Library and Information Literacy*, *3*(1), 1-13.
10. Ibrahim, N., & Lawal, M.M. (2022). Accessibility and utilization of information resources by academic staff of Federal University Gusau amid telecommunication shutdown in Zamfara State. *Library Philosophy and Practice (e-journal)*, 7440.
11. Igere, M.A. (2020). Users and Digital Information Resources at Benson Idahosa University Library, Benin City. *ATBU Journal of Science Technology and Education, Nigeria. 8*(4), 37-43.
12. Jamogha, O., Jamogha, E., & Godwin, L.S. (2010). Influence of ICT skills on library information resources utilization by undergraduates in two universities in South West,

Nigeria. *Information Impact: Journal of Information and Knowledge Management*, *10*(2).
13. Mwalukasa, N. (2022). Use of library information resources by undergraduate students at Sokoine University of Agriculture, Tanzania. *Library Philosophy and Practice (e-journal)*, 7541. https://digitalcommons.unl.edu/libphilprac/7541
14. Ngeme, F., Ajewole, G., &Akinola, S.A. (2023). University students' utilization of academic library: A case study of Joseph Ayo Babalola University Ikeji-Arakeji, Osun State Nigeria. *Library Philosophy and Practice (e-journal)*, 7294. https://digitalcommons.unl.edu/libphilprac/7294
15. Oguguo, B.C., Okeke, A.O., Dave-Ugwu, P.O., Ocheni, C.A., Ugorji, C.O., Nwoji, I.H. N., & Ike, I.C. (2020). Assessment of ICT Skills Relevant for Effective Learning Possessed by Undergraduate Students at University of Nigeria. *International Journal of Higher Education*, *9*(4), 206-215.
16. Okeuhie, N., Udo, A., & Udo, A. (2021). Utilization of library resources by undergraduate students of Library and Information Science in Michael Okpara University of Agriculture, Umudike. *International Journal of Academic Library and Information Science*, 9(11), 515-525.
17. Okere, O.O., &Mabawonku, I. (2023). Internet and library database use among undergraduate students of Fountain University, Osogbo, Osun State, Nigeria. *International Journal of Information and Communication Sciences*, *8*(2), 19-25.
18. Olorunfemi, M., &Ipadeola, D.A. (2021). Library and information resources use by undergraduate students of Federal University of Technology, Akure. *Library Philosophy and Practice (e-journal)*, 5525. https://digitalcommons.unl.edu/libphilprac/5525
19. Olowokere, O., Ismaila, Y.A., & Rasaq, A.M. (2020). Information and communication technology facilities for use by library and information science educators in university libraries in Abia State, Nigeria. *Journal of Applied Information Science and Technology*, *13*(2), 93-101.
20. Oshinaike, A.B., Yusuf, S.K., & Quadri, M.O. (2022). Accessing electronic information resources by undergraduate students in federal universities in North Central, Nigeria: Issues and challenges. *Nigerian School Library Journal*, *21*(2), 1-12.
21. Osinulu, L.F. (2020). Awareness and use of electronic information resources by students of College of Health Sciences in Olabisi Onabanjo University, Nigeria. *Information Impact: Journal of Information and Knowledge Management*, *11*(3), 1-11. https://doi.org/10.4314/iijikm.v11i3.1
22. Otunla, A.O., & Amuda, C.O. (2018). Nigerian undergraduate students' computer competencies and use of information technology tools and resources for study skills and habits' enhancement. In M. Khosrow-Pour D.B.A. (Ed.), *Encyclopedia of Information Science and Technology* (4th ed., pp. 2303-2313).
23. Simon, B.R., &Ogom, O.J. (2015). Evaluation of the extent of utilization of electronic library resources and services by undergraduate students in University of Calabar Library, Calabar – Nigeria. *Education Journal*, *4*(2), 82-89.
24. Udoh, I.U., Ekpenyong, G.E.M., & Olowookere, O. (2020). Digital literacy skills of undergraduate students of Library and Information Science on the utilization of electronic information resources in two federal universities in Nigeria. *Library Philosophy and Practice*, 4269. https://digitalcommons.unl.edu/libphilprac/4269/

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