

Academic use of electronic resources by undergraduates of University of Ibadan

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Abstract

This study explored electronic resources use and students' academic tasks. The descriptive survey design of the correlational type was adopted and the study population consisted of the 13,153 undergraduate students of the University of Ibadan. The multi stage sampling technique was used to select a sample of 248. However, a total of 231 administered copies of questionnaire were returned and used for analysis, consisting of four faculties and two departments each. The questionnaire was used for data collection. Data were analysed using descriptive statistics on three research questions. Findings revealed that a majority of the undergraduates - 98 (42.4%) and 91 (39.4%) - indicated that the e-resources readily available to them were e-books, e-journals and e-newspapers such as Punch and The Nation. The respondents - 151 (65.4%), 142 (61.5%) and 138 (59.7%) - indicated that they used e-resources for learning, reading (personal and general) and project works respectively. Findings also showed that Internet really plays a prominent role in the academic engagements of undergraduates as a majority of the undergraduates - 171 (74.0%) and 99 (42.9%) - indicated that they made use of the Internet and electronic mails (e-mails) daily. The challenges experienced by the undergraduates were: slow network connectivity, lack of adequate power supply and unfriendly user interfaces, as expressed by 132 (57.1%), 110 (47.6%) and 93 (40.3%) respondents respectively. The paper concluded and recommended that university administrators contribute to the upkeep and acquisition of these electronic resources, particularly for the library, to facilitate easy access and utilization by undergraduates and other categories of students for their diverse educational activities within the university.

Keywords: Academic tasks, electronic information resources, electronic information resources use, undergraduates

Introduction

Information communication technology (ICT) has been a major driver for rapid advancement and development in the 21st century and this development has been of great significance and importance in scholarly communication. The development in technology has dramatically increased the rate of conversion of knowledge, information and data into electronic format. This

development has created effective and efficient ways of organising, storing, accessing and retrieval of information (Kehinde & Folorunsho, 2019). The emergence of resources arising from advancement in ICT has brought changes to teaching, learning and research activities in Nigerian Universities. Consequently, electronic resources are becoming crucial in academic environment owing to the

unique benefits to users and providing unlimited and easy access to current information, obliterating space problem and promoting collaborative efforts in research (Yebowaah & Plockey, 2017).

Electronic resources are electronic version of print formats which is a crucial part of library collection in the digital era. They are materials requiring computer access using desktops or handheld mobile devices such as Ipad, laptop and Smartphone in the library or at home for the purpose of teaching, studying and or research. E-resources include databases (online and offline), e-books, e-journals, e-newspapers, e-research reports and E-lecture notes. Others are theses/dissertation, indexing and abstracting, reference databases such as bibliographies, dictionaries as well as sounds and files. E-resources are information content in electronic format such as databases, e-books, e-journals amongst others, accessible through internet connected technologies, which aids academic activities like; teaching, learning and research. In support of this, Adetunla (2016), pointed out that “the creation of e-resources has no doubt, made an essential impact on teaching and learning process”. In other words, e-resources are vital sources of information and backbone of academic activities in this technological age. E-resources form an integral part of library’s collection and is becoming essential information requirement for learning, teaching and research activities in the digital era. In view of the inherent

benefits of e-resources, it becomes necessary for undergraduates and other users to have the knowledge that e-resources could be easy to use for varying degrees of their academic activities, and other vital needs.

Akpojotor (2017) asserted that, in order to enhance acceptance and increase usage of e-resources, it is important to understand how users make decisions on selection and use of e-resources. The level of success of any learning programmes depends largely on the commitment of institutions in ensuring enabling environment for their learners in accessing and using e-resources for teaching and learning. Urhiewhu, Okeke & Nwafor (2015), reported that undergraduates use e-project, e-journals, e-reference materials, e-seminar papers, e-books, e-newsletters and e-thesis to a high extent. This study therefore investigated the relationship between electronic resources use and students’ academic tasks.

Research Questions

The following questions are answered in the study:

1. What are the academic tasks that necessitate electronic resources use by undergraduates in University of Ibadan?
2. What is the frequency of electronic resources use for academic tasks by undergraduates in University of Ibadan?
3. What are the challenges encountered in the use of

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electronic resources by undergraduates in University of Ibadan?

Literature review

Undergraduates used e-resources for many purposes, specifically academic tasks (Ajayi, Shorunke & Aboyade, 2014). According to the authors, undergraduates use e-resources mostly for academic purpose that is, to study and prepare for examinations, to do class assignment, and carry out research, retrieving current literature for studies, and to communicate and collaborate with peers and their lecturers via the Internet on e-mail or by following blog discussions. E-books and e-journal articles are used to acquire knowledge and carry out research by the students. Urhiewhu. Okeke and Nwafor (2015), surveyed the extent of e-resources use by undergraduates in Delta and Edo states and reported undergraduates use e-project, e-journals, e-reference materials, e-seminar papers, e-books, e-newsletters and e-thesis to a high extent for their academic tasks. Olaniran, Duma and Nzima (2017), revealed web 2.0, e-journals, e-books and CD-ROM are the mostly used electronic resources by undergraduates.

Toyo (2017) revealed that undergraduates in Delta State University, Abraka, Nigeria made use of electronic resources such as e-discussions, e-news, e-journals, CD-ROM, e-books and e-data archives. Tariq and Zia (2014) carried out a survey to find out the use of e-resources

by the students of Faculty of Science, University of Karachi, Pakistan. The findings showed that students used e-resources for class assignments and to get updates about their specialty. Burns (2016) found that majority of students and research scholars are dependent on e-resources to get desired and relevant information. Katabalwa (2016) found that that most of the students used e-journals for various purposes, including assignments, literature review, and research report writing, among others.

On the contrary however, studies revealed that undergraduates face series of challenges in e-resources use for their academic tasks. Findings from the study of Nkebukwa (2016), revealed that most of the students were not using e-resources due to lack of awareness of the e-resources being available at the institution. Equally, the researcher noted that lack of searching skills and connected computers affected the usage of e-resources. Mollel & Mwantimwa (2019) mentioned issues such as frequent power outage, inadequate bandwidth, lack of training, lack of awareness, limited access to computers and difficulty in searching, among the challenges that affected the effective usage of e-resources.

Madondo et al (2017) established that there was low usage of e-resources by undergraduate students due to socio and technical challenges. It was further discovered that students lack adequate hands-on skills necessary to retrieve information from subscribed e-resources, hence low usage. The respondents in the

study of Bankole, Ajiboye, & Otunla (2015) were requested to indicate the constraints faced in the use of electronic resources. The most common constraint in was insufficient skill to retrieved needed information cited by 65 (38.2%) of respondents. Next was difficulty in finding relevant information mentioned by 56 (33.0%) respondents, lack of time to access electronic information resources (25.3%) and frequent power outage by 42(24.7%) respondents. The other constraints mentioned by over 20% of respondents were slow internet speed (22.4); information overload (21.8), limited access to an internet point (21.2 %).

Findings in the study of Owolabi, Idowu, Okocha, & Ogundare (2016) presented the various factors that hinder the use of electronic resources by the undergraduates in University of Ibadan. Among these factors, inadequate power supply was a major problem which had the highest ranking of 156 (83%) response rates. Following this is the poor network/internet connectivity with 148(78.7%) of the respondents agreed, and limited access to computer terminals of which 112(59.6%) of the total respondents agreed, as well as too much information retrieved which had 107(56.9%) respondents agreed. Result from the study revealed that 74% of the respondents agreed that frequent power cut is a major challenge, followed by lack of relevant information on how to use EIR (69%), lack of knowledge to use the EIR (67%) came third in the ranking of challenges. Further, respondents

agreed (62%) that library staff are not supportive. Also Slow internet bandwidth was found to be another challenge. Finally, the least challenges indicated by the respondents is that Library time is not suitable. Mawere and Sai (2018), investigated electronic utilisation among university students, and reported poor utilisation of electronic resources due to lack of awareness and ignorance of the facilities among students.

Methods

The study employed the descriptive research design. Population consisted of undergraduates of University of Ibadan, Ibadan, Nigeria with a total number of thirteen thousand, one hundred and fifty three (13,153) undergraduates. Multi stage sampling technique was adopted for the study. In the first stage four faculties were purposively chosen based on their exposure to electronic resources, and these are Faculties of Technology, Sciences, Social Sciences, and Education. The second stage involved the purposive selection of eight departments (i.e. two departments from each faculty). The sample population for this study was summed up to a total of two thousand and seventy (2070). At the last stage a sampling fraction of 12% was used to select the sample size of two hundred and forty-eight (248) respondents. The instrument for data collection was a structured questionnaire. The Statistical Product and Service Solutions (SPSS) was used for the analysis. Descriptive statistics

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such as frequency and percentages were used to analyse the research questions.

Results

A total of 248 copies of the questionnaire were administered to the undergraduates in the eight departments within the four faculties in University of Ibadan and 231 copies were returned and used for analysis giving a response rate of 94.3%.

Table 1 presented results on the demographic information of the respondents. Findings revealed that 100 level students had highest representation in the sample with 82 (35.5%), while the least represented level was 500 level with 5 (2.2%) respondents. Most of the undergraduates 147 (63.6%) that

participated in the study were between 21-25 years of age and only 1 (0.4%) was between 36 and 40. The results on gender presented an almost balanced representation as 116 (50.2%) were males and 115 (49.8%) were of the female gender. Majority of the sampled respondents 199 (86.1%) practiced Christianity, while 2 (0.9%) expressed that their religion belonged to the “others” category. Expectedly, most of the respondents 220 (95.2%) were single, as 11 (4.8%) noted that they were married. Findings also showed that most of the undergraduates 84 (36.4%) had a personal monthly income that was less than 10,000, while just 3 (1.3%) had an income above 49,999.

Table 1: Demographic Information of the Respondents

| Variables | | N | % |
|--------------------------------|------------------|------------|------------|
| Level | 100 | 82 | 35.5 |
| | 200 | 38 | 16.5 |
| | 300 | 41 | 17.7 |
| | 400 | 65 | 28.1 |
| | 500 | 5 | 2.2 |
| | Total | 231 | 100 |
| Age | 16-20 | 74 | 32.0 |
| | 21-25 | 147 | 63.6 |
| | 26-30 | 9 | 3.9 |
| | 36-40 | 1 | 0.4 |
| | Total | 231 | 100 |
| Gender | Male | 116 | 50.2 |
| | Female | 115 | 49.8 |
| Total | | 231 | 100 |
| Religion | Christianity | 199 | 86.1 |
| | Islam | 30 | 13.0 |
| | Others | 2 | 0.9 |
| Total | | 231 | 100 |
| Marital status | Single | 220 | 95.2 |
| | Married | 11 | 4.8 |
| Total | | 231 | 100 |
| Personal monthly income | Less than 10,000 | 84 | 36.4 |
| | 10,000-19999 | 54 | 23.4 |
| | 20,000-29999 | 54 | 23.4 |

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|--------------|-------------|------------|------------|
| | 30000-39999 | 26 | 11.3 |
| | 40000-49999 | 10 | 4.3 |
| | Above 49999 | 3 | 1.3 |
| Total | | 231 | 100 |

Findings in Table 2 on the academic tasks that necessitated the use of the electronic resources revealed that the resources were used for all diverse academic tasks that were outlined. However, most of the respondents 151 (65.4%), 142 (61.5%) and 138 (59.7%)

noted that they used electronic resources for learning, reading (personal and general) and project works respectively. This implies that undergraduates make effective use of e-books, e-journals and e-newspapers to address their academic tasks whenever the needs for such arise.

Table 2: Academic tasks that necessitate electronic resources use by undergraduates

| | Academic purpose | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | |
|---|--------------------------------|----------------|------|-------|------|----------|------|-------------------|-----|
| | | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| 1 | Learning | 151 | 65.4 | 74 | 32.0 | 5 | 2.2 | 1 | 0.4 |
| 2 | Reading (personal and general) | 142 | 61.5 | 77 | 33.3 | 10 | 4.3 | 2 | 0.9 |
| 3 | Preparation for Examination | 127 | 55.0 | 91 | 39.4 | 13 | 5.6 | - | - |
| 4 | Class work | 115 | 49.8 | 98 | 42.4 | 15 | 6.5 | 3 | 1.3 |
| 5 | Assignments completion | 141 | 61.0 | 76 | 32.9 | 13 | 5.6 | 1 | 0.4 |
| 6 | Seminar presentation | 85 | 36.8 | 116 | 50.2 | 23 | 10.0 | 7 | 3.0 |
| 7 | Project works | 138 | 59.7 | 77 | 33.3 | 14 | 6.1 | 2 | 0.9 |

Table 3 presented results on the frequency of use of the electronic resources by the undergraduates. Findings showed that majority of the respondents 171 (74.0%) and 99 (42.9%) indicated that they made use of the Internet and electronic mails (e-mails) daily. In addition, 72 (31.2%) and 69 (29.9%) expressed that they never used OPAC (online public access catalogue)

and CD-ROM Databases. While 69 (29.9%) used e-books on a weekly basis. This result shows that the Internet really play a prominent role in the academic engagements of undergraduates. Undergraduates always have reasons to access the Internet daily for one reason or another. Without the Internet, e-mails cannot be sent and received and e-books cannot be accessed either.

Table 3: Frequency of electronic resources use by undergraduates

| Electronic-resources | Daily | | Weekly | | Monthly | | Quarterly | | Yearly | | Occasionally | | Never | |
|----------------------|-------|------|--------|------|---------|------|-----------|------|--------|-----|--------------|------|-------|------|
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| E-books | 66 | 28.6 | 69 | 29.9 | 16 | 6.9 | 9 | 3.9 | 1 | 0.4 | 55 | 23.8 | 15 | 6.5 |
| E-journals | 26 | 11.3 | 56 | 24.2 | 35 | 15.2 | 13 | 5.6 | 2 | 0.9 | 57 | 24.7 | 42 | 18.2 |
| E-magazines | 21 | 9.1 | 46 | 19.9 | 32 | 13.9 | 24 | 10.4 | 9 | 3.9 | 53 | 22.9 | 46 | 19.9 |
| Online Databases | 30 | 13.0 | 41 | 17.7 | 31 | 13.4 | 21 | 9.1 | 7 | 3.0 | 61 | 26.4 | 40 | 17.3 |

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|---------------------------------------|-----|------|----|------|----|------|----|-----|---|-----|----|------|----|------|
| CD-ROM Databases | 8 | 3.5 | 29 | 12.6 | 23 | 10.0 | 22 | 9.5 | 8 | 3.5 | 72 | 31.2 | 69 | 29.9 |
| OPAC (Online Public Access Catalogue) | 22 | 9.5 | 30 | 13.0 | 22 | 9.5 | 18 | 7.8 | 7 | 3.0 | 60 | 26.0 | 72 | 31.2 |
| Internet | 171 | 74.0 | 30 | 13.0 | 6 | 2.6 | 9 | 0.9 | 1 | 0.4 | 18 | 7.8 | 3 | 1.3 |
| Electronic Mails (e-mails) | 99 | 42.9 | 66 | 28.6 | 25 | 10.8 | 6 | 2.6 | - | - | 27 | 11.7 | 8 | 3.5 |
| e-newspapers | 61 | 26.4 | 57 | 24.7 | 22 | 9.5 | 12 | 5.2 | 4 | 1.7 | 54 | 24.7 | 18 | 7.8 |

Table 4 showed that most of the respondents agreed that they encountered all the six challenges outlined in their use of the electronic resources. However the top three challenges faced by the undergraduates in University of Ibadan were slow network connectivity, lack of adequate power supply and unfriendly user interfaces, as expressed by 132 (57.1%), 110 (47.6%) and 93 (40.3%) respondents respectively. The implication of this is that the use of electronic resources by the undergraduates is bedeviled by institutional, infrastructural and personal

challenges. These impediments constitute a clog in the wheel of the effective use of the internet for academic purposes by the undergraduate students. Moreover, some respondents mentioned other challenges in the use of electronic resources for academic purposes that were not included in the questionnaire. These include lack of access to the Faculty Wi-Fi after payment, as passwords were hidden from them, inability to possess the needed gadgets like smart devices, expensive rate of data services and lack of funds to access data.

Table 4: Challenges encountered in the use of electronic resources by undergraduates

| Challenges | Strongly Agree | | Agree | | Disagree | | Strongly Disagree | |
|--|----------------|------|-------|------|----------|------|-------------------|-----|
| | Freq. | % | Freq. | % | Freq. | % | Freq. | % |
| 1 Lack of adequate power supply | 151 | 65.4 | 74 | 32.0 | 5 | 2.2 | 1 | 0.4 |
| 2 Lack of information retrieval skills | 142 | 61.5 | 77 | 33.3 | 10 | 4.3 | 2 | 0.9 |
| 3 Inadequate work space | 127 | 55.0 | 91 | 39.4 | 13 | 5.6 | - | - |
| 4 Slow Network connectivity | 115 | 49.8 | 98 | 42.4 | 15 | 6.5 | 3 | 1.3 |
| 5 Unfriendly user interfaces | 141 | 61.0 | 76 | 32.9 | 13 | 5.6 | 1 | 0.4 |
| 6 Lack of proper awareness | 85 | 36.8 | 116 | 50.2 | 23 | 10.0 | 7 | 3.0 |

Discussion

It was discovered through the findings of the study that e-resources such as e-books, e-journals and e-newspapers were used by undergraduates to address their academic tasks as most of the undergraduates used electronic resources for learning, reading (personal and general) and project works respectively. The result agrees with the study of Ajayi, Shorunke & Aboyade (2014), which justified that undergraduates use e-resources mostly for academic related tasks such as studying, examination preparation, assignments, research activities, retrieving current literature for studies, and to communicate and collaborate with peers and their lecturers.

It became evident from the findings of the study that majority of the respondents indicated they used the Internet and electronic mails (e-mails) daily, some expressed they never used OPAC (Online Public Access Catalogue) and CD-ROM databases, while others maintained that they used e-books on a weekly basis. Findings is in consonance with the outcome of the study of Urhiewhu Okeke and Nwafor (2015), which posited that undergraduates use e-project, e-journals, e-reference materials, e-seminar papers, e-books, e-newsletters and e-thesis frequently for their academic tasks. In addition, Olaniran, Duma and Nzima (2017), revealed e-resources such as web 2.0, e-journals, e-books and CD-ROM are the mostly used electronic resources by undergraduates daily.

Results from the study reported that most of the respondents encountered challenges in the use of the electronic resources, such as slow network connectivity, lack of adequate power supply and unfriendly user interfaces. Moreover, some respondents mentioned other challenges in the use of electronic resources for academic purposes such as lack of access to the Faculty Wi-Fi after payment, as passwords were hidden from them, inability to possess the needed gadgets like smart devices, expensive rate of data services as well as lack of funds to access data. Findings is in agreement with the results in the study of Mollel & Mwantimwa, (2019), which emphasised challenges such as frequent power outage, inadequate bandwidth, lack of training, lack of awareness, limited access to computers and difficulty in searching, among the challenges that affected the effective usage of e-resources. Also, Madondo *et al* (2017), established that there was low usage of e-resources by undergraduate students due to socio and technical challenges. It was further discovered that students lack adequate hands-on skills necessary to retrieve information from subscribed e-resources, hence low usage. In addition, the respondents in the study of Bankole, Ajiboye, & Otunla (2015), mentioned insufficient skill to retrieved needed information, difficulty in finding relevant information, lack of time to access electronic information resources, frequent power outage, slow internet speed, information overload, as well as limited access to an internet point.

Conclusion

Undergraduates who are in possession of electronic gadgets are those who are able to use them to get their desired information needs, while those who do not have may have to look for other means whatever the case. There are challenges encountered in the use of e-resources such as; slow network connectivity, inadequate electricity supply, unfriendly user interfaces, and so on. E-resources predominantly e-books, e-journals and e-newspapers, were important and available to the undergraduate students and were used for examination preparations, class work, assignments completion, seminar presentation, and so on. They are used mostly for learning, reading both personal and general, and project works respectively. Undergraduates used the Internet daily as it helps them to connect to other e-resources to access and use any information they need, thereby enhancing their academic tasks.

Based upon the findings of this study, the following recommendations are made:

1. University administrators should expend more efforts in the regular provision of e-resources which would help ease students' academic tasks further.
2. Further training and retraining should be regularly organised for the undergraduates, this could help improve their skills in the proper use of e-resources for their varying degrees of academic related tasks. Equally, undergraduates should be allowed their own password and username and also given unlimited access to the e-resources.
3. University management should ensure adequate and proper funding which would help address all the possible challenges that are liable to impede undergraduates' efforts in the optimal use of e-resources for their academic activities during their academic excursion in the university.

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