

Users' Awareness, Utilization, and Satisfaction with Online Library Information Resources and Services

Analyn P. Panhilason

Carlos Hilado Memorial State University, Bacolod City, Negros Occidental, Philippines

Author email: analyn.panhilason@chmsu.edu.ph

Date Submitted: January 31, 2024

Date Revised: February 9, 2024

Date Published: February 13, 2024

Originality: 80%

Grammarly Score: 99%

Similarity: 20%

Recommended citation:

Panhilason, A. (2024). Users' Awareness, Utilization, and Satisfaction with Online Library Information Resources and Services. *Journal of Interdisciplinary Perspectives*, 2(3), 49–56. <https://doi.org/10.69569/jip.2024.0034>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

ABSTRACT

Libraries are the support system for the academic success of students and teachers. These have been proven when libraries were greatly affected during the COVID-19 pandemic. There was a shift from on-site to online library services, and various library innovations were implemented to support the academic community despite the COVID-19 pandemic challenges. This study examined the online library information resources and services at Carlos Hilado Memorial State University in terms of users' awareness, utilization, and satisfaction. A researcher-made questionnaire was used, validated by five (5) experts in research and library and information science, and 374 students participated. The instrument's reliability was strong, with a Cronbach's alpha coefficient of 0.910. Descriptive and inferential statistics were employed in data analysis. Mean, standard deviation, t-test, ANOVA, and Pearson's r were the statistical tools used. The results showed a high level of awareness of online library information resources and services, and the users often utilized these resources and services. Users were very satisfied with the resources and services, indicating that their needs were effectively met. Furthermore, there is a significant difference in the users' level of awareness and satisfaction when grouped according to age, year level, campus, and frequency of library usage, and no significant difference when grouped according to their sex. However, there is no significant difference in the users' extent of utilization when grouped according to age, sex, year level, campus, and frequency of library usage. As to the correlation, there is a significant relationship between users' level of awareness and their extent of utilization of online library information resources and services.

Keywords: *Users' Awareness; Utilization; Satisfaction; Online Library Resources; Online Library Services*

Introduction

Libraries are considered to be the support system for the academic success of students and teachers. These have been proven when libraries were greatly affected during the COVID-19 pandemic. There was a shift from on-site to online library services, and various library innovations were implemented to support the academic community despite the COVID-19 pandemic challenges.

Academic libraries serve as a learning center that supports educational programs and fulfill their academic community's informational, instructional, and personal needs. "It assumes a pivotal role in institutional development through its commitment to achieving success and efficient delivery of services in various aspects of institutional instruction, research, and public service" (College Library Manual, 2012). Online resources such as e-journal subscriptions were prioritized by the Library and Information Services unit of Carlos Hilado Memorial State University, and various online library services were launched as answers to the challenges brought by the COVID-19 pandemic. These services include Virtual Reference, Borrowing a Book, Book Return, Document Delivery, and Online Library Instruction.

Hence, the problem being studied is the users' awareness, utilization, and satisfaction with online library information resources and services. As libraries take advantage of digital platforms, evaluating users' awareness, utilization, and satisfaction is critical. Undergraduates acknowledge their training needs in resource utilization as they are aware of and heavily rely on electronic information resources (Adenariwo, 2022). Additionally, the electronic resources high awareness level in Swami Shraddhanand College was evident in Sharma's (2019) research. On the other hand, Osinulu's (2020) research at Olabisi Onabanjo University in Nigeria's College of Health Sciences discovered a low awareness of online resources.

As to utilization, the study of Yap, Martinez, and Rian (2022) revealed that electronic resource utilization has one of the highest means among the library resources. Furthermore, it was evident during the COVID-19 outbreak that electronic resources and internet access were significant in education (Rafiq et al., 2021). Likewise, online services must be promoted (Adayi et al., 2020). The study of Papay and Colas (2023) on blended library services of the University of Baguio revealed a high effectivity in the assessment by the faculty, non-teaching staff, and other users.

According to Ijiekhuamhen, Aghojare, and Ferdinand (2015), the user's satisfaction with the services and resources determines their library utilization. In addition, Chandrashekara, Jaiprakash, and Thammanna (2020) cited the claims of (Ikenwe & Adegbihero-Iwari, 2014) that library user satisfaction is the patron's feelings following the use of information resources and services as well as their desire to use the library again. Chandrashekara, Jaiprakash, and Thammanna, (2020) further affirmed that libraries successfully address their users' information demands by offering e-journals, e-books, abstracting and indexing resources, full-text database accessibility, and e-dissertations/project reports.

Despite the efforts of the Carlos Hilado Memorial State University to adapt to online platforms, there remains a research gap in understanding the users' awareness, utilization, and satisfaction with online library information resources and services. While some studies have highlighted the significance of electronic resources and online services in academic settings, there is limited research specifically examining these aspects in the context of this university. Therefore, this study aimed to address this gap by investigating the users' awareness, utilization, and satisfaction levels regarding online library information resources and services at Carlos Hilado Memorial State University. Specifically, it sought to answer the following questions:

1. What is the users' level of awareness of online library information resources and services?
2. What is the extent to which users utilize online library information resources and services?
3. What is the users' level of satisfaction with the online library information resources and services?
4. Is there a significant difference in the users' awareness of online library information resources and services when grouped according to age, sex, year level, campus, and frequency of library usage?
5. Is there a significant difference in the extent to which users utilize online library information resources and services when grouped according to age, sex, year level, campus, and frequency of library usage?
6. Is there a significant difference in the users' level of satisfaction with the online library information resources and services when grouped according to age, sex, year level, campus, and frequency of library usage?
7. Is there a significant relationship between users' level of awareness of online library information resources and services and their extent of utilization?

Methodology

Research Design

The descriptive-correlational method was utilized in this study. The descriptive design was employed to measure the users' awareness, utilization, and satisfaction with Carlos Hilado Memorial State University's online library information resources and services during the Academic Year 2022-2023. Likewise, correlation was used to determine if there is a significant relationship between awareness and utilization of library users.

Data Gathering Procedure

An online survey was conducted to 374 second-year to fifth-year students of Carlos Hilado Memorial State University on August 2023 through the researcher-made questionnaire. Stratified sampling was considered. Five (5) research and library science experts validated the instrument using the Good and Scates Validity Instrument. Moreover, reliability testing of the instrument was conducted on thirty (30) library users of the Alijis campus. The Cronbach's alpha (α) result is 0.910, indicating a high-reliability coefficient. Ethics in the research were considered, from asking for approval on the study's conduct, seeking the participants' consent during the survey, and discarding the data after completion of the study. Descriptive and inferential statistics were used for data analysis. Mean and standard deviation were used to determine the users' awareness, utilization, and satisfaction levels. The t-test was used to determine the differences in users' awareness, utilization, and satisfaction when grouped according to demographic profiles such as age, year level, campus, and frequency of library usage, whereas ANOVA was used with sex. Pearson's r was used in determining the relationship between users' level of awareness of online library information resources and services and their extent of utilization.

Results and Discussion

Users' Level of Awareness of Online Library Information Resources and Services

Table 1 presents the users' level of awareness of online library information resources and services. The result shows a high awareness level of online library information resources and services. Specifically, there is a high awareness level of online library resources and a very high awareness level of online library information services. The users' high awareness level of online library resources means the users' strong understanding of and familiarity with the online library resources provided by the library.

Table 1: Users' level of awareness of online library information resources and services

	Level of Awareness		
	Mean	Std. Deviation	Verbal Interpretation
A. Online Library Information Resources			
1. Philippine e-journal	4.02	0.94	High
2. ProQuest	3.93	0.98	High
3. IG Library	4.00	0.95	High
Sub-Mean	3.98	0.89	High
B. Online Library Information Services			
1. Virtual Reference	4.14	0.89	High
2. Borrow a Book	4.26	0.88	Very High
3. Book Return	4.29	0.83	Very High
4. Document Delivery	4.17	0.89	High
5. Online Library Instruction	4.22	0.87	Very High
Sub-Mean	4.22	0.78	Very High
Overall Mean	4.13	0.75	High

*Mean Range: 4.21 – 5.00 (Very High), 3.41 – 4.20 (High),
2.61 – 3.40 (Moderate), 1.81 – 2.60 (Low), 1.00 – 1.80 (Very Low)*

The result affirms Jamuna and Dhanamjaya (2021), Ingole, and Chavan (2023), and Bellary, Manchare, and Sadlapur (2023) on the users' high awareness level of electronic resources. Furthermore, there is awareness and high utilization of electronic resources at Fountain University as revealed in Adenariwo's (2022) study. However, a low awareness level of electronic resources was evident in the College of Health Sciences at Olabisi Onabanjo University as revealed by Osinulu's (2020) study.

Online library information services have a very high user awareness level. The result indicates that online library information services are well disseminated and promoted, contributing to a very high level of user awareness. The findings affirm Bhat, Prasad, and Rao (2021) in their study that the majority are aware of almost all the services of the library. There is likewise an awareness of virtual libraries among undergraduate medical students of Benue State University as shown in the study of Ejegwa, and Mngutyo (2023). However, they need to learn how equipped the virtual library is. According to Adayi, Neboh, and Oluchi (2023), library and information services are offered to satisfy users' information needs.

Users' Extent of Utilization of Online Library Information Resources and Services

Table 2 presents the extent to which users utilize online library information resources and services. The data shows that library users often utilize online library information resources and services. Among the online library information resources, Philippine e-journal got the highest mean score of 3.70, and ProQuest had the lowest mean score of 3.62. For the online library information services, virtual reference got the highest mean score of 3.89, and borrowing a book got the lowest mean score of 3.75. The result means that the users can access online resources and services, making it convenient for them to research, study, or access materials remotely. It also indicates the relevancy of the online library resources and services to the users' needs and interests.

The result of the study affirms the findings of Papay and Colas (2023) on the utilization of the University of Baguio's blended library services, specifically the online resources, online document delivery of online circulation, and online reference service. Yap, Martinez, and Rian (2022) also found that electronic resources got the highest mean when it comes to utilization compared to other library resources. COVID-19 highlights the importance of electronic resources and internet access for education (Rafiq, Batool, Ali, and Ullah, 2021). Adayi et al. (2020) emphasized the promotion of the online service by deploying digital resources. Moreover, the study of Ingole and Chavan (2023) found that library patrons commonly use digital materials. E-resources help library users locate, retrieve, and share research. Electronic resources increased their research output. However, due to their high cost, infrastructural changes may encourage research scientists to employ these technologies more often. In addition, the pandemic caused a significant increase in digital library utilization, causing a swift adoption of electronic books and journals. Librarians have been instrumental in enhancing stakeholders' awareness of electronic resources during this crisis (Aamir, et al., 2022). Uwandu (2022) indicated that postgraduate students derive advantages from using electronic information resources, including accessing a broader array of information, obtaining quicker access to trustworthy and current information, enjoying unlimited information access, having access to hyperlinks to additional resources, and finding it easier to share and duplicate content.

Table 2: Users' extent of utilization of online library information resources and services

	Extent of Utilization		
	Mean	Std. Deviation	Verbal Interpretation
A. Online Library Information Resources			
1. Philippine e-journal	3.70	1.11	Often
2. ProQuest	3.62	1.12	Often
3. IG Library	3.66	1.13	Often
Sub-Mean	3.66	1.07	Often
B. Online Library Information Services			
1. Virtual Reference	3.89	1.04	Often
2. Borrow a Book	3.75	1.20	Often
3. Book Return	3.83	1.18	Often
4. Document Delivery	3.81	1.12	Often
5. Online Library Instruction	3.87	1.08	Often
Sub-Mean	3.83	1.03	Often
Overall Mean	3.77	0.99	Often

*Mean Range: 4.21 – 5.00 (Very High), 3.41 – 4.20 (High),
2.61 – 3.40 (Moderate), 1.81 – 2.60 (Low), 1.00 – 1.80 (Very Low)*

Users' Level of Satisfaction with the Online Library Information Resources and Services

Table 3 presents the users' level of satisfaction with the online library information resources and services. The results revealed that users are very satisfied with the online library information resources and services.

Table 3: Users' level of satisfaction with the online library information resources and services

	Level of Satisfaction		
	Mean	Std. Deviation	Verbal Interpretation
A. Reliability			
1. Accuracy and relevancy of search results	4.32	0.71	Very Satisfied
2. Timeliness of access to resources	4.33	0.73	Very Satisfied
3. Consistency of web performance	4.25	0.75	Very Satisfied
Sub-Mean	4.30	0.69	Very Satisfied
B. Assurance			
1. Confidence in the credibility of resources	4.40	0.67	Very Satisfied
2. Availability of user support and guidance	4.37	0.70	Very Satisfied
3. Security and privacy of personal information	4.38	0.71	Very Satisfied
Sub-Mean	4.39	0.65	Very Satisfied
C. Tangibility			
1. User-friendly interface	4.40	0.70	Very Satisfied
2. Clear and organized website layout	4.37	0.73	Very Satisfied
3. Availability of up-to-date online resources	4.33	0.73	Very Satisfied
Sub-Mean	4.37	0.68	Very Satisfied
D. Empathy			
1. Personalized support and assistance	4.35	0.72	Very Satisfied
2. Understanding of user needs and preferences	4.37	0.72	Very Satisfied
3. Willingness to go the extra mile to assist users	4.32	0.74	Very Satisfied
Sub-Mean	4.35	0.70	Very Satisfied
E. Responsiveness			
1. Promptness of customer support	4.34	0.73	Very Satisfied

2. Availability of assistance in using online library resources	4.36	0.73	Very Satisfied
3. Responsiveness to user feedback	4.37	0.73	Very Satisfied
Sub-Mean	4.36	0.70	Very Satisfied
F. Overall			
1. Overall, I am satisfied with the Online Library Information Resources and Services.	4.40	0.69	Very Satisfied
2. I would recommend the Online Library Information Resources and Services to others.	4.39	0.69	Very Satisfied
3. I intend to continue using the Online Library Information Resources and Services.	4.35	0.71	Very Satisfied
Sub-Mean	4.38	0.66	Very Satisfied
Overall Mean	4.36	0.63	Very Satisfied
<i>Mean Range: 4.21 – 5.00 (Very High), 3.41 – 4.20 (High), 2.61 – 3.40 (Moderate), 1.81 – 2.60 (Low), 1.00 – 1.80 (Very Low)</i>			

The findings were aligned with the studies of Chandrashekara, Jaiprakash, and Thammanna (2020); and Marjaei, Ahmadianyazdi, and Chandrashekara (2022) on the awareness and satisfaction with library resources and services, and their findings revealed that access to the internet, databases, and library facilities satisfied most scholars. Abraham and Sabu (2022) emphasized users' utilization patterns and feelings about their library's various programs in meeting their information needs. They concluded their study that most were satisfied with the resources and services of the PIA library at the Mangalapuzha campus. Moreover, they claim that a library's success is based on the users' satisfaction.

Differences in the Users' Level of Awareness of Online Library Information Resources and Services When Grouped According to their Demographic Profile

Table 4 presents the differences in the users' level of awareness of online library information resources and services when grouped in terms of age, sex, year level, campus, and frequency of library usage. The data shows a significant difference in the users' level of awareness of online library information resources and services in terms of their age, year level, campus, and frequency of library usage. The results mean that the said categories significantly influence users' level of awareness of online library resources and services. However, there is no significant difference in terms of sex. This suggests that sex has nothing to do with determining users' awareness of online library resources and services. Both males and females have similar levels of awareness of online library resources and services.

Table 4: Differences in the users' level of awareness of online library information resources and services when grouped according to their demographic profile

Category	Computed Value	P-value	Interpretation
Age	3.341	0.036	Significant
Sex	0.91	0.341	Not Significant
Year Level	9.178	0.000	Significant
Campus	8.074	0.000	Significant
Frequency of Library Usage	3.476	0.016	Significant

*Significant at the 0.05 level

Differences in the Users' Extent of Utilization of Online Library Information Resources and Services When Grouped According to their Demographic Profile

Table 5 presents the differences in the users' extent of utilization of online library information resources and services when grouped in terms of age, sex, year level, campus, and frequency of library usage. The findings revealed no significant difference in the users' extent of utilization of online library information resources and services when grouped in age, sex, year level, campus, and frequency of library usage. The results imply that the categories minimally impact users' utilization of the library's online resources and services.

Table 5: Differences in the users' extent of utilization of online library information resources and services when grouped according to their demographic profile

Category	Computed Value	P-value	Interpretation
Age	1.118	0.328	Not Significant
Sex	1.354	0.245	Not Significant
Year Level	1.646	0.178	Not Significant
Campus	2.257	0.081	Not Significant
Frequency of Library Usage	2.482	0.061	Not Significant

*Significant at the 0.05 level

Differences in the Users' Level of Satisfaction of Online Library Information Resources and Services When Grouped According to their Demographic Profile

Table 6 presents the differences in users' satisfaction levels with the online library information resources and services when grouped in terms of age, sex, year level, campus, and frequency of library usage. The findings reveal a significant difference in the users' satisfaction level with the online library information resources and services when grouped in terms of age, year level, campus, and frequency of library usage. The results mean that the users' satisfaction level with the online library information resources and services varies when they are grouped based on the said variables. Users' diverse needs and expectations could contribute to their satisfaction level as it varies among different groups. However, there is no significant difference in the users' satisfaction level when grouped in terms of their sex. It means that males and females are similarly satisfied with online library information resources and services. The sex of users does not impact their satisfaction level with the online library information resources and services.

Table 6: Differences in the users' level of satisfaction with online library information resources and services when grouped according to their demographic profile

Category	Computed Value	P-value	Interpretation
Age	8.255	0.000	Significant
Sex	0.030	0.862	Not Significant
Year Level	9.493	0.000	Significant
Campus	8.405	0.000	Significant
Frequency of Library Usage	3.898	0.009	Significant

*Significant at the 0.05 level

Relationship Between Users' Level of Awareness of Online Library Information Resources and Services and their Extent of Utilization

Table 7 presents the relationship between users' level of awareness of online library information resources and services and their extent of utilization. The result shows that Pearson r of 0.694 and the p -value of 0.000 indicates that it is statistically correlated at alpha 0.01. Hence, it fails to reject the null hypothesis, stating that there is no significant relationship between the users' level of awareness and their extent of utilization of online library information resources and services. The findings imply that as library users become more aware of online resources and services, they are more likely to utilize them to a greater extent. It also shows that awareness is significant to increase the utilization of library resources and services.

Table 7: Relationship between Users' Level of Awareness of Online Library Information Resources and Services and their Extent of Utilization

Variables	r-value	p-value	Conclusion
Level of Awareness and Extent of Utilization	0.694	0.000	Significant

*Significant at the 0.05 level

The results support the findings of Dukper Bawa, Bawa, and Arthur (2018) on the strong relationship between awareness and utilization of electronic library resources. In addition, the study of Obande and Abdulsalami (2020) in Nasarawa State also affirms that users' awareness of electronic information resources significantly influences their

utilization. Furthermore, the paper of Nwankwo, Chukwu, Igbokwe, and Agbanu (2019) also revealed that library and information resources awareness facilitate the usage of these resources.

Conclusions

The study indicates that library users are highly aware of and satisfied with online library resources and services. Demographic factors such as age, year level, campus, and library usage frequency influence users' awareness and satisfaction levels but not their utilization extent. Additionally, there is a significant relationship between awareness level and utilization extent. To sustain the high level of awareness, utilization, and satisfaction with online library information resources and services, it is recommended that the library enhance its promotional efforts to continuously promote and raise awareness about online library information resources and services. The library could explore the possibility of enhancing the variety and quality of its online library resources and services to accommodate a broader spectrum of interests and requirements. User training and guides may also be provided to help users maximize the benefits of online resources and services. There shall also be a periodic assessment of the relevance and effectiveness of the library's online resources and services.

Contributions of Authors

The paper has only one author.

Funding

This work received no specific grant from any funding agency.

Conflict of Interests

The author declares that she has no conflicts of interest.

Acknowledgment

The author thanks the project advisory board and colleagues for the helpful guidance and suggestions.

References

- Abraham, P., & Sabu, N. D. (2022). User satisfaction on library resources and services: a case study of Pontifical Institute of Theology and Philosophy Alwaye (PIA) Library at Mangalapuzha Campus. *Library Philosophy and Practice*, 1-18. <https://www.proquest.com/scholarly-journals/user-satisfaction-on-library-resources-services/docview/2640587379/se-2>
- Adayi, I.O., Idoko, R., Odeh, O. A. And Onah, C. J. (2020). Creative adaptation strategies for effective library services in Nigeria: a response to mitigate COVID-19 pandemic. *Journal of Management and Technology*, 16: p. 1-8. Retrieved from <https://tinyurl.com/3hsuss66>
- Adayi, I. O., Neboh, R. I., & Oluchi, E. G. (2023). Users' assessment of digital reference service delivery in private university libraries in Enugu State. *Library Philosophy and Practice*, 1-19. Retrieved from <https://www.proquest.com/scholarly-journals/users-assessment-digital-reference-service/docview/2847938523/se-2>
- Adenariwo, F. K. (2022). Awareness and usage of e-resources among Undergraduate in Fountain University, Osun State, Nigeria. *Library Philosophy and Practice*, 1-13. <https://www.proquest.com/scholarly-journals/awareness-usage-e-resources-among-undergraduate/docview/2705449268/se-2>
- Bellary, R., Manchare, P., & Sadlapur, S. (2023). Investigating awareness and usage of electronic information resources by the engineering students of NMIMS (deemed university), Mumbai. *Library Philosophy and Practice*, 1-18. Retrieved from <https://www.proquest.com/scholarly-journals/investigating-awareness-usage-electronic/docview/2816975835/se-2>
- Bhat, S., Dr, Prasad, T. P., & Rao, M., Dr. (2021). Awareness and utilization of information resources and services among library users of JCBM College, Shringeri, India: a study. *Library Philosophy and Practice*, 1-21,1A. Retrieved from <https://www.proquest.com/scholarly-journals/awareness-utilization-information-resources/docview/2606936109/se-2>
- Chandrashekar, J., Jaiprakash, H. L., & Thammanna, H. N. (2020). Users' satisfaction of online resources and services in the engineering college in libraries in Mysore City: A study. *Library Philosophy and Practice*, 1-17. Retrieved from <https://www.proquest.com/scholarly-journals/users-satisfaction-online-resources-services/docview/2646986275/se-2>

- Dukper Bawa, K., Bawa, S. & Arthur, B. (2018). Awareness and utilization of electronic library resources by students of Tamale Technical University, Ghana. *Library Philosophy and Practice*. Retrieved January 28, 2024, from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=5446&context=libphilprac>
- Ejegwa, J. O., & Mngutyo, J. (2023). An evaluation of the effects of virtual library on the academic performance of undergraduate students in the department of medicine and surgery, Benue State University, Makurdi, Nigeria. *Library Philosophy and Practice*, 1-18. Retrieved from <https://www.proquest.com/scholarly-journals/evaluation-effects-virtual-library-on-academic/docview/2816971685/se-2>
- Gohain, R. R. (2020). Exploring users' experiences with digital information services in the Law College libraries affiliated to University of Mumbai, Maharashtra. *Library Philosophy and Practice (e-journal)*, 1-16
- Ijiekhuamhen, O. P., Aghojare, B. & Ferdinand O. A. (2015). Assess users' satisfaction on academic library performance: a study. *International Journal of Academic Research and Reflection*. 3(5), 66-77.
- Ingole, S. A., & Chavan, S. (2023). Analyzing the awareness and utilization of digital resources by the library users of selected medical deemed universities in Maharashtra. *Library Philosophy and Practice*, 1-17. Retrieved from <https://www.proquest.com/scholarly-journals/analyzing-awareness-utilization-digital-resources/docview/2816983895/se-2>
- Jamuna, K., & Dhanamjaya, M. (2021). A study on awareness and ease of using eresources with Special Reference to Bengaluru City University Affiliated Colleges. *Library Philosophy and Practice (e-journal)*, 6734, 1-11.
- Marjaei, S., Ahmadianyazdi, F., & Chandrashekara, M. (2022). Awareness and satisfaction of research scholars using library resources and services in academic libraries. *Library Philosophy and Practice*, 1-8. <https://www.proquest.com/scholarly-journals/awareness-satisfaction-research-scholars-using/docview/2645223934/se-2>
- Nwankwo, N., Chukwu, I, Igbokwe, O. & Agbanu, N. (2019). Awareness and use of library information resources: a conceptual approach. *International Journal of Social Sciences and Humanities Review*, 9(2), 188-197.
- Obande, O. & Abdulsalami, L. (2020). Availability, awareness and use of electronic information resources amongst library registered students in Federal University Lafia and Nasarawa State University Keffi. *Direct Research Journal of Engineering and Information Technology*, 7(6), 97-107. Retrieved from <https://directresearchpublisher.org/drjeit/>
- Osinulu, L. F. (2020). Awareness and use of electronic information resources by students of College of Health Sciences in Olabisi Onabanjo University, Nigeria. *Journal of Information and Knowledge Management*, 11(3), 1-11. Retrieved from <https://www.ajol.info/index.php/ijikm/article/view/199008>
- Papay, L. C., & Colas, J. B. (2023). Status of blended library services at the University of Baguio. *Library Philosophy and Practice*, 1-40. Retrieved from <https://www.proquest.com/scholarly-journals/status-blended-library-services-at-university/docview/2816971037/se-2>
- Rafiq, M., Batool, S. H., Ali, A. F., & Ullah, M. (2021). University libraries response to COVID-19 pandemic: A developing country perspective. *The Journal of Academic Librarianship*, 47(1), 102280.
- Sharma, N. (2019). Use of e-resources by the faculty members and students: a study of Swami Shraddhanand College, University of Delhi, Delhi. *Journal of Indian Library Association*, 54(3). Retrieved from <https://www.ilaindia.net/jila/index.php/jila/article/view/268>
- Uwandu, L. I. (2022). Use of electronic information resources by postgraduate students of faculty of education in Imo State University, Owerri Library. *Library Philosophy and Practice*, 1-16. Retrieved from <https://www.proquest.com/scholarly-journals/use-electronic-information-resources-postgraduate/docview/2794896533/se-2>
- Yap, B. N., Martinez, I. P. & Rian, C. E. (2022). Utilization of Main Library Information Resources amidst Pandemic. *JPAIR Institutional Research Journal*, 19(2), 19-39. <https://doi.org/10.7719/irj.v19i1.834>