E-Resources *vs* Prints : Usages and Preferences by Undergraduates in a Private University, Nigeria

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ABSTRACT

Electronic and print resources usages and preferences among undergraduates of Landmark University, Omu-Aran, Kwara State, Nigeria has been examined. The study population consist of all undergraduates of the University, from which a sample of 250 that is 10 percent of the population was selected. The instrument used for data collection was a questionnaire. 231 copies of the questionnaire were completed and returned, representing 92.45 per cent response rate. Results from the study revealed that 110 (47.6 %) of the respondents preferred print resources, while interestingly, the same number 110 (47.6 %) preferred electronic resources; 11(4.8 %) of the participants did not provide any response to the question. It therefore implies that both print and electronic resources are complementary in meeting the information needs of undergraduates. However, majority of the respondents indicated that they usually supplement print materials with electronic resources or vice versa. The test of hypotheses revealed that user preferences were influenced by demographic factors such as age, course and level of study. Libraries should maintain hybrid collections, as both resources were found to be relevant sources of information for teaching, learning and research is recommended.

Keywords: Electronic resources; Print resources; Academic libraries; Undergraduates; Private universities; Landmark university; Nigeria

1. INTRODUCTION

The library occupies a strategic position in any academic community as all information resources required for teaching, learning and research are acquired, processed, preserved and disseminated through the library. Noted[1] that the library is a major support for intellectual development of students through provision of adequate and suitable print and non-print information resources. It is however disturbing as it appears that the undergraduates do not maximise the available resources in the library. While some students prefer to use print resources, some prefer electronic and some prefer the combination of the electronic and print resources. It is generally assumed that the advent of electronic resources has ushered in the exit of materials in print format; some findings however revealed this may not be totally true as disparity exists in the use of electronic and print resources by undergraduates[2-3].

Electronic library resources have significant peculiarities that endear them to library users and librarians. Concurrent access and use of same information material by several users is a major feature that distinguishes electronic resources from print. Users do not also need to physically be in the library to have access to electronic resources as it is mandated in the

traditional library. Reference materials that are not permitted to be loaned to users in the physical libraries could be remotely accessed by the user community from the comfort of their homes when they are in electronic format. The challenge of space to store print materials has been mitigated with the use of electronic library resources as millions of textbooks, journals and other materials could be acquired through electronic sources[4].

Another very important dimension that electronic resources have introduced to library services is that ownership of information resources has been deemphasised in favour of access. Premium has been given to access to information irrespective of where it is located. This has also encouraged interlibrary cooperation. Librarians have opportunities to serve wider user communities from around the world as against the traditional services that place emphasis on the use of library cards to access the library resources. This traditional method on its own is cumbersome, time consuming and uneconomical. However, with electronic resources, users enjoy greater freedom of membership to several libraries from several parts of the world without leaving their geographical locations[4].

Specifically in Landmark University, a study of this kind becomes paramount as it has earlier been established in a study by[4] that the University Library is well stocked with print resources and subscription to electronic databases and books is

commendable. It could be deduced from[4] that huge investment must have been made on acquiring these resources. It may therefore amount to sheer waste of resources if they are not maximised by the targeted undergraduates of the institution. This study is therefore an attempt at establishing a basis for decision making on whether the University Management needs to continue to invest in the subscription and acquisition of these materials.

2. STATEMENT OF THE PROBLEM

The dawn of the 21st century witnessed the evolution of e-resources in library and information centres. Prior to this, library collections were largely made up of print materials only. With the introduction of e-resources, some management of institutions are of the opinion that e-resources will replace prints resources. Several opinions have been expressed in various quarters in relation to users' preferences and usage of prints and e-resources. There is need to verify current trends of these claims empirically especially in the Nigerian environment. Not much is available in literature examining current trends in Nigerian libraries. This study fills this gap and serves as a pivot for justification of investment into print and electronic resources in libraries and information centres in Nigeria.

3. OBJECTIVES OF THE STUDY

The main objective of the study was to investigate e-resources versus prints usage and preference by undergraduates in a private university, Nigeria. The specific objectives are to:
- find out how often the students use the library
- find out the type of materials the students use in the library
- ascertain the preferred type of material by the students
- ascertain the purpose of use of the materials
- ascertain the location of use of the materials by the students
- find out the challenges the students encounter in using the library materials.

4. LITERATURE REVIEW

Library resources are integral to the university education system, hence the huge investments on them in ideal environments. In recent times, library collections have become hybrid in nature, consisting of print and electronic resources. However, there have been reported disparities in the usage of these resources among library users[2]. [5] in a study aimed at evaluating level of awareness and use of electronic library resources among undergraduates at Central University, Ghana found that 57 per cent of respondents had preference for print library resources. Although the students were to use computers and all other electronic devise that could facilitate the use of electronic library resources, they still preferred print resources. They also reported that students used Google search engines instead of the library's subscribed electronic resources.

Some studies have further reported that higher level of use of subscribed electronic resources has not been significantly reported among undergraduates despite the huge financial commitment to ensure continuous access to them[6,7]. Also discovered high usage of electronic resources by students[8]. The ICT skills, perception, attitude, availability, and accessibility affect the use of e-resources[9,10].

5. METHODOLOGY

Survey research design was adopted for the study. The population of the study consist of all the undergraduates of Landmark University which was 2500. Convenient sampling technique was adopted to select 10 percent of the total population. Questionnaire was the instrument used for data collection. Two hundred and fifty copies of the questionnaire, which represent 10 per cent of the study population, were distributed to Landmark University undergraduates within the University library in 2018. Two hundred and thirty-one copies of the questionnaire were completed and returned, which represent return rate of 92.45 per cent. The data were analysed using descriptive and regression methods.

5.1 Analysis and Discussion of Findings
Demographic characteristics of the respondents

Respondents who completed and returned copies of the questionnaire comprise of 77 student in Engineering, 22 student from Computer Science, 56 student from Sciences, 27 student from Social Sciences, and 49 from Management Sciences. As shown in Table 1, the percentage of males was

Table 1.   Demographic characteristics of the respondents (n = 231)

Variable	Measurement	Number of respondents	Percentage
Age	No response	4	1.7
	14-16	18	7.8
	17-19	113	48.9
	20-22	81	35.1
	23-25	13	5.6
	Above 25	2	.9
Gender	Male	125	54.1
	Female	106	45.9
Course of study	Engineering	77	33.3
	Computer Science	22	9.5
	Sciences	56	24.2
	Social Sciences	27	11.7
	Management Sciences	49	21.2
Level of study	No response	2	0.9
	100	41	17.7
	200	53	22.9
	300	50	21.6
	400	60	26.0
	500	25	10.8

54.1 per cent (125) while females was 45.9 per cent (106); the largest proportion of respondents fell within the age group of 17 to 19 year, accounting for 48.9 per cent of the respondents. With respect to respondents' level of study, 26 per cent (60) and 10.8 per cent (25) were in 400 and 500 level respectively, most of whom were on their final year projects, 22.9 per cent (53) were in 200 level, 21.6 per cent (50) were in 300 level, and 17.7 per cent (41) were in 100 level.

5.2 Frequency of using the Library

The frequency of using the Library as reported by the respondents are shown in Fig. 1. The survey showed that 65 (28.1 %) indicated that they used the Library very often, 123 (53.2 %) used it often, while 28 (12.1 %) and 14 (6.1 %) used the library not often and not very often respectively. Only one respondent (0.4 %) indicated not to have used the library at all. As shown in Table 5, the library materials were mostly used for assignments (92.6 %), to gain knowledge (92.6 %), and for research purposes (71.9 %).
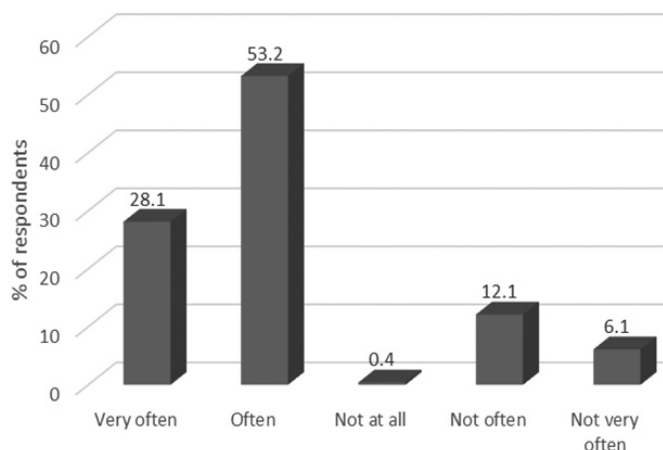

Figure 1. Frequency of using the Library.

Table 2: Types of library materials used by the respondents

Types of materials	Number of respondents	Percentage
Prints	94	40.7
E-resources	38	16.5
Both	94	40.7
No response	5	2.2
Total	231	100.0

5.3 Type of Library Resources Used and Preferred

The respondents were asked about the kind of library material they used. The result showed that 94 (40.7 %) of the respondents reported they used print resources only and the same number of respondents 94 (40.7 %) also used both print and electronic resources, while only 38 (16.5 %) was reported to have used electronic resources only (see Table 2). The respondents were asked additional questions to find out their preferred type of library resources to use for academic and other purposes. This is to find out their preferred choice of formats of library resources, whether electronic or print
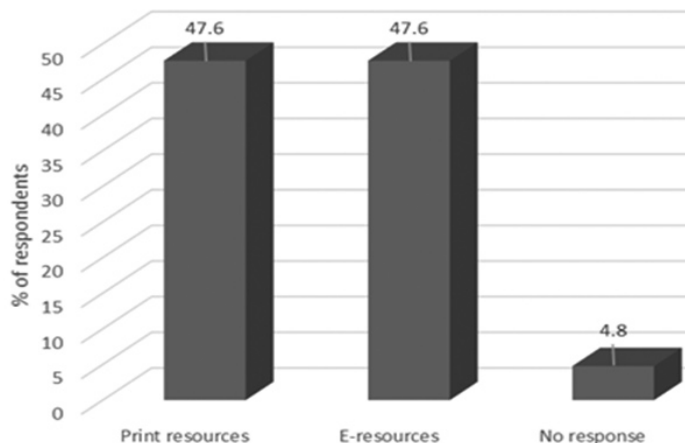

Figure 2. Preferred type of library material.

resources. As shown in Fig. 2, 110 (47.6 %) of the respondents preferred electronic resources while the same figure 110 (47.6 %) preferred print resources as well. However, 11 (4.8 %) of the students did not respond to this question. This implies that both electronic and print resources complement each other in meeting the information needs of the respondents.

As shown in Fig. 3, 70.1 % of the respondents reported that they need to supplement electronic resources with print resources. Even though the reason for this was not stated, 29.9 per cent of the respondents reported that they will not search for additional information from electronic resources. However, the majority of the respondents desire to meet their information needs by using the combination of print and electronic resources.
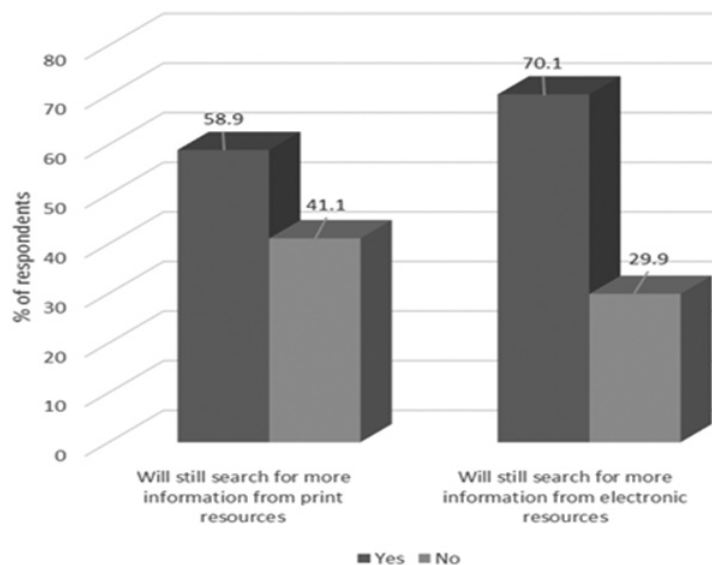

Figure 3. The need for additional information from different types of library resources.

The respondents were requested to indicate the kind of library materials they usually consult first to complete assignments and/ research projects. As shown in Table 3, 43.3 per cent of respondents consulted first library print books, 27.3 per cent World Wide Web (WWW), 22.1 per cent library e-resources, and only 0.9 per cent consulted first library print

Table 3. Types of information sources first consult

Kind of library materials	Library e-resources (%)	Library print books (%)	Library print journals (%)	World Wide Web (%)	Others (%)	No response (%)
Gender						
Males (n = 125)	28 (22.4)	46 (36.8)	1 (0.8)	41 (32.8)	4 (3.2)	5 (4.0)
Females (n = 106)	23 (21.7)	54 (50.9)	1 (0.9)	22 (20.8)	1 (0.9)	5 (4.7)
Total (n = 231)	51 (22.1)	100 (43.3)	2 (0.9)	63 (27.3)	5 (2.2)	10 (4.3)
Level of study						
100 (n = 41)	7 (17.1)	23 (56.1)	0 (0.0)	9 (22.0)	1 (2.4)	1 (2.4)
200 (n = 53)	9 (17.0)	30 (56.6)	2 (3.8)	11 (20.8)	1 (1.8)	0 (0.0)
300 (n = 50)	10 (20.0)	28 (56.0)	0 (0.0)	9 (18.0)	1 (2.0)	2 (4.0)
400 (n = 60)	14 (23.3)	14 (23.3)	0 (0.0)	25 (41.7)	1 (1.7)	6 (10.0)
500 (n = 25)	11 (44.0)	4 (16.0)	0 (0.0)	8 (32.0)	1 (4.0)	1 (4.0)
No response (n = 2)	0 (0.0)	1 (50.0)	0 (0.0)	1 (50.0)	0 (0.0)	0 (0.0)
Total (n = 231)	51 (22.1)	100 (43.3)	2 (0.9)	63 (27.3)	5 (2.2)	10 (4.3)
Course of study						
Engineering (n = 77)	22 (28.6)	23 (29.9)	0 (0.0)	28 (36.4)	1 (1.3)	3 (3.9)
Computer science (n= 22)	2 (9.1)	9 (40.9)	0 (0.0)	8 (36.4)	2 (9.1)	1 (4.5)
Sciences (n = 56)	13 (23.2)	24 (42.9)	2 (3.6)	13 (23.2)	2 (3.6)	2 (3.6)
Social sciences (n = 27)	2 (7.4)	18 (66.7)	0 (0.0)	4 (14.8)	0 (0.0)	3 (11.1)
Management sciences (n=49)	12 (24.5)	26 (53.1)	0 (0.0)	10 (20.4)	0 (0.0)	1 (2.0)
Total (n = 231)	51 (22.1)	100 (43.3)	2 (0.9)	63 (27.3)	5 (2.2)	10 (4.3)

journals. This implies that undergraduates are likely to use the library print books and WWW as their first sources of information without considering the reliability of the information from the WWW. This also justifies earlier observation that unlike undergraduates, postgraduates are observed to be heavy users of library e-resources. Further analysis showed that female students (50.9 %) tended to first consult library print books than their male counterpart (36.8 %). While, more male students (32.8 %) began their information search with WWW compared to female students (20.8 %). However, both male (22.4 %) and female (21.7 %) students in similar pattern preferred to consult library e-resources first before other sources when searching for information. With reference to level of study, 500 level students (44.0 %) were more likely to first consult library e-resources compared to other students in 100 level (17.1 %), 200 level (17.0 %), 300 level (20.0 %), and 400 level (23.3 %). For library print books, more students in 100 level (56.1 %), 200 level (56.6 %), and 300 level (56.0 %) which are referred to as lower level students, in similar pattern, turned to library print books first to satisfy their information needs than higher level students.

Also, Table 3 showed undergraduates' preferences of information sources across various disciplines in completing given assignments and/ research projects. With regard to discipline, 28.6 per cent of engineering students, 23.2 per cent from sciences, and 24.5 per cent from management sciences turned to library e-sources first for information, compared to 9.1 per cent in computer science, and 7.4 per cent in social sciences. On the other hand, students in social science (66.7 %) and management sciences (66.7 %) are more likely to first consult library print books as information sources and more heavily use same than students in engineering (29.9 %),

computer science (40.9 %), and sciences (42.9 %). It was also found that there is statistically significant but weak-positive relationships between choice of library print books and the students subject discipline (x2 = 13.619, p < 0.01; Pearson's R = 0.212, p < 0.01). Students in social and management sciences uniquely chose to consult library print books first more than other students. The preference for library print books by students in social and management sciences could be explained based on their level of expertise in their fields, as non-experts usually prefer books than journals. Another explanation could be that there was inadequate or inaccessible relevant research materials in social and management sciences from the WWW as much as those in engineering, computer science, and sciences.

6. TESTING OF HYPOTHESES

Chi-square was used to find out the pattern of relationship between the use of electronic and print resources by the respondents. As shown in Table 4, there is statistically significant but weak inverse relationships between the use of electronic resources and print resources ($X^2 = 21.041$, p<0.05, r = -0.302**). This implies that as students used more of electronic resources, they used less of print resources.

Table 4. Relationship between electronic and print resources usage

Variables	Chi Square values	Df	Pearson's R
Electronic Resources * Print resources	21.041 (0.000**)	1	-0.302 (0.000**)

The chi-square analysis as shown in Table 5 and Table 6 indicates that the use of electronic resources significantly and

positively relates with age of respondents ($X^2 = 23.289$, $p<0.05$, $r = 0.262**$) and their level of study ($X^2 = 27.093$, $p<0.05$, $r = 0.307$). This suggests that the older the students are, the more they tend to use electronic resources. In addition, although a statistically significant relationship was established between the use of print resources and age of respondents, there is no clear observed pattern in the relationship between use of print resources and age of respondents ($X^2 = 12.782$, $p<0.05$, $r = -0.121$).

Table 5. Chi Square analysis of electronic resources use by demographic characteristics

Demographics	Chi Square values	Df	Pearson's R
Gender	1.488 (0.223)	1	-0.080 (0.224)
Age	23.289 (0.000**)	5	0.262 (0.000**)
Level of study	27.093 (0.000**)	5	0.307 (0.000**)
Course of study	6.377 (0.173)	4	-0.033 (0.613)

Table 6. Chi Square analysis of print resources use by demographic characteristics

Demographics	Chi Square values	Df	Pearson's R
Gender	0.345 (0.557)	1	0.039 (0.559)
Age	12.782 (0.026**)	5	-0.121 (0.067)
Level of study	7.767 (0.170)	5	-0.109 (0.098)
Course of study	8.355 (0.079)	4	0.113 (0.088)

7.   CONCLUSIONS

The availability and utilisation of print and electronic resources is very important to teaching, learning and research in any educational system. Both print and electronic resources are important sources of information to undergraduates. This is evident in the study as students made use of both kinds of resources in their academic endeavours. This study established a strong justification for libraries' continual acquisition of both print and electronic information resources as they both have exclusive values. Therefore, both print and electronic resources should be acquired, organised and preserved by libraries.

8.   RECOMMENDATIONS

In order to address perceived and identified challenges, the following recommendations are made:

- Funding is an important factor in the acquisition and management of hybrid collections; information resources whether in print or electronic formats are very expensive and would normally involve foreign monetary exchange. Unfortunately, funding has become a perennial challenge to many libraries especially in developing countries like Nigeria. Although for Landmark University, funding appears not to be a challenge right now, it is however, recommended that the library begins to source for alternative funding to sustain current achievements on the long run. Generally, academic libraries depend on their parent institutions for funds; this has adversely affected many libraries in an era of global economic meltdown. Academic libraries are being challenged to either generate funds or attract funding from donor agencies or multinational companies.

- There is the need for the library to train its staff on good human and customer relations as it relates to users. This would help to correct users' perception of library staff as unfriendly professionals. Librarians should consider users as customers, without which they would not be in business. Such trainings could be done in the form of seminars and workshops.

- The library management should work on making the library space and environment more conducive for reading, learning and research. This would improve readership and use of print materials.

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