

AWARENESS AND USE OF E-BOOKS AMONG UNDERGRADUATE STUDENTS OF AJAYI CROWTHER UNIVERSITY, OYO

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Abstract

The use of electronic books (E-books) by undergraduates could impact positively on their academic activities. However, empirical evidences have shown that the use of E-books by some undergraduates is low. The study therefore examines awareness and usage of E-books among undergraduates in Ajayi Crowther University, Oyo, Oyo State, Nigeria. This study employed convenience sampling technique to conduct a quantitative study on undergraduates. The population consisted of 3,683 undergraduates while a sample size of Three hundred and sixty eight (368) was determined from the population. The finding revealed that the level of students' awareness of E-books among the undergraduates is high, as many of them are aware that there are E-books open access sites, and that the university library provided access to e-books, especially books in their area of specialization. Also, the finding of the study revealed that despite the countless number of formats and hardware that can be used to access e-book, PDF and Laptop are the most preferred file format and hardware used by the undergraduates for accessing E-books. The study recommended that university libraries' funding bodies should set aside sufficient funds to enable the sustainable acquisition, use, and access to e-books.

Keywords: E-books, E-books awareness, E-books usage, Undergraduates, Universities

Introduction

Digital books, such as e-textbooks, e-books, e-references, e-monographs, and e-reference materials, are known as e-books. Rabiou, Ojukwu and Oladele (2016) noted that E-books are available in different formats, ranging from basic text files to well structured, purpose built files, such as the e-Pub, and Adobe PDF formats. The ease of access to e-books is primarily made possible with Internet, making it easier to access the resources via various online platforms with the use of computers, e-readers, and other digital devices (Franco and Bidarra, 2022).

The relevance of e-book formats have consequently been split into two broad categories: (a) computer-based e-books which can be viewed directly on a computer or downloaded as files for later reading and (b) device-based e-books which need a specialised E-book reader (e.g. Sony Reader) or a PDA (e.g. Palm Pilot) (Fojtik, 2015). E-books can also be categorised on

the basis of their function. These are: (a) textbooks which are used for formal study of a subject and which are often read in their entirety; (b) reference books which are consulted to find a specific piece of information or a fact (e.g. dictionary or encyclopaedia); and (c) manuals or instructional books which contain specialist procedures or instructions for a particular task (Abdullah and Gibb, 2006).

E-books have been embraced as one of the electronic learning tools by a number of research and academic institutes in developing nations. However, there are views that e-book adoption is taking longer than expected (Allen and Kaddu, 2014; Maduku, 2015). Although e-books are still not the best option for most users, nonetheless, library policies have included them in their collections, which to some schools of thought means giving content access precedence above reading enjoyment (Arroyo-Vazquez, Alvite-Diez, Rodriquez-Bravo & Gonzalez-Taladriz, 2023). E-books' undeniable benefit is instant access to their material, from any location at any time (Blummer and Kenton, 2020). This is crucial for students who learn online or have limited mobility. Furthermore, they also have other strengths, such as portability and ease in searching content, as well as their space-saving and environmentally friendly nature (Blummer and Kenton, 2020; Owens et al., 2023). All these qualities make e-books ideal for students' performance of academic tasks, such as doing class work, consulting specific data, or expanding their knowledge. However, it is argued that print format is preferred for tasks such as studying and in-depth reading, and, in general, when concentration is required (Mastrobattista and Merchan-Sánchez-Jara, 2022). It is therefore important than ever for librarians to understand when, how and why library use e-books in order to design services that meet users' needs. In the light of this, this study aims at exploring the awareness and usage of e-books by undergraduate students of Ajayi Crowther University.

HISTORY OF AJAYI CROWTHER UNIVERSITY

The Supra Diocesan Board (West) of the Church of Nigeria (Anglican Communion) established Ajayi Crowther University (ACU), Oyo, in the year 2005 in order to provide learning environment which is influenced by Christian ethics and principles by focusing the vision of its graduates on spirituality, moral rectitude and academic excellence. The school is situated on what used to be St. Andrews College of Education (SACOED) Oyo, with the permanent site at Ofa Meta along Oyo- Ogbomoso road. The university presently consists of twelve faculties; Social Sciences, Management Sciences, Humanities, Natural Sciences, Law, Environmental Studies, Agriculture, Basic Medical Sciences, Engineering, Education,

Nursing and Communication and Media Studies. Academic development is seriously dependent on the quality of the library. Ajayi Crowther University has a standard building that is imposing and for years to come will be most suitable and adequate for all forms of expansion that are bound to take place as the university grows in number of academic programmes, staff and students. Presently, the library can sit 1,500 users conveniently. The book holdings in the library have also increased from 2500 in 2007 to over 30,000. In a bid to carry out this responsibility, efforts are being made to enrich the Library collections with print and electronic resources that will serve the needs of each programme run in the institution. In order to bring library services closer to faculty members and students, Justice Babasola Ogunade Law Library, formerly, the University Law Library was established in the year 2014 to serve this purpose. Also, a library building is currently under construction at Permanent site of the University to serve the needs of the students in the Basic Medical Sciences.

Objectives

The main objective of the study is to investigate awareness and usage of e-books among undergraduate students in Ajayi Crowther University, Oyo, Oyo State, Nigeria.

1. to find out undergraduate students' awareness of the availability of e-books in Ajayi Crowther University library;
2. examine the purpose of use of e-books among undergraduate students in Ajayi Crowther University;
3. determine the most preferred e-book format used among undergraduate students;
4. determine the availability of hardware for accessing e-books in the library;
5. find out the constraints in the use of e-books among undergraduate students

Literature Review

Researchers in library studies have done a lot of studies on awareness and users' perceptions toward E-books. For instance, Mokhtaram and Razak (2022) surveyed the use of e-books among Malaysian undergraduates, 62.9% of students thought that accessing e-books was easy and free, while 27.7% preferred paper books. Overall, it can be said that the majority of

students are aware of and utilize the library's e-book resources. Likewise, a study on South Korean e-book usage and attitudes was conducted by Hwang, Kim, Lee, and Kim (2014). They found that the majority of users access and learn about e-books via university library websites, which demonstrated the critical role that libraries play in society.

Oriogu, Oluwatola, Oriogu-Ogbuiyi and Enamudu (2018) explored awareness and usage of electronic books among undergraduate students and revealed that most of the respondents are partially aware of the availability of e-book in their area of specialization, dedicated e-book reader devices (e.g. Kindle, Sony reader) and e-book open access sites. The results also showed that they don't know how to use the library's website to access e-books. It also shows that, as long as they can obtain the books they want from the university library, they do not use e-books from the library's webpage.

Khan et al. (2017) conducted an empirical assessment on e-books usage by students in Pakistani universities. In the nutshell, the study reported that the use of e-books is still at a development stage. The students of social sciences were less fond of e-books as compare to engineering and agriculture students. It is also noticed that majority of the students liked e-books because of its advantages such as supports in research work, in-text quick reading, improves academic performance and easy to manage.

According to a survey by Casselden and Pears (2020), respondents favoured e-books for a number of reasons, such as portability, navigability, convenience and accessibility, and the capacity to serve as a preview to assess a book's usefulness. They also discovered that students' use of e-books occasionally interfered with their learning practices and that the technology utilized to access the e-books made it difficult for them to fully engage with the material. Furthermore, according to a survey and interviews conducted by Lin et al. (2020), e-textbooks were not positioned to replace print textbooks for Taiwanese university students, and half of the respondents still chose print textbooks over e-textbooks.

According to a research conducted by Gueval, Tarnow and Kumm (2015), it was reported that students bought e-books because of lower cost and portability but prefer print books because of familiarity. When it comes to the importance of e-books, students liked the convenience of not being bound by time or distance. The findings also demonstrate that students were unfamiliar with e-book resources and how to use them, and that software and

hardware limitations can limit digital reading, and due to the new design, taking notes can be difficult.

Bennett and Landoni (2005) revealed that 54% of their respondents were aware e-book holdings in the library. When asked about how they found out that the library provided access to e-books, 50% indicated that it was from the library website, 22% from a lecturer, 13% from other sources and 8% from a librarian. It is interesting to note that respondents who answered “other” to this question indicated that they found out that the library held e-books from participating in the survey, with friends or the library catalogue being other minor sources.

According to a survey by Abdullah and Gibb (2006), a large percentage of respondents preferred using free e-books that were accessible online or through the library and didn't cost students extra. "There was no comparable printed book available" was the second most common explanation. Because there was no comparable printed book accessible, some students remarked that they were forced to use e-books through EEBO (Early English Book Online). Additional justifications offered by students who chose the "other" option include the following: e-books are convenient to use and carry around, can be accessed remotely, and eliminate the need to visit the library.

In addition, Briddon et al. (2009) differentiated between library sources and faculty sources for providing E-book information at the University of the West of England. The researchers claimed the largest source of knowledge centered on library sources and this included library promotional efforts, the library catalogue, the library webpages, and librarians at 43%. On the other hand, 41% of respondents maintained their knowledge of the institution's E-books stemmed from faculty sources such as tutor recommendations, modules, and course management systems.

Regarding the devices used to access e-books, Roberts (2016) found that over half of Americans own tablets, smartphones, or e-reader devices, and they exclusively use them for reading. Over the last ten years, the United States has seen a 3,000 percent increase in e-book sales. A significant increase in the demand for and expansion of the e-book market was also highlighted by an industrial statistics report. In May 2017, the Association of American Publishers reported that the sales of children's and young adult books and University Presses

had boosted the overall revenue from e-book sales to 2.4% (Bluestone, 2017). The fact that the sales of e-books have surged reveals that consumers have embraced it with open arms.

Pinto et al. (2014) investigated Spanish students' perception, usage and habits to use e-books and their preferred reading mobile devices at the University of Granada. Findings revealed contradiction because the students used printed and electronic books according to their necessities rather than their preference and selection. As a result, the results also showed that, in the health sciences, medical students are the least likely to read e-books (24%), whereas biology students (69%) and dental students (53%) are the most likely to do so on their computers and other technologies. E-books have many benefits, such as being easier to find, easier to share, and less expensive than conventional books.

Despite the advantages of using e-books, empirical studies have identified several challenges faced by users of e-books. According to Walters (2014) the challenges of sharing and using E-books in academic libraries includes restrictive license provisions, proprietary software and file formats, digital rights management (DRM) and the single-user business model adopted by mang e-books. Oriogu et al. (2018) who reported the challenges encountered by the students in accessing E-books which are inactive/dead link, unaware of where to locate needed e-book and poor internet connection.

Methodology

SN	Faculty	Population	Sample size
1.	Agriculture	69	7
2.	Basic Medical Sciences	395	40
3.	Communication and Media Studies	359	36
4.	Education	113	11
5.	Engineering	373	37
6.	Environmental Studies	124	12

7.	Humanities	499	50
8.	Law	292	29
9.	Management Sciences	300	30
10.	Natural Sciences	450	45
11.	Nursing Sciences	359	36
12.	Social Sciences	350	35
	TOTAL	3683	368

This study employed a descriptive survey research design, using a convenience sampling technique to conduct a quantitative study on undergraduates of Ajayi Crowther University, Oyo. The population consisted of 3,683 undergraduates. The distribution of the study's target population is shown in table 1 below. Convenience sampling technique was used to administer the questionnaire to undergraduates who were physically present in the library. Also, there was modality that was put in place to ensure that students must not fill more than ones and the administration was done within a period of three weeks. Slovin Formula was being used to determine the sample size of Three hundred and sixty eight (368). Denoting by n the sample size is given by

$$n = N / (1 + Ne^2)$$

where n = sample size N = total population e =level of significance /margin error(0.05) which is not more than 5%

Table 1: Population of Students in Ajayi Crowther University, Oyo

Result and Interpretation

Demographic Profile of the Respondents

The demographic profile of the respondents are represented in table 1 below.

Table 1: Demographic Profile of Respondents

S/N	Faculty	Frequency	Percentage	Cumulative Percentage
1.	Education	11	3.0	3.0

2.	Communication and Media Studies	36	9.8	12.8
3.	Natural Sciences	45	12.2	25.0
4.	Management Sciences	30	8.2	33.0
5.	Engineering	37	10.1	43.2
6.	Humanities	50	13.6	56.8
7.	Social Sciences	35	9.5	66.3
8.	Law	29	7.9	74.2
9.	Environmental Sciences	12	3.3	77.4
10.	Agriculture	7	1.9	79.3
11.	Basic Medical Sciences	40	10.9	90.2
12.	Nursing	36	9.8	100.0
Total		368	100.0	
Sex				
1.	Male	195	53.0	53.0
2.	Female	173	47.0	100.0
Total		368	100.0	
Age Range				
1.	16-20years	179	48.6	48.6
2.	21-25years	176	47.8	96.5
3.	26-30years	9	2.4	98.9
4.	31-35years	4	1.1	100.0
Total		368	100.0	
Level of Study				
1.	100	20	5.4	5.4
2.	200	114	31.0	36.4
3.	300	106	28.8	65.2
4.	400	98	26.6	91.8
5.	500	30	8.2	100.0
Total		368	100.0	

Source: Author's Computation, 2025

Table 1 shows the demographic profile of respondents for this study. The result reveals that majority of the respondents are from Faculty of Humanities with 50 (13.6%), closely followed by Natural Sciences, with 45 (12.2%); Basic Medical Sciences, 40 (10.9%); Engineering 37 (10.1%); Communication and Media Studies, having same response rate as Nursing with 36 (9.8%) respectively. Also, Faculty of Social Sciences has 35 (9.5%) responses, while others like Management Sciences, Law, Environmental Sciences, Education, and Agriculture all having response rates of 30 (8.3%), 29 (7.9%), 12 (3.3%), 11(3.0%), and 7 (1.9%) respectively.

Furthermore, there were more male respondents, 195 (53.0%) than females, 173 (47.0%). In addition, majority of the respondents fall within the age range of 16-20years, as evident by 179 (48.6%) responses. This is followed by those within the age range of 21-25years with 176 (47.8%) responses; 26-30years with 9 (2.4%), while only 4 (1.1%) of them are within the age of 31-35years. Moreover, the highest number of responses was from the respondents in 200 level, 114 (31.0%), followed by those in 300 level, 106 (28.8%), while those in 400 level are indicated with 98 (26.6%) response rate. Lastly, not too many responses were gotten from those in 100 and 500 level, as indicated by 20 (5.4%) and 30 (8.2%) respectively.

Research Questions

Research Question 1: What is the level of students' awareness of E-books in Ajayi Crowther University, Oyo?

Table 2: Level of Students' Awareness of E-books in Ajayi Crowther University, Oyo

S/N	Statement	FA	A	NA	NFA	Mean	Std. Deviation
1.	I am aware that my university library provides access to e-books	117 (31.8%)	168 (45.7%)	56 (15.2%)	27 (7.3%)	3.02	.875
2.	I am aware of the availability of e-book in the area of my specialization	99 (26.9%)	201 (54.6%)	55 (14.9%)	13 (3.5%)	3.05	.748
3.	I am aware of how to access e-books in the library webpage	84 (22.8%)	221 (60.1%)	45 (12.2%)	18 (4.9%)	3.01	.740
4.	I am aware of e-book open access sites	208 (56.5%)	123 (33.4%)	27 (7.3%)	10 (2.7%)	3.44	.747
5.	I am aware that e-book can be	46	273	36	13	2.96	.603

	downloaded on mobile devices and laptops	(12.5%)	(74.2%)	(9.8%)	(3.5%)		
6.	I am aware that e-books can be accessed online and offline	156 (42.4%)	135 (36.7%)	45 (12.2%)	32 (8.7%)	3.13	.938

Source: Author's Computation, 2025

Table 2 displays the responses to the level of students' awareness of E-books in Ajayi Crowther University. Based on the result, the response with the highest mean value ($x = 3.44$) indicates that the most of the students were fully aware of e-book open access sites. While the responses with the lowest mean value ($x = 2.96$) shows that some percentage of the respondents were aware that e-book can be downloaded on mobile devices and laptops. The result also shows that these students are very much aware that e-books can be accessed online and offline, as indicated with a mean value of ($x = 3.13$). Likewise, the mean score of ($x = 3.05$) corresponds to the fact that a quite number of the respondents were aware of the availability of e-book in the area of their specialization, while the mean value of ($x = 3.02$) indicates that the students are aware that their university library provides access to e-books. Lastly, the mean score of ($x = 3.01$) indicates that some of the respondents were aware of how to access e-books in the library webpage.

The results above implies that the level of students' awareness of E-books in Ajayi Crowther University is high, as many of them are aware that there are e-book open access sites, and that the university library provided access to e-books, especially books in their area of specialization. Also they are aware of hardware devices that can be used to download the E-books.

Research Question 2: What are the purposes of using E-book by students in Ajayi Crowther University?

Table 3: Purposes of using E-books by Students in Ajayi Crowther University

S/N	Statement	SA	A	D	SD	Mean	Std. Deviation
1.	To read as a recommended course book	181 (49.2%)	95 (25.8%)	61 (16.6%)	31 (8.4%)	3.16	.986
2.	To find materials for a project or research work	181 (49.2%)	129 (35.1%)	48 (13.0%)	10 (2.7%)	3.31	.799
3.	For seminar presentation	125	177	52	14	3.12	.787

		(34.0%)	(48.1%)	(14.1%)	(3.8%)		
4.	To look up the answer to a specific question	163	159	40	6	3.30	.726
		(44.3%)	(43.2%)	(10.9%)	(1.6%)		
5.	To read as a textbook for a course	157	133	60	18	3.17	.872
		(42.7%)	(36.1%)	(16.3%)	(4.9%)		
6.	Learning more about a subject	105	158	79	26	2.93	.883
		(28.5%)	(42.9%)	(21.5%)	(7.1%)		
7.	For course assignment	60	184	88	36	2.73	.849
		(16.3%)	(50.0%)	(23.9%)	(9.8%)		

Source: Author's Computation, 2025

Table 3 shows the results on the purpose of using E-books by Ajayi Crowther University students. From the result, it was indicated that majority of the respondents use e-books to find materials for a project or research work, as evident by mean score of ($x = 3.31$). Also, a larger percentage of the respondents agreed to using e-books to look up the answer to a specific question, corresponding to mean score of ($x = 3.30$). In addition, the mean value of ($x = 3.17$) indicates that most of these students utilize E-books to read as a textbook for a course. Moreover, the mean score of ($x = 3.16$) reveals that the respondents agreed to reading e-books as a recommended course book, while mean score of ($x = 3.12$) shows that some of the respondents use E-books for seminar presentation. Lastly, the mean values of ($x = 2.93$) and ($x = 2.73$) respectively indicate that the respondents use e-book for learning more about a subject, and for course assignment.

The above result indicates that E-book is highly used by students in Ajayi Crowther University for academic purposes such as reading E-book as a recommended course book, using it to find materials for project or research works, to look up the answer to specific question, for seminar presentation, as textbooks, to learn more about specific subject and for course assignments.

Research Question 3: What is the most preferred format and hardware for accessing E-books by students?

Table 4: The Most Preferred Format and Hardware for Accessing E-books by Students

Descriptive Statistics

	N	Minim um Statisti c	Maxim um Statistic	Mean Statisti c	Std. Deviation Statistic	Skewness Statisti c Std. Error		Kurtosis Statisti c Std. Error	
TEXT	368	1	4	3.13	.944	-.707	.127	-.625	.254
PDF	368	1	4	3.26	.704	-1.017	.127	1.724	.254
HTML	368	1	4	3.17	.798	-.895	.127	.611	.254
DOCX	368	1	4	3.21	.904	-1.060	.127	.351	.254
Franklin eBookman	368	1	4	2.84	.802	-.111	.127	-.682	.254
Hiebook reader	368	1	4	2.78	.904	-.169	.127	-.852	.254
Gemstar eBook	368	1	4	2.97	.901	-.441	.127	-.719	.254
Palm device	368	1	4	3.01	.825	-.449	.127	-.446	.254
Pocket PC	368	1	4	3.02	.904	-.555	.127	-.584	.254
Handheld PC	368	1	4	3.18	.881	-.893	.127	.039	.254
Laptop	368	1	4	3.23	.827	-.970	.127	.470	.254
Valid N (listwise)	368								

Source: Author's Computation, 2025

The results in table 4 shows responses on the preferred format and hardware for accessing e-books by students. From the result, on the e-book formats, it was indicated that the respondents access e-books in formats like text, pdf, html and docx, with the PDF format being the most preferred e-book format, as indicated by the highest mean score ($x = 3.26$).

Also, in term of the hardware use for accessing e-books, hardware such as Franklin e-bookman, Hie-book reader, Gemstar e-book, Palm device, Pocket PC, Handheld PC and Laptop are all used by the respondent. However, Laptop was found to be the most preferred hardware used by these students for accessing e-books, as evident by mean score of ($x = 3.23$).

The above result implies that despite the countless number of formats and hardware that can be used to access e-book, PDF and Laptop are the most preferred file format and hardware used by Ajayi Crowther University students' for accessing E-books.

Research Question 4: What is the level of availability of hardware for accessing e-books in the library?

Table 5: Level of Availability of Hardware for Accessing E-books in the Library

S/N	Statement	VRA	RA	OA	NA	Mean	Std. Deviation
1.	Franklin eBookman	80 (21.7%)	20 (5.4%)	114 (31.0%)	154 (41.8%)	2.80	.840
2.	Hiebook reader	92 (25.0%)	26 (7.1%)	104 (28.3%)	146 (39.7%)	2.83	.887
3.	Gemstar eBook	55 (14.9%)	14 (3.8%)	143 (38.9%)	143 (38.9%)	3.16	.816
4.	Palm device	44 (12.0%)	18 (4.9%)	125 (34.0%)	181 (49.2%)	3.12	.801
5.	Pocket PC	13 (3.5%)	37 (10.1%)	146 (39.7%)	172 (46.7%)	3.23	.768
6.	Handheld PC	149 (40.5%)	37 (10.1%)	13 (3.5%)	169 (45.9%)	3.29	.787
7.	Laptop	178 (48.4%)	136 (37.0%)	35 (9.5%)	19 (5.2%)	3.29	.840

Source: Author's Computation, 2025

Table 5 displays the results on the level of availability of hardware for accessing e-books in the library. From the result, the responses with the highest mean score ($x = 3.29$) respectively show that laptops are very readily available in Ajayi Crowther University library. However, other hardware such as Pocket PC, ($x = 3.23$); Gemstar e-book, ($x = 2.16$); Palm device, ($x = 3.12$); Franklin e-bookman, ($x = 2.80$) and Hie-book reader, ($x = 2.03$) are not available in the library.

This result implies that Ajayi Crowther University needs to level up in providing necessary hardware such as Franklin e-bookman, Hie-book reader, Gemstar e-book, Palm device, Pocket PC, Handheld PC, etc. that are needed for accessing e-books, other than laptops.

Research Question 5: What are the challenges students face when using E-books in Ajayi Crowther University?

Table 6: Challenges Students Face When Using E-Books in Ajayi Crowther University

S/N	Statement	SA	A	D	SD	Mean	Std. Deviation
1.	Poor internet connection	183 (49.7%)	119 (32.3%)	55 (14.9%)	11 (3.0%)	3.11	.762
2.	Poor electricity supply	126	124	85	33	2.71	.921

		(34.2%)	(33.7%)	(23.1%)	(9.0%)		
3.	Inadequate hardware devices to access e-books	87	65	84	132	2.48	1.038
		(23.6%)	(17.7%)	(22.8%)	(35.9%)		
4.	The subject areas of the e-books are limited	75	96	181	16	2.97	.800
		(20.4%)	(26.1%)	(49.2%)	(4.3%)		
5.	Difficult to concentrate / too many distraction online	60	150	127	31	2.65	.851
		(16.3%)	(40.8%)	(34.5%)	(8.4%)		
6.	Lack of confidence with relevant technology	117	135	60	56	2.85	1.035
		(31.8%)	(36.7%)	(16.3%)	(15.2%)		
7.	The e-book interface is not user friendly	10 (2.7%)	34 (9.2%)	179	145	3.25	.732
				(48.6%)	(39.4%)		
8.	Hard to read and browse	47	27 (7.3%)	151	143	3.11	.894
		(12.8%)		(41.0%)	(38.9%)		

Source: Author's Computation, 2025

Table 6 shows the results on the challenges Ajayi Crowther University students face when using e-book. From the result, the highest mean score ($x = 3.25$) indicates that majority of the respondents disagreed that the E-book interface is not user friendly. While the lowest mean value ($x = 2.48$) shows that inadequate hardware devices to access E-books is a major constraint to using E-books by Ajayi Crowther University students. Other challenges as highlighted by the respondents are poor internet connection ($x = 3.11$); lack of confidence with relevant technology ($x = 2.85$); poor electricity supply ($x = 2.71$); and difficulty to concentrate / too many distractions online ($x = 2.65$). However, some of the respondents disagreed that the E-books are hard to read and browse ($x = 3.11$); and that the subject areas of the E-books are limited ($x = 2.95$).

The above result means that the major challenges encountered by students in Ajayi Crowther University when using E-books include poor internet connection, poor electricity supply, lack of confidence with relevant technology, and difficulty to concentrate / too many distraction online.

Discussion of Findings

The finding of this study revealed that the level of students' awareness of E-books by the respondents is high, as many of them are aware that there are E-books on open access sites, and that the university library provided access to e-books, especially books in their area of specialization. This finding is in tandem with the report of Bennett and Landoni (2005) which revealed that majority of the respondents were aware of e-book as part of the library holdings.

It was found that respondents are generally familiar with the term e-books and also have used them before. This finding disagrees with the report of Oriogu et al. (2018) who explored awareness and usage of electronic books among undergraduate students and revealed that most of the respondents are partially aware of the availability of e-book in their area of specialization, dedicated e-book reader devices (e.g. Kindle, Sony reader) and e-book open access sites. The findings also indicated that they are not aware on how to access e-books in the library webpage. It also reveals that they do not use e-book from the university's library webpage, as long as they could get the desired books from the university library.

Also, this study revealed that despite the countless number of formats and hardware that can be used to access e-books, PDF and Laptop are the most preferred file format and hardware used by the majority of the respondents for accessing E-books. This finding is in support of Roberts (2016)'s report which indicated that more than 50 per cent of Americans have their personal tablets, smartphones, e-reader devices and they use them for academic purposes.

Furthermore, the finding of this study indicated that challenges encountered by the respondents when using E-books. For instance; poor internet connection, poor electricity supply, lack of confidence with relevant technology, and difficulty to concentrate / too many distraction online. This study supports the finding of Oriogu et al. (2018) who reported the challenges encountered by the students in accessing E-books which are inactive/dead link, unaware of where to locate needed e-book and poor Internet connection. Also the study supports the finding of Ukonu, Wogu and Obayi (2012) that considers low network, difficulty encountered in the process of accessing e-books due to lack of subscription, coupled with inability to secure access to online books as part of the challenges militating against the use of the digital library by degree students of University of Nigeria, Nsukka. In addition, this finding disagrees with the study of Luo, Xiao, Ma & Li (2021) who reported that students encounter many difficulties in the digital reading experience, including the limitations of software and hardware, the challenges involved in underlining and making notes, and the unfriendly user interface. Students expressed the view that unstable software or hardware might hinder their e-book reading. E-book firms could improve the stability of software and hardware, thereby enhancing students' use satisfaction.

Conclusion and Recommendations

E-books have become more and more popular among students of all ages, particularly among undergraduates. In the twenty-first century, the majority of digital learning resources, including e-books, have taken the place of printed books. Undergraduate students benefit greatly from it since it facilitates an efficient and interactive learning environment. According to the study's findings, students utilize e-books for academic purposes, including seminar presentations, learning more about particular subjects, and course assignments, due to their dynamic features, which include time savings, portability, quick and easy access, and round-the-clock availability. The study therefore, recommends that university libraries as a matter of necessity, should at intervals sensitize and equip students with the knowledge and skills to access and use e-books. They should also provide effective Wi-Fi platform to enable students have access to Internet. Also, the issue of low internet connectivity can be solved if there are offline version of E-books being downloaded on laptop computers for undergraduate students to have access to. In addition, funding is crucial to the smooth functioning of any institution. Therefore, it is recommended that university libraries' funding bodies should set aside sufficient funds to enable the sustainable acquisition, use, and access to e-books.

References

- Abdullah, N. & Gibb, F. (2006). A survey of e-book awareness and usage amongst students in an academic library. In: Proceedings of International Conference of Multidisciplinary Information Sciences and Technologies, Merida, 25-28 October, 2006, 2006-10-25 - 2006-10-28, Merida.
- Allen, M., & Kaddu, S. (2014). *A Report on the Survey of the eBooks and eLending in African Countries*. Academic Press.
- Arroyo-Vazquez, N., Alvite-Diez, M., Rodriguez-Bravo, B. & Gonzalez-Taladriz, L.C. (2023). E-books in Spanish university libraries: an analysis of online social sciences degrees. *The Journal of Academic Librarianship*, 49, 1-10.
- Bennett, L. & Landoni, M. 2005. E-books in academic library. *The Electronic Library*, 23(1), 9-16.
- Bluestone, M. (2017). Ebook revenue up in May 2017: first monthly increase in more than two years", available at: <http://newsroom.publishers.org/ebook-revenue-up-in-may-2017-firstmonthly-increase-in-more-than-two-years/>
- Blummer, B., & Kenton, J. M. (2020). Systematic review of E-books in academic libraries: Access, advantages, and usage. *New Review of Academic Librarianship*, 26(1), 79–109. <https://doi.org/10.1080/13614533.2018.1524390>
- Briddon, J., Chelin, J., Ince, G., Redman, J., Sleat, A., & Williams, E. (2009). E-books are good

- if there are no copies left: a survey of e-book usage at UWE. *Library Services*, 33(104), 45–65.
- Casselden, B., & Pears, R. (2020). Higher education student pathways to ebook usage and engagement, and understanding: highways and cul de sacs. *Journal of Librarianship and Information Science*, 52(2), 601–619.
- Franco, D. C., & Bidarra, J. (2022). Instructional Design of Online Courses in Mozambique: The Use of eBooks as a Strategy to Improve Learning. *Open Praxis*, 14(2), pp. 122–132. DOI: <https://doi.org/10.55982/openpraxis.14.2.141>
- Fojtik, R. (2015). Ebooks and mobile devices in education. *Procedia-Social and Behavioral Sciences*, 182, 742-745.
- Gueval, J., Tarnow K., Kumm, S. (2015). Implementing e-books: faculty and student experiences. *Teaching Learning Nursing* (10)181–85. doi:10.1016/j.teln.2015.06.003.
- Hwang, J.-Y., Kim, J., Lee, B., & Kim, J. H. (2014). Usage patterns and perception toward e books: Experiences from academic libraries in South Korea. *The Electronic Library*, 32 (4), 522–541.
- Khan, A., Bhatti, R. & Khan, A. (2017). E-books usage by agriculture, engineering and social science students in selected universities of Pakistan: an empirical assessment. *The Electronic Library*, 34 (6), 958-973.
- Luo, Y-Z, Xiao, Y-M, Ma, Y-Y & Li, C. (2021). Discussion of students' E-book reading intention with the integration of theory of planned behavior and technology acceptance model. *Front. Psychol.* 12:752188. doi: 10.3389/fpsyg.2021.752188
- Lin, Y.H., Chen, M.R.A., & Hsu, H.L. (2020). Fostering low English proficiency learners' reading in a freshman EFL reading class: effect of using electronic and print textbooks on Taiwanese university students' reading comprehension. *International Journal of English Linguistics*, 11(1), 54-67.
- Maduku, D. K. (2015). Factors of E-book use intentions: perspective of students in a developing country. *Perspectives on Global Development and Technology*, 14(6), 597–618. doi:10.1163/15691497-12341364
- Mastrobattista, L., & Merchán-Sánchez-Jara, J. (2022). Identificación y análisis de factores de desapego de la lectura digital en el entorno académico: Una revisión crítica de la bibliografía. *Profesional de la información*, 31(2). <https://doi.org/10.3145/epi.2022.mar.07>
- Mokhtaram, H. & Razak, N.A. (2022). Ebook awareness and usage among UiTM CPP students. [https://appspenang.uitm.edu.my/sigcs/Publication 1-6](https://appspenang.uitm.edu.my/sigcs/Publication%201-6)
- Oriogu, C. D., Oluwatola, K. I., Oriogu-Ogbuiyi, D.C. & Enamudu, A.I. (2018). Awareness and use of electronic books among undergraduate students: a survey. *Library Philosophy and Practice (e-journal)*. 2208.
- Owens, E., Hwang, S., Kim, D., Manolovitz, T., & Shen, L. (2023). Do you love them now? Use and non-use of academic ebooks a decade later. *The Journal of Academic Librarianship*, 49(3). <https://doi.org/10.1016/j.acalib.2023.102703>
- Pinto, M., Pouliot, C. & Antonio Cordon-Garcia, J. (2014). E-book reading among Spanish university students. *The Electronic Library*, 32 (4), 473-492.
- Rabiu, N., Ojukwu, N. N., & Oladele, P. (2016). *Availability and accessibility of e-books in*

- Nigerian libraries: A survey. Information Impact: Journal of Information and Knowledge Management*, 7 (1), 163–175.
- Roberts, S. (2016). The demand for eBooks is rapidly growing-Here's you can take advantage. Available at: <https://probblogger.com/the-demand-for-ebooks-is-rapidlygrowing-heres-how-you-can-take-advantage/>
- Roskos K, Brueck J, Lenhar L. (2017). An analysis of e-book learning platforms: affordances, architecture, functionality and analytics. *Int J Child-Computer Interaction*. 2017;12:37–45. doi:10.1016/j.ijcci.2017.01.003.
- Ukonu, M., Wogu, J. & Obayi, P. (2012). Problems and challenges facing the University of Nigeria undergraduate students in the use of the UNN Digital Library. *IOSR Journal of Humanities and Social Science*, 3(2): 4-12.
- Walter, W.H. (2014). E-books in academic libraries: challenges for sharing and use. *Journal of Librarianship and Information Science*. 46(2) 85-95.