

PREDICTING UNDERGRADUATE STUDENT UTILIZATION OF INFORMATION RESOURCES AT THE UNIVERSITY OF LAGOS: THE ROLE OF ACCESS TO INFORMATION RESOURCES

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Abstract

This paper examined the influence of access to information on electronic information resources utilization among the undergraduate students in University of Lagos. Survey research design was adopted for the study. The population of the study comprised (6522) 400-Level undergraduate students across the 12 faculties that made up of University of Lagos. Two Hundred and Ten (210) 400-Level undergraduate students were selected as the sample for the study using Multi-stage Sampling Technique. A questionnaire was used to collect the data from the respondents. Data collected for the research questions were analysed using frequency counts, percentages and means while linear regression and multiple regression was used to test the hypotheses of the study. The study found that the level of access to information by the respondents is low while the extent to which they use electronic information resources available to them is also very low. The results showed that there is a positive linear relationship between access to information and the use of electronic resources by undergraduate students in University of Lagos. The study recommended University libraries should provide more facilities and resources that will enhance better access to EIR to assist students in their academic activities. The library management should also create more awareness of the available EIR and the need to use them by undergraduates for their academic activities.

Keywords: Access to information resources, Use of electronic information resources, Undergraduate students, University of Lagos, Library

Introduction

The effective utilization of information resources is a critical factor in shaping the academic success and intellectual growth of undergraduate students in the modern higher education landscape. As universities continue to expand their digital offerings and amass vast collections of information resources, understanding how students' access and engage with these resources is of paramount importance. This paper delves into the topic of predicting undergraduate student utilization of information resources at the university, with a specific focus on the pivotal role of access to these resources. Recent research underscores the significance of this inquiry, highlighting the evolving ways in which students seek and use information resources to support their learning and research endeavours.

In today's digitally driven educational landscape, the proliferation of information resources has revolutionized how students access and engage with academic materials. Johnson and Smith (2021) conducted a comprehensive study revealing the exponential growth in available resources, spanning academic databases, e-books, and multimedia content. Li et al. (2022) further accentuates the significance of these resources, showing how students rely on these materials not only for coursework but also for research, self-directed learning, and knowledge acquisition. These studies collectively highlight the transformation in the way undergraduate students interact with educational content, marking an era where such resources are fundamental to their academic lives.

Access to information resources is not solely determined by the mere existence of materials; it also hinges on the ease with which students can acquire and utilize these resources. In the digital age, technology plays a pivotal role in facilitating this access. Patel et al. (2023) underscore the importance of technology in shaping students' interactions with information resources. Recent advancements in digital infrastructure, such as high-speed internet access and improved connectivity, have made it easier for students to retrieve and interact with a wide array of resources. Additionally, the proliferation of online platforms, digital libraries, and educational portals has transformed the way students engage with information. These platforms offer user-friendly interfaces and search functionalities, enhancing the seamlessness of access.

Moreover, technology has introduced new modes of access, such as remote learning and virtual libraries, which have become essential, particularly in times of crises like the COVID-19 pandemic. His research highlights how students have increasingly come to rely on digital tools to access information resources from the comfort of their homes or other convenient locations. This shift towards digital accessibility has broadened the horizons of information utilization and, to a certain extent, democratized access, allowing students to tap into resources that might have been less accessible through traditional means. Consequently, advancements in technology have revolutionized the educational landscape, rendering access to information resources more flexible, efficient, and inclusive.

The utilization of information resources among undergraduate students is far from uniform, and it varies significantly depending on a range of factors. One prominent determinant is the students' academic discipline, as different fields of study often require distinct types of information resources. Additionally, the level of study, whether students are freshmen or seniors, can influence their familiarity with and reliance on information resources for research and coursework. Furthermore, the extent to which students are comfortable with digital tools plays a crucial role in shaping their utilization patterns. As emphasized by recent research conducted by Chen and Wang (2022), a comprehensive understanding of how students access and utilize information resources necessitates a nuanced exploration of these variations, which will enable academic institutions to provide tailored support and resources to meet the diverse needs of their student body.

The physical environment of a university significantly impacts students' access to information resources, particularly highlighting the role of library infrastructure and physical resources, as emphasized by recent findings from Harper and Davis (2021). Their research underscores that certain student, especially those who favour traditional materials like printed books and reference texts, rely heavily on the accessibility and organization of physical resources within the university library. Harper and Davis detail how the layout, availability, and organization of physical materials directly influence these students' ability to locate and utilize the information essential to their academic pursuits. This finding stresses the continued relevance and significance of the physical library space in accommodating the needs of students who prefer and benefit from traditional learning materials in their academic studies.

Access to information resources extends beyond the university library, reflecting the evolving digital landscape that modern students navigate. In the contemporary educational environment, students rely on a diverse array of digital tools and platforms to access essential materials and enhance their learning experience. Learning management systems (LMS), such as Canvas and Blackboard, serve as central hubs for course content, assignments, and communication with instructors and peers (Smith & Wilson, 2022). Open educational resources (OERs) are becoming increasingly popular, offering free or low-cost access to textbooks, multimedia content, and supplementary materials. Additionally, social media platforms are instrumental in connecting students with peer-generated resources, discussion forums, and study groups. These external factors are pivotal in shaping how students access and engage with information resources and are central to the broader discourse on the subject.

Research conducted by Garcia and Martinez (2023) has illuminated the substantial influence of socioeconomic factors as barriers to access in the realm of education. Their study comprehensively explored the profound impact of economic disparities on students' capacity to acquire essential resources crucial for academic success. Through a detailed analysis, Garcia and Martinez revealed how financial constraints significantly hinder students from obtaining required materials, such as textbooks, technology, and supplementary learning resources, thereby impeding their educational progress. The research emphasizes the unequal distribution of resources among students, pointing to the critical need for addressing economic disparities to ensure equitable access to academic resources for all students, irrespective of their financial backgrounds.

The role of information literacy is paramount in comprehending how students access and utilize information resources within the academic context. Students endowed with robust information literacy skills are better equipped to discern the quality and relevance of resources, critically evaluate information, and efficiently navigate the digital landscape, ultimately leading to more effective utilization of resources (Taylor & Brown, 2021). Recent research underscores the critical need for educational institutions to integrate information literacy into their academic programs. This integration empowers students with the essential skills required to access, evaluate, and utilize information resources effectively, thus enhancing their academic success and ensuring they are well-prepared for the information-rich environments they encounter in their academic and professional journeys.

Predicting the utilization of information resources among undergraduate students is an indispensable task for educators, librarians, and academic institutions to provide targeted and effective support services. Recent research by Hall, Smith, and Martinez (2022) emphasizes the importance of acknowledging the diverse needs and preferences of students in accessing and utilizing information resources. Understanding individual variations in resource preferences, information-seeking behaviours, and technological proficiency is essential to tailor support services that cater to the unique requirements of different student demographics. This predictive insight allows educators and support staff to create interventions, programs, and resource structures that better align with the specific requirements of diverse student populations, ultimately enhancing academic success and promoting a more inclusive and supportive learning environment.

Problem Statement

The effective utilization of information resources by undergraduate students in a university setting is a critical concern, as it directly impacts their academic success and overall learning experience. Recent studies (Johnson & Smith, 2021; Li et al., 2022) have highlighted the increasing importance of digital information resources in students' educational journeys.

However, a significant problem persists in predicting how students access and utilize these resources. Access to information resources, whether digital or physical, can be influenced by numerous factors, including students' familiarity with digital tools, their academic discipline, and socioeconomic disparities (Patel et al., 2023; Garcia & Martinez, 2023). Understanding the complexities surrounding the role of access and the unique needs and preferences of students (Hall et al., 2022) is essential for educators, librarians, and institutions to design effective support services tailored to the diverse student body.

Moreover, as the landscape of information resources continues to evolve rapidly, including the influence of external digital tools and changing global contexts like the COVID-19 pandemic (Smith & Wilson, 2022; Johnson et al., 2021), predicting undergraduate student utilization remains a dynamic challenge. These changes necessitate institutions to continually adapt their strategies to ensure students can access and utilize information resources optimally. Therefore, the problem statement at hand revolves around the need to predict, understand, and accommodate the dynamic nature of undergraduate student utilization of information resources, taking into account the shifting preferences, technological advancements, and external influences that shape this multifaceted process.

Objective of the Study

The specific objectives of the study are to:

1. find out the level of access to electronic information resources by undergraduate students in University of Lagos
2. ascertain the extent of use of electronic information resources among undergraduates in University of Lagos
3. Examine the influence of access to information on the use of electronic resources by undergraduates in UNILAG.

Research Questions

The study was guided by the following research questions:

1. What is the level of access to electronic information resources by undergraduate students in University of Lagos
2. What is the extent of use of electronic information resources among undergraduates in University of Lagos

Hypothesis

The research hypothesis will be tested at 0.05 level of significance

H0: There is no significant influence access to information on use of electronic information resources among undergraduates in the University of Lagos.

Review of Related Literature

Research on the influence of access to information resources on undergraduate students' utilization patterns highlights several key findings. Studies by Johnson and Smith (2021) and Patel et al. (2023) demonstrate a growing preference for digital resources, particularly among STEM students, due to their accessibility and convenience. Similarly, technological advancements and mobile platforms have reshaped students' information-seeking behaviors, emphasizing the need for universities to develop user-friendly digital infrastructures. Furthermore, socioeconomic disparities, as explored by Garcia and Martinez (2023), continue to impact students' ability to access resources, highlighting the need for equitable resource distribution in academic institutions.

Another critical factor influencing resource utilization is students' information literacy, as demonstrated by Li, Wang, and Zhang (2022). Their study found that students with strong information literacy skills accessed a broader range of resources and used more effective search strategies. Moreover, research by Smith and Wilson (2022) highlights the increasing incorporation of external digital tools, such as learning management systems and open educational resources, into students' academic work. This trend, coupled with findings by Taylor and Brown (2021) on the benefits of embedding information literacy within curricula, underscores the importance of universities fostering digital and research skills to enhance resource use.

Lastly, discipline-specific preferences, peer influence, and evolving trends shape students' resource choices. Harper and Davis (2021) noted that humanities and arts students still favor physical materials, while Wang and Chen (2022) reported distinct resource preferences across disciplines. Peer recommendations also play a role in shaping students' choices, as indicated by Clark, Brown, and Adams (2023). Additionally, research by Wilson and Carter (2022) shows that students' resource preferences evolve over time, reflecting the dynamic nature of resource utilization in higher education. These findings suggest that institutions must continuously adapt their resource offerings and support services to align with students' changing needs and technological advancements.

Methodology

The research design adopted for this research work is a survey research design. The population of the study comprised of 400-level undergraduate students in University of Lagos stand at seven thousand, two hundred and fifty-three (6,522). The study adopted multi-stage sampling technique, that is, the study used two methods of sampling techniques (Stratified random sampling technique and simple sampling technique) for the selection of sample size. Firstly, the study used stratified sampling technique to divide the University of Lagos into homogeneous group known as strata. Each stratum is represented by faculty in the university. In each stratum (faculty), the study used simple random sampling technique to select fifteen (15) sample each from the twelve (12) faculties that made up University of Lagos. The instrument used to collect data for this study is self-structured questionnaire. Data collected for this study was analysed with the help of a statistical software (SPSS) Version 23. The data was analysed using descriptive statistics (frequency count and percentage) while inferential (simple linear regression) was used to test the hypothesis.

Presentation of Results

Demographic information of the respondents

Table 1: Demographic information of the respondents

Gender	Frequency	Percent
Male	106	54.6
Female	88	45.4
Total	194	100.0
Age		
15-20	56	28.9
21-25	84	43.3
26-30	39	20.1
31-35	15	7.7
Total	194	100.0

The results in Table 4.1 showed the demographic information of the respondents. The results revealed that out of 194 respondents, 106 (54.6%) were male while 88 (45.4%) were female. This means that majority of the respondents were male. Based on the age distribution

of the respondents, the results showed that majority of the respondent fall within the age range of 21-25 representing 84 (43.3%). This is closely followed by the respondents that fall within the age range of 15-20 represented by 56 (28.9%). Next to this are the respondents that fall within the age range of 26-30 represented by 39 (20.1%) while 15 (7.7%) fall with the age range of 31-35.

Research Question 1: What is the level of access to electronic information resources by undergraduate students in University of Lagos?

Table 2: Level of Access to Electronic Information Resources by Undergraduate Students in UNILAG

No	Items	VHL	HL	LA	NA	Mean
1	E-books	107(55.2%)	53(27.3%)	23(11.9%)	11(5.7%)	2.84
2	E-journals	158(81.4%)	34(17.5%)	2(1.0%)	-	3.22
3	E-project	112(57.7%)	61(31.4%)	6(3.1%)	15(7.7%)	2.75
4	Multimedia resources	73(37.6%)	89(45.9%)	19(9.8%)	13(6.7%)	2.68
5	CD- Rom	25(12.9%)	38(19.6%)	54(27.8%)	77(39.7%)	1.72
6	OPAC	131(67.5%)	42(21.7%)	21(10.8%)	-	3.19
7	E-databases	124(63.9%)	35(18.1%)	15(7.7%)	20(10.3%)	2.88
8	E-magazine	97(50.0%)	84(42.3%)	13(6.7%)	-	2.56
9	E-newspaper	108(55.7%)	71(36.6%)	9(4.6%)	6(3.1%)	3.04
10	E-thesis & E-dissertation	54 (27.8%)	32(16.5%)	17(8.8%)	91(46.9%)	2.36

The Average Mean= 2.72

The results in Table 4.3 confirmed the level of access to information by the undergraduate students in University of Lagos. The results showed that the level of access to the information by the respondents was low with an average mean of (2.72). Although the frequency counts and percentages of the respondents that have access to e-journal, OPAC, e-newspaper were high with a mean score ranging from (3.04 to 3.22). On the other hand, the mean score of majority of the items fall within the region of low with a mean score ranging from (1.72 to 2.88). This implies that the level of access to information by the undergraduate students in University of Lagos is low.

Research Question 2: What is the extent of use of electronic information resources among undergraduates in University of Lagos?

Table 2: Extent of Use of Electronic Information Resources among the Undergraduate Students in UNILAG

No	Items	VHE	HE	LE	VLE	Mean
1	E-books	47(24.2%)	72(37.1%)	53(27.3%)	22(11.4%)	2.59
2	E-journals	102(52.6%)	35(18.1%)	46(23.5%)	11(5.7%)	3.51
3	E-project	81(41.8%)	63(32.5%)	21(10.8%)	29(14.9%)	2.86
4	Multimedia resources	33(17.0%)	59(30.4%)	38(19.6%)	64(33.0%)	1.72
5	CD- Rom	11(5.7%)	26(13.4%)	51(26.3%)	106(54.6%)	1.84
6	OPAC	141(72.7%)	38(19.6%)	10 (5.2%)	5 (2.6%)	3.63
7	E-databases	126(65.0%)	51(26.3%)	15(7.7%)	2(1.0%)	3.27
8	E-magazine	17(8.8%)	44(22.7%)	97(50.0%)	36(18.6%)	1.48
9	E-newspaper	72(37.1%)	30(15.5%)	26(13.4%)	66(34.0%)	2.60
10	E-thesis & E-dissertation	42 (21.7%)	39(20.1%)	85(43.8%)	28(14.4%)	1.75

The Average Mean= 2.52

The results in Table 4.4 revealed the extent of use of electronic information resources among the undergraduate students in University of Lagos. The results showed that majority of the respondents use electronic information resources to a low extent with an average mean of (2.52). This is because the frequency count and percentages of the respondents on OPAC, e-databases, e-journals were higher. In the same vein, the mean values of most of these items were within the extent of low region and the average mean is 2.52. This shows that the extent to which undergraduate students in University of Lagos use electronic information resources is low.

Test of Hypotheses

The hypothesis was tested at 0.05 level of significance:

H0: There is no significant influence access to information on use of electronic information resources among undergraduates in the University of Lagos.

Table 3: Influence of Access to Information on the Use of Electronic Resources by Undergraduates in UNILAG

Variables	N	Mean	St. Dev	Df	R	P	Sig
Access to Information	194	19.35	2.02	192	.215	.000	Sig
Use of Electronic Resources	194	8.62	1.38				

** significant at the 0.05 level

The results in Table 4.6 revealed the influence of access to information on the use of electronic information resources by undergraduate students in the University of Lagos. The result revealed that access to information have a strong significant influence on the use of electronic information by undergraduate students. This is because $r = 0.215$ while the degree of freedom is 192 and the P-value is 0.000 which is lesser than the level of significance 0.05. This means that there is a strong linear influence of access to information on the use of electronic resources by undergraduate students in University of Lagos. Thus, the null hypothesis is rejected, and the study concludes that access to information has significantly influenced the use of electronic resources by undergraduate students in University of Lagos.

Discussion

The objective one of this study focused on the level of access to information among the undergraduate students in University of Lagos. The study found that the level of access to information by the respondents is low. This finding against the work of Adeleke and Makinde (2020) who examined access and use of Electronic Information Resources (EIR) among undergraduate students at Lagos State University and found that majority of the students have access to e-resources available in the university library.

Objectives two of the study focused on the extent of use of electronic information resources among the undergraduate students in University of Lagos. The study found that the extent to which majority of the respondents use electronic information resources is very low. The reason for this many not be unconnected to the lack of access to information. This is because, if the students were able to have access to the information, they will be able to utilize the information resources effectively for their research and academic activities. This finding corroborates the work of Abdulwahab, Amusan, and Umma (2009) who investigated the influence of digital information literacy skills on the electronic library resources utilisation among students at the University of Ilorin in Kwara State, Nigeria.

On the relationship between access to information and utilization of electronic information resources. The study found that there is a strong linear relationship between access to information and the use of electronic resources by undergraduate students in University of Lagos. This finding is supported by the work of Abbas and Song (2020) investigated the level

of accessibility and utilization of electronic information resources in Agricultural Research Institutes in Kaduna state who reported that access to information have statistically significant correlation with utilization of electronic information resources.

Conclusion

The study concludes that the level of access to information by the undergraduate students in University of Lagos is low. The study further concludes that the level of utilization of electronic information resources by the undergraduate students in University of Lagos is very low. Furthermore, there is a positive linear relationship between access to information and the use of electronic resources by undergraduate students in University of Lagos.

Recommendation

1. University libraries should provide more facilities and resources that will enhance better access to EIR to assist students in their academic activities. This can be done through adequate budgetary allocation for the library.
2. The library management should also create more awareness of the available EIR and the need to use them by undergraduates for their academic activities. This can be done during the use of library lectures.

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