

Aspect of Desire in Enhancing Electronic Resource Utilization among Postgraduate Students at Universities in Meru County

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Abstract

The global shift to virtual libraries and e-learning has significantly increased the use of electronic resources in university libraries, particularly for postgraduate students. Customizing these services can enhance the "Desire" component of the AIDA model, promoting availability, regular updates, perceived value, and convenience. However, empirical investigations reveal that e-resources are underutilized. This paper presents some of the results of a large study that looked at how adoption of the AIDA model can enhance utilization of e-resources among postgraduate students in universities in Meru County. It assessed the desire of postgraduate students for e-resources. It employed a mixed method approach with a descriptive survey research design. The target population comprised of departmental heads and post-graduate students. Purposive sampling technique was employed to obtain librarians, while stratified random sampling and simple random sampling method was used to select students. A sample size of 260 postgraduate students and 13 departmental heads was obtained. Data was collected using questionnaires and interview guides, with quality ensured through construct, content, and face validity checks; while reliability was measured using Cronbach's alpha. Data was analyzed by computing mean, standard deviation, and correlation analysis to test relationship, while qualitative data was analyzed thematically. There was a positive correlation between postgraduate students' desire and e-resources utilization. However, in Meru County university libraries', desire is moderate. This can be enhanced by improving resource quality, staff communication, sensitization, user experiences, marketing strategies, and technological infrastructure. The study recommended university libraries to strengthen training programs, resource marketing, promoting e-resources' benefits, and integrating them into the curriculum to enhance postgraduate students desire for e-resources.

Keywords: *E-resources utilization, Desire, AIDA Model, Postgraduate Students, Universities libraries*

1.0 Introduction

Utilization of e-resources is crucial for postgraduate students, as it significantly enhances their research productivity (Ruzegea & Msonde, 2021). E-resources provide students with quick access to information, flexible search options, and easy citation of academic works, which are essential for their education (Burhansab et al., 2020). The effectiveness of e-resource use is influenced by factors such as perceived usefulness, ICT skills, resource availability, infrastructure, training, librarian support, and search proficiency (Azonobi et al., 2020; Wagay & Dutta, 2023).

E-resources include scholarly articles, e-books, journals, databases, multimedia, research repositories, and educational websites, available either by subscription or for free (Akuffo & Budu, 2019; Kassim & Mwantimwa, 2023). These resources are accessible both on-campus and off-campus via various electronic devices like desktops, laptops, tablets, and mobile phones through software like MyLOFT (Akuffo & Budu, 2019). Effective utilization is characterized by accessibility, ease of use, perceived usefulness, and the impact of e-resource usage (Atuase & Maluleka, 2022a; Merande et al., 2021). Measuring e-resource utilization involves evaluating access frequency, duration, resource types, and search behavior (Merande et al., 2021).

The AIDA model, developed in 1898 by Elmo Lewis, is a marketing framework that helps companies create effective communication strategies to market their products and services (Purbaningsih et al., 2022). AIDA stands for Attention, Interest, Desire, and Action, representing the stages of capturing customer interest and driving them towards a purchase decision (Abdelkader & Rabie, 2019a). The model has been widely applied across various industries and has been shown to influence consumer behavior,

purchasing decisions, and perceptions when exposed to marketing and advertising (Parmar et al., 2021; Song et al., 2021; Wei et al., 2022). This research applied the AIDA model to explore its relevance and effectiveness in the utilization of electronic resources at universities in Meru County.

Globally, universities enhance e-resource utilization through regular subscriptions, marketing, and providing internet and Wi-Fi services to improve accessibility (Jan, 2019; Rudraksha et al., 2021; Tarus et al., 2022). In Asia, universities support e-resource use through ICT orientation, training, and librarian assistance (Mishra et al., 2020). Effective utilization requires modern technology, knowledgeable staff, and student awareness, with the efficiency of e-resources evaluated based on user engagement and proactive actions.

In developed African nations like Nigeria, South Africa, Zambia, and Uganda, under-utilization of e-resources persists despite their recognized benefits and significant investments (Obande et al., 2020; Onuoha et al., 2020). Efforts to improve utilization include collaboration among educational stakeholders, redesigning digital literacy approaches, and advancing technological infrastructure (Nkansah & Oldac, 2024; Wang & Si, 2024). Strategies such as awareness campaigns, regular training, and enhanced access through open databases and improved infrastructure have been emphasized to boost e-resource use (Baayel & Asante, 2019; Jan, 2019).

In Kenya, e-resources are valued for their contribution to teaching, research, and community development, leading to significant investments in infrastructure and access systems (Kanori, 2019; Memusi, 2022). However, limited utilization of e-resources by postgraduate students is attributed to factors like insufficient information literacy skills, lack of awareness,

and inadequate access points (Kanori, 2019; Merande et al., 2021). Challenges such as inadequate training and awareness programs, and high subscription costs also hinder usage (Memusi, 2022). This study applied the AIDA model to explore how fostering desire can enhance e-resource utilization among postgraduate students at Kenya Methodist University and Meru University of Science and Technology.

“The desire for use of e-resources by post-graduate students in university libraries was moderate, hence requiring to be strengthened through effective communication, marketing, conducting and information literacy programs”

Statement of the Problem

The global shift to virtual libraries and e-learning has significantly increased the adoption of electronic resources in university libraries (Ruzegwa & Msonde, 2021). Postgraduate students are expected to utilize these resources as they are crucial for advancing education, providing efficient access to information, diverse search capabilities, and seamless citation of scholarly works. Therefore, electronic resources offered by university libraries are expected to enhance the "desire" of postgraduate students. This is demonstrated when the librarians providing these e-resources communicate their advantages, create awareness through marketing, regular

updates, offer training and user-friendly websites to resources subscribed to (Vasilyeva & Vasilyeva, 2019). These aspects spur postgraduate students' desire. Postgraduate students' desire for e-resources is cultivated when they interact with these e-resources, focusing on their benefits, relevance and friendliness of the webpages.

However, incidences of users losing the desire to use e-resources have continued to be reported (Anyim, 2020; Issa et al., 2020; Jatto & Diyaolu, 2021). Failure to cultivate and sustain desire for e-resources provided by the university libraries leads to underutilization of information. This can result in missed learning opportunities, decreased productivity, digital divide and negates the investment made by universities on electronic resources (Osinulu, 2020; Ruzegwa & Msonde, 2021). Additionally, it prevents the university from expanding its research program and realizing the return on investment from the funds used to set up e-resources infrastructure. It is of ultimate importance to conduct an investigation into strategies that can improve the use of electronic resources by postgraduate students. One effective strategy is the adoption of the AIDA model, which outlines the process of grabbing attention, stimulating interest, recognizing desire, and inspiring action through advertising (Wei et al., 2022).

Purpose of the Study

This study examines how postgraduate students' desire for electronic resources enhances their utilization in universities in Meru County.

Research Objective

To examine postgraduate students' level of desire for electronic resource utilization in universities in Meru County.

Research Question

What is the level of postgraduate students' desire for electronic resources in universities in Meru County?

Literature Review

The desire for e-resources among postgraduate students is cultivated through positive attitudes, perceptions, and the recognition of the necessity and value of the resources (Murithi, 2020a; Sebastian & Muthumari, 2020). Grounded in the AIDA model by Elmo Lewis, which highlights the importance of capturing attention, generating interest, creating desire, and prompting engagement, this desire is further enhanced by providing high-quality resources, conducting awareness campaigns, strategic marketing, and implementing robust information literacy programs (Purbaningsih et al., 2022; Roman, 2020; Wagay & Dutta, 2023). This approach is particularly relevant for improving e-resource utilization in universities in Meru County.

Despite postgraduate students' proactive engagement with e-resources demonstrated by frequent use of online databases, participation in information literacy workshops, and utilization of digital tools face challenges that hinder their full engagement (Anyim, 2020; Mwanzu et al., 2022). Issues such as slow internet, limited staff support, insufficient retrieval knowledge, and restricted device access can hinder effective e-resource usage (Issa et al., 2020; Jatto & Diyaolu, 2021). These obstacles highlight the need for improved infrastructure and support to maximize the benefits of e-resources.

2.0 Materials and Methods

The study employed a descriptive research design with a mixed methods approach. The target population was 800 post-graduate students and 13 librarians at KeMU and MUST. Library section heads were

purposively sampled, while stratified and simple random sampling techniques were used to select postgraduate students. A sample size of 260 postgraduate students and 13 library heads of sections was obtained. The instruments employed were questionnaires and interview schedules. Pretesting was conducted at Embu University. Data consistency was confirmed by calculating Cronbach's alpha value. Questionnaire data was analyzed with SPSS, generating descriptive statistics; that is, mean and standard deviation and also conducted correlation analysis to test relationship. The findings were displayed in tables and figures. Qualitative data from open-ended questions and interviews underwent thematic analysis, resulting in the development of respective themes.

3.0 Results and Discussion

The study distributed 260 questionnaires to postgraduate students, and set out to interview 13 library section heads. In the field, 12 (92.3%) library heads were interviewed, while a 218 (83.0%) filled and returned the questionnaires. Consequently, the overall response rate was 84.2%, which was considered good due to effective prior planning and cooperation from KeMU and Meru Universities.

Background Information of Respondents

The study gathered key demographic information, revealing that among the postgraduate students in the two universities in Meru County, 49.5% were male and 50.5% were female, indicating a slightly higher female enrollment, which aligns with Amirtham and Kumar's (2021) observation of a predominantly female postgraduate population in India. The majority of students (72%) held a bachelor's degree, 12.8% had a postgraduate diploma, and 15.1% had a master's degree. Additionally, the study found that library heads had substantial experience, with most having served between

four to seven years, meaning they were well-equipped to provide informed responses about the AIDA model and e-resource usage. These findings are consistent with Haylenchale's (2020) assertion that three or more years of work experience is sufficient for developing a strong understanding of institutional procedures and effective strategies.

Results on utilization of E-resources by postgraduate students at KeMU and Meru Universities

The utilization of electronic resources by postgraduate students was the dependent

variable in this study. Seven statements were posed to postgraduate students, focusing on various indicators of desire such as awareness and promotion of e-resources, engagement and appeal of e-resources, motivation and demand for e-resources, behavioral strategies and utilization practices, technological and logistical support, accessibility and convenience of e-resources, and relevance and currency of e-resources. The students were required to indicate their opinions on these statements using a 5-level Likert rating scale. The results are displayed in Table 1.

Table 1
Utilization of E-resources by postgraduate students

Sentiments on Utilization of e-resources	SD(1)	D(2)	N(3)	A(4)	SA(5)	Mean	STD
Attention to e-resources enhances their utilization in university libraries	4(1.8%)	2(0.9%)	9(4.1%)	109(50%)	94(43.1%)	4.32	.759
Having interest in e-resources enhances their utilization in university libraries.	0	4(1.8%)	19(8.7%)	98(45%)	97(44.5%)	4.30	.780
Cultivating students' desire for e-resources enhances their utilization in university libraries.	2(0.9%)	2(0.9%)	17(7.8%)	92(42.2%)	105(48.2%)	4.36	.744
Taking proactive steps to utilize e-resources improves their utilization in university libraries.	0	4(1.8%)	7(3.2%)	100(45.9%)	107(49.1%)	4.40	.726
There is adequate infrastructure to enable postgraduates utilize e-resources	8(3.7%)	16(7.3%)	19(8.7%)	81(37.2%)	94(43.1%)	4.09	1.068
The 24/7 availability of e-resources interest me to utilize them.	4(1.8%)	3(1.4%)	26(11.9%)	83(38.1%)	102(46.8%)	4.27	.860
The up-to-date status of e-resources interest me to utilize them	2(0.9%)	4(1.8%)	22(10.1%)	81(37.2%)	109(50%)	4.33	.805

The findings shown in Table 1 on utilization of e-resources by postgraduate students show a high mean values and a standard deviation of about 1. This demonstrated a high level of utilization, making the study's findings crucial for developing strategies to sustain this usage. These findings align with Hashim et al. (2022) who noted that during the COVID-19 pandemic, postgraduate students in Malaysian universities relied heavily on electronic resources, underscoring their essential role in supporting scholarship. Additionally, findings on the interview carried out on the librarians indicate challenges that students face when using e-resources in universities in Meru County. Some of the highlighted challenges include technical and infrastructure issues, training and literacy, resource relevance and availability, content quality and engagement, time and workload constraints, and financial barriers. In support of these findings, Humbhi et al. (2023) identified financial constraints, limited ICT infrastructure, and inadequate information literacy skills as barriers to e-resource utilization.

Results on Desire for Electronic Resource Utilization

To gather findings on desire for e-resources, opinions were collected from both postgraduate students and head librarians at the universities in Meru County. Postgraduate students provided their responses via questionnaires, while the librarians were interviewed. Postgraduate students indicated their views on the provided statements using a 5-level Likert scale. Table 2 presents the findings.

Table 2 shows that most sentiments regarding desire were well agreed on. The aspects with the highest levels of agreement were convenience of accessing e-resources anytime, anywhere (mean=4.62), incorporate electronic resources into my academic

research and studies (mean=4.38), electronic resources offer interactive features (Mean=4.13), perceived value and convenience of e-resources (Mean=4.09), library focuses on the benefits of e-resources during orientations (mean=4.07), e-resources available at the library are relevant and up-to-date (Mean=3.98) and library website is user friendly (mean=3.94).

The findings align with Azonobi et al. (2020) who noted that postgraduate students' desire for e-resources is influenced by perceived usefulness, convenience, ease of access, regular updates and awareness. Open-ended questions posed to students revealed that the desire for e-resources can be cultivated through reliable internet, training and support, awareness and communication, relevance, policies and procedures, user engagement, and integration of resources into the curriculum

In an interview, the heads of section librarians were asked to state the strategies employed to encourage postgraduate students to develop a strong desire for using e-resources. The responses highlighted key factors such as user awareness, high-quality information resources, regular training, remote access, curriculum integration, personalized support, online guides, accessibility, availability, and regular updates.

In concurrence, Atuase and Maluleka (2022b) reiterated the importance of collaborating with faculty to integrate electronic resources into course materials, ensuring that students are exposed to these resources as part of their academic curriculum also observed that the quality of resources and services significantly influences user desire. The study noted that the level of desire for e-resource utilization in universities in Meru County was moderate.

Table 2

Descriptive results on Desire

Sentiments on Desire	SD(1)	D(2)	N(3)	A(4)	SA(5)	Mean	STD
I express a strong desire to incorporate electronic resources into my academic research and studies	7(3.2%)	2(0.9%)	9(4.1%)	83(38.1%)	117(53.7%)	4.38	.873
My library focuses on the benefits of e-resources during orientations and training sessions.	9(4.1%)	4(1.8%)	28(12.8%)	99(45.4%)	78(35.8%)	4.07	.965
I enjoy the convenience of accessing e-resources anytime, anywhere.	2(0.9%)	7(3.2%)	16(7.3%)	105(48.2%)	85(39%)	4.62	1.452
The perceived value and convenience of e-resources strongly shape my preference for utilizing them.	5(2.3%)	4(1.8%)	31(14.2%)	104(47.7%)	74(33.9%)	4.09	.870
The e-resources available at the library are relevant and up-to-date.	4(1.8%)	15(6.9%)	29(13.3%)	104(47.7%)	66(30.3%)	3.98	.938
The library's dedication to ensure e-resource accessibility greatly improves my desire in using them.	2(0.9%)	16(7.3%)	29(13.3%)	108(49.5%)	63(28.9%)	3.98	.895
The library website is user friendly	7(3.2%)	12(5.5%)	41(18.8%)	85(39%)	73(33.5%)	3.94	1.017
Electronic resources are accessible whenever I want, no matter where I am or what time it is unlike print resources	7(3.2%)	25(11.5%)	26(11.9%)	96(44%)	64(29.4%)	3.85	1.069
Electronic resources provide real-time updates and access to the latest research findings, hence their relevance	5(2.3%)	12(5.5%)	29(13.3%)	84(38.5%)	88(40.4%)	4.09	.979
Electronic resources offer interactive features and multimedia content that enhance engagement and diverse learning styles compared to print materials.	2(0.9%)	8(3.7%)	25(11.5%)	108(49.5%)	75(34.4%)	4.13	.821

Relationship between Aspect of desire in the AIDA model and the utilization of e-resources among postgraduate students

The study examined the relationship between the aspect of Desire in the AIDA model and

the utilization of e-resources among postgraduate students at Kenya Methodist University (KeMU) and Meru University of Science and Technology (MUST), using Pearson correlation analysis. The results are shown in Table 3.

Table 3

Correlations between Aspect of desire in the AIDA model and the utilization of e-resources among postgraduate students

		X3	Y
X1	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	218	
Y	Pearson Correlation	.627**	1
	Sig. (2-tailed)	.000	
	N	218	218

** . Correlation is significant at the 0.01 level (2-tailed).

The findings of the Pearson correlation analysis between the aspect of Desire in the AIDA model (X1) and the utilization of e-resources (Y) among postgraduate students at Kenya Methodist University (KeMU) and Meru University of Science and Technology (MUST) indicate a statistically significant positive correlation. Specifically, the Pearson correlation coefficient (r) is .627, with a p-value of .000, which is significant at the 0.01 level (2-tailed).

The correlation coefficient of .627 suggests a high positive connection between students' desire, as conceptualized in the AIDA model, and their utilization of e-resources. This aligns with conclusion made by Wei et al. (2022) who demonstrated the applicability of the AIDA model across various sectors. It implies that as students' desire to engage with e-resources increases, their actual usage of these resources also tend to increase. The statistical significance ($p < .01$) indicates that this relationship is unlikely to have occurred by chance (Field (2024)), affirming the reliability of the findings.

These results are important for understanding how motivational factors, such as desire, influence the practical usage of e-resources among postgraduate students. The strong correlation underscores the need for universities to foster and enhance students' desire to use e-resources, which can be achieved through targeted interventions such as awareness campaigns, training, and improving the perceived value of the resources. By increasing students' motivation, universities can increase e-resource usage, thereby supporting academic success and research productivity.

4.0 Conclusion

The findings concluded that aspect of desire in the AIDA model has a statistically significant positive correlation with the utilization of e-resources among postgraduate students. However, the level of desire for use of e-resources in university libraries in Meru County was moderate. Desire for e-resources is enhanced by improving the quality of resources and services provided by library staff, effective

communication of their benefits which raises awareness, implementing marketing strategies, conducting information literacy programs, and adopting the necessary technological infrastructure.

5.0 Recommendations

University libraries should prioritize the acquisition and maintenance of high-quality, up-to-date e-resources to meet users' needs. To enhance the effectiveness of these

resources, libraries should focus on improving internet bandwidth and ensuring reliable access to digital content. Maintaining user-friendly interfaces and establishing robust feedback systems will further support user engagement and satisfaction. Additionally, library staff should collaborate closely with faculty to seamlessly integrate e-resources into the curriculum, thereby fostering their regular use and enriching the overall educational experience.

References

- Abdelkader, O. A., & Rabie, M. H. (2019). Exploring the general awareness of young users according to AIDA model applied to social networking ads. *Journal of Theoretical and Applied Information Technology*, 97(6), 1693-1703.
<https://www.researchgate.net/profile/OsamaAbdelkader/publication/333209129>
- Akuffo, M. N., & Budu, S. (2019). Use of electronic resources by students in a premier postgraduate theological university in Ghana. *South African journal of information management*, 21(1), 1-9.
<https://doi.org/10.4102/sajim.v21i1.1026>
- Amirtham S, N., & Kumar, A. (2021). Gender parity in STEM higher education in India: A trend analysis. *International Journal of Science Education*, 43(12), 1950–1964.
<https://doi.org/10.1080/09500693.2021.1946867>
- Anyim, W. O. (2020). Electronic Information Resources for Learning and Research Activities among Undergraduate Students in the University Library. *Journal of Computer Science and Technology Studies*, 2(4), 103-116.
<https://al-kindipublisher.com/index.php/jcsts/article/view/431>
- Atuase, D., & Maluleka, J. (2022). Marketing of library resources and its impact on the library usage of distance-learning students. *Digital Library Perspectives*, 39(1), 111–123.
<https://doi.org/10.1108/DLP-03-2022-0025>
- Azonobi, I. N., Uwaifo, S. O., & Tella, A. (2020). Determinants of Postgraduates' Use of Electronic Information Resources in Federal Universities in Southern Nigeria. *The International Information & Library Review*, 52(3), 202–215.
<https://doi.org/10.1080/10572317.2020.1783629>
- Baayel, P., & Asante, E. (2019). Students' awareness and use of electronic information resources: a study of Koforidua Technical University. *International Journal of Social Media and Interactive Learning Environments*, 6(2), 122-136.
<https://www.inderscienceonline.com/doi/abs/10.1504/IJSMILE.2019.102164>
- Burhansab, P., Batcha, D. M. S., & Ahmad, M. (2020). Investigating Awareness and usage of Electronic Resources by

- the Library Users of Selected Colleges of Solapur University. *Library Philosophy and Practice* (e-Journal). <https://digitalcommons.unl.edu/libphilprac/4309>
- Field, A. (2024). *Discovering Statistics Using IBM SPSS Statistics: North American Edition*. SAGE Publications.
- Hashim, H., Shuhidan, S. M., Anwar, N., & Heriyanto, H. (2022). Postgraduate Students' Utilization of Web-based Library and Information Services during Covid-19 Pandemic. *Environment-Behaviour Proceedings Journal*, 7(10), 261–267. <https://ebpj.eiph.co.uk/index.php/EBProceedings/article/view/4131>
- Haylenchale, E. (2020). *Determinants of e-service delivery implementation in Ethiopian public universities: the case of Dilla University* [Doctoral dissertation, University of Ethiopia]. Ethiopia. <http://etd.hu.edu.et/bitstream/handle/123456789/467>
- Humbhi, S., Tareen, S., Raheem, A., & Humbhi, A. (2023). Awareness and Utilization of E-Resources to Support Academic and Research Activities: *IAFOR Journal of Literature & Librarianship*, 12(2), 107–129. <https://doi.org/10.22492/ijl.12.2.08>
- Jan, S. (2019). Status of Electronic Resources in Libraries: a review study. *Library Philosophy and Practice*, 0_1-19. <https://www.proquest.com/openview/b9198b257267d4bd2c5db03fe73bd213/1?pq-origsite=gscholar&cbl=54903>
- Jatto, E., & Diyaolu, B. (2021). Users' Attitudes to the Use of Electronic Resources and Services by Undergraduate Students of McPherson University, Ogun State, Nigeria. *Library Philosophy and Practice* (e-Journal), 4(3), 1–18. <https://digitalcommons.unl.edu/libphilprac/6643/>
- Issa, A. I., Ibrahim, M. A., Onojah, A. O., & Onojah, A. A. (2020). Undergraduates' Attitude towards the Utilization of Open Educational Resources for Learning. *International Journal of Technology in Education and Science*, 4(3), 227-234. <https://eric.ed.gov/?id=EJ1258536>
- Kanori, J. N. (2019). *Influence of information literacy on utilization of electronic resources by bachelor of education teacher trainees, University of Nairobi, Kenya* [Doctoral dissertation, University of Nairobi]. Kenya. <http://erepository.uonbi.ac.ke/bitstream/handle/11295/106708>
- Kassim, M., & Mwantimwa, K. (2023). Impact of Electronic Resources Utilization in Research Productivity in Tanzania Universities. *Collection Management*, 48(2), 127–149. <https://doi.org/10.1080/01462679.2022.2114967>
- Memusi, E. (2022). *Utilization of electronic information resources by undergraduate students at Maasai Mara University Library, Narok, Kenya* [Doctoral dissertation], Masai Mara University. Kenya. <http://ir-library.mmarau.ac.ke:8080/handle/123456789/13584>
- Merande, J., Mwai, N., & Ogalo, J. (2021). Use of electronic resources by postgraduate users in Kenyan selected academic libraries. *Journal of Information Sciences and Computing Technologies*, 10(1), 1-12.

- <http://erepository.uonbi.ac.ke/bitstream/handle/11295/155910>
- Mishra, S., Sharma, F. L., Bhimawat, B. S., & Vyas, L. (2020). Utilization Pattern of e-Resources Among the Postgraduate Scholars. *Indian Research Journal of Extension*, 20(4), 28–33.
<https://seea.org.in/uploads/pdf/2020-64-28-33.pdf>
- Murithi, C. K. (2020). *Roles of Postgraduate Students' Satisfaction with E-Resources and Perception of Daystar University and Multimedia University Libraries* [Master's Thesis, | Kenya Methodist University]. Kenya. <http://repository.kemu.ac.ke/handle/123456789/869>
- Mwanzu, A., Nakaziba, S., Karungi, J., Ayebazibwe, E., & Gatiti, P. (2022). Adoption of LibGuides as a reference service in academic libraries: Insights from Aga Khan University, Uganda. *The Journal of Academic Librarianship*, 48(4), 102560. <https://www.sciencedirect.com/science/article/abs/pii/S0099133322000763>
- Nkansah, J. O., & Oldac, Y. I. (2024). Unraveling the attributions of digital literacy skills and knowledge gap in Ghana's higher education: Undergraduate student's voices in a phenomenological study. *Education and Information Technologies*, 1(1), 1–30. <https://doi.org/10.1007/s10639-024-12483-8>
- Obande, B. O., Osakwe, J., Ujakpa, M. M., Iyawa, G., Ikechukwu, A. O., & Amunkete, K. (2020, May). Awareness, accessibility and usability of E-resources: university student's perspective. In 2020 IST-Africa Conference (IST-Africa) (pp. 1-9). *IEEE*.
- <https://ieeexplore.ieee.org/abstract/document/9144021/>
- Onuoha, J. C., Ifeanyi, L. U., & Yunisa, A. Y. (2020). Availability and utilization of e-resources in university libraries for effective research output by undergraduates of social studies in South East Nigeria. *Library Philosophy and Practice*. (e-journal), 4489.
<https://core.ac.uk/download/pdf/345183373.pdf>
- 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://www.ajol.info/index.php/ijikm/article/view/199008>
- Parmar, D. R., Patel, T. A., & Chetan, D. P. (2021). Utilization of Print Vs. E-Resources in Selected Academic Resource Centre of Ahmedabad. *Library Philosophy and Practice (e-Journal)*, 1–21.
<https://digitalcommons.unl.edu/libphilprac/6430/>
- Purbaningsih, Y., Putri, S. E., Bangkara, B. M. A. S. A., Nurofik, A., & Ms, M. Z. (2022). Understanding the AIDA Model in Marketing Small Business in the Digital Age: Opportunities and Challenges. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(3), e3.
<https://doi.org/10.33258/birci.v5i3.6016>
- Roman, R. G., Trobada, C. S. P., Gatón, F. P., Gania, C. K., Oluyinka, S. A., Cuenco, H. O., & Daenos, R. G. (2020). A Study on the Utilization of e-Resources among College Students.

- International Journal of Knowledge Engineering*, 6(1), 24-29.
<http://www.ijke.org/vol6/127-X388.pdf>
- Ruzegea, M., & Msonde, S. (2021). University Students' E-Resource Usage: Predictors, Problems and Practical Implications. *International Journal of Education and Development using Information and Communication Technology*, 17(2), 104-119.
<https://eric.ed.gov/?id=EJ1298155>
- Rudraksha, G., Kona, R., & Chagari, S. (2021). Use of Electronic Resources in Selected University Libraries in Andhra Pradesh: a study. *Library Philosophy and Practice (E-Journal)*, 5384, 1-23.
<https://www.researchgate.net/profile/Ramakrishna-Kona/2/publication/351512825>
- Sebastian, R., & Muthumari, D. P. (2020). Impact and Usefulness of E-resources on Delivering Knowledge in Contemporary Learning Environments of Medical Colleges in Kerala: A Study. *Library Philosophy and Practice*, 1-17.
<https://www.researchgate.net/profile/Pmuthumari-Pandiyam/2/publication/338965526>
- Song, H., Ruan, W. J., & Jeon, Y. J. J. (2021). An integrated approach to the purchase decision making process of food-delivery apps: Focusing on the TAM and AIDA models. *International Journal of Hospitality Management*, 95, 102943.
<https://doi.org/10.1016/j.ijhm.2021.102943>
- Tarus, V., Namande, B. W., & Maake, B. (2022). Utilization of Open Access Library Resources by Postgraduate Students at Karatina University, Kenya. *Open Access Library Journal*, 9(10), 1-17.
<https://www.scirp.org/journal/paperinformation?paperid=120680>
- 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.
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=14400&context=libphilprac>
- Vasilyeva, V., & Vasilyeva, V. (2019). Use of e-resources by unmotivated students: a success story from a library in Russia. *Information and Learning Sciences*, 120(12), 773-788.
<https://www.emerald.com/insight/content/doi/10.1108/ILS-06-2019-0056/full/html>
- Wagay, J. A., & Dutta, S. (2023). Utilization of electronic resources: an analysis of awareness and perception of users of Kashmir University. *Information Discovery and Delivery*, 1-11.
<https://doi.org/10.1108/IDD-08-2022-0083>
- Wang, C., & Si, L. (2024). The Intersection of Public Policy and Public Access: Digital Inclusion, Digital Literacy Education, and Libraries. *Sustainability*, 16(5), e5.
<https://doi.org/10.3390/su16051878>
- Wei, M., Liu, M., Xu, J., Li, S., & Cao, J. (2022). Understanding the influence of sensory advertising of tourism destinations on visit intention with a modified AIDA model. *Asia Pacific Journal of Tourism Research*, 27(3), 259-273.
<https://doi.org/10.1080/10941665.2022.2061367>