

## E-BOOKS UTILISATION AND STUDENTS' ACADEMIC ACHIEVEMENT IN UNIVERSITIES IN LAGOS STATE, NIGERIA: IMPLICATION FOR EDUCATIONAL PLANNERS

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Article info	Abstract
<b>Received: 1 February 2022</b> <b>Accepted: 25 September 2022</b> <b>Published: 25 October 2022</b>	<p>This study examined e-books utilisations and students' academic achievement in universities in Lagos State: implication for educational planners. With the use of descriptive survey research methodologies, this study was driven by three research questions and three null hypotheses. All six of Lagos State's traditional universities make up the study's population. Three institutions were chosen using a straightforward random sampling method. Additionally, 150 final-year students from each of the studied institutions were chosen using a practical selection approach, resulting in 450 respondents from the three universities chosen for the study. A well-structured questionnaire titled "E-Book Utilisation and Students' Academic Achievement in Universities" was used to gather data (IEBSAAU). The test-retest reliability approach was used to validate the instrument, and it was determined to be reliable with a reliability coefficient of 0.79. The statistical technique Chi-Square was used to gather data. The findings showed significant relationship in the use of electronic books with <math>X^2 = (4, N = 450) = 246.462, P = .000</math>; a significant relationship between computer literacy with <math>X^2 = (4, N = 450) = 206.431, P = .000</math>; a significant relationship between students' perception on the use of electronic books for academic progress with <math>X^2 = (4, N = 450) = 262.109, P = .000</math> and student academic achievement. It is recommended that: E-book library should be set up and maintained in every university of study to boost interest and enlightens students and teachers on the importance of e-books to teaching and learning.</p>
<b>Keywords:</b> E-book; student academic achievement; universities; educational planners	

## INTRODUCTION

Electronic books have been one of the information age's most hotly debated topics since the early 1990s, propelling fast advancement in educational media. The development of electronic books and learning in the field of education demonstrates the growth of learning and the creation of the possibility for everyone to study anywhere and anytime. An electronic book is a book in digital form, consisting of texts and images and readable on a computer or other electronic devices. According to Akinoso (2018), see e-book reader is a material structure computer used to study devices or a software application for use on a computer such as a laptop, or i-pods, i-pads, among others. The device is an excellent choice as some batteries' life can span two weeks. They are also lightweight and backlit, making reading in the dark easy.

Electronic materials are defined as educational aids that are developed in an electronic format to help in teaching and learning processes. In reality, electronic learning facilitates and expands access to information for education by facilitating coordination and collaboration between professionals and students, and it has a higher success rate than the traditional technique (Landouni & Diaz, pp. 2-3 2013). It should be mentioned, however, that such the use of modern media in the field of education necessitates financial backing, a qualified workforce, and a shift in responsibilities. Previously, electronic books were more expensive than printed books. Price decreases have recently occurred, resulting in a favourable step toward the adoption of electronic books. Allowing individuals to make the greatest use of electronic books will undoubtedly be far more cost-effective and time-consuming than forcing them to use printed ones.

Given the growing popularity of electronic books in a variety of educational sectors, these resources are considered one of the goals of distance education, the many elements of which may be researched. To be sure, success in the usage of electronic books in our different virtual education systems necessitates some research on foresight and assessment of requirements in this area. As a result, the current study attempts to explore electronic books and students' academic performance. Several studies have been conducted on the outcome of the performance of electronic books in the learning process and the changing function of digital resources as compared to printed material, according to research. The perception presented indicates the disagreement between critics and supporters of electronic books.

Compared to printed books, electronic book reading devices may find their preferred topics and area of interest more quickly and simply (Shelburne, 2019). Readers of electronic books enjoy having access to desired content without the need to be physically present in a library, saving time and energy, and occasionally saving money. Additionally, students prefer them to printed books due to their benefits, including the ability to move around the text, flexibility,

and the ability to save a lot of resources on a mobile phone's hard drive, as well as the ability to take notes and record subjects using electronic ink (Gibson & Gibb, 2016).

Several studies have previously been undertaken to explore the impact of electronic books on academic advancement and student performance. The research about advances in teaching and learning conducted is an example of this sort of study; nevertheless, there are a number of limitations to this technology for educational purposes. Some of these constraints include, among other things, unattractive programming or user interfaces, restricted resources, a lack of needed expertise and ability, a lack of time, and a high maintenance cost. As a result, this study differs from others in that it investigates the influence of electronic books on students' academic accomplishment while comparing it to printed version materials. This may help relevant education officials decide whether to employ such technology in the future.

Hwang (2018) investigated e-book consumption habits and attitudes in South Korea in a recent study. Hwang discovered that the library's function is critical since most consumers learn about and access e-books through university library websites rather than through portal sites like Google. Furthermore, Hwang discovered that people with higher education are more likely to notice and use e-book services. Wilson (2018), using a web-based survey, investigated the extent to which e-books suit the demands of medical professors at the University of New South Wales in the performance of their academic activities. The results showed that medical academics' use of e-books was relatively low; nonetheless, the majority of respondents projected that they would use e-books over the next five years.

According to e-book use studies, 71% of students and teachers agreed that e-books improved their overall productivity. Al-Harbi (2019) also attempted to explore the elements influencing electronic learning acceptability at the higher education level in Saudi Arabia. The findings suggested that students' internet access and computer skill efficiency significantly impact behavioural intention. The importance of Electronic books popularly referred to as e-books in today's 21<sup>st</sup> century, cannot be overemphasized as many academic and non-academic institutions now adopt its usage to improve their activities and replace printed materials of all types. Relatively, the importance of these electronic books gave rise to their disadvantages which range from safety, maintenance, operation and cost. Part of the problem experienced today by most people with electronic books is how to keep the file safe for decades without viruses penetrating into it. Maintenance of these electronic books devices is another bothering issue as most electronic files/books are meant to be lost if the component is affected. One of the challenges depriving many of getting an electronic book is the skill of operating the E-book devices and how to access the files to get desired information needed is another bothering issue as most people are not computer literate to be able to rate the E-book devices. The cost of purchasing E-book devices to facilitate dents' academic work is another great issue as most parents are below the average el of purchasing the gadgets for their children The purpose of this study is to investigate the effects of using electronic books on students' learning rates, gender differences in students' use of electronic books, computer literacy and

the benefits of using electronic books, student perspectives on using electronic books, and the effects of using electronic books on students' academic progress.

As a result, the study on the use of electronic books on student academic achievement in universities in Lagos State is worth pursuing. It is hoped that the result of the study will provide findings; recommendations and suggestions on the importance of e-book readers as it affects the academic achievements of undergraduate students in universities in Nigeria.

The following research hypotheses were developed in light of the study's purpose:

1. There is no significant relationship between the use of electronic books and students' academic achievement in universities in Lagos State
2. There is no significant relationship between computer literacy and students' learning with electronic books in universities in Lagos State
3. There is no significant relationship in students' perception on the use of electronic books for academic progress and students' academic achievement in universities in Lagos State

## **METHODOLOGY**

This study adopted a descriptive survey research design. The population for this study consists of all six conventional universities in Lagos State. A simple random sampling technique was adopted to select three universities, including one federal, state, and private university. Furthermore, a convenient sampling technique was adopted to select 150 final-year students from three faculties of each of the sampled universities, making a total of 450 respondents from the three selected universities for this study. A self-designed research instrument/questionnaire titled "E-book Utilisation and Students Academic Achievement in Universities (EBUSAAU)" was adopted for data collection for this study. The instrument was designed using four points Likert style of Strongly Agree,-4 Agree-3, Disagree-2 and Strongly Disagree-1. The instrument contains fifteen item statements validated through the face and content validity and was also found reliable through the test-re-test technique at 0.79 reliability coefficient. Data collected for the formulated hypotheses were analyzed using Chi-Square statistical tool at a 0.05 level of significance through Statistical Package for Social Science (SPSS) version 20.

## **RESULT/FINDINGS**

### **Hypotheses 1**

There is no significant relationship between the use of electronic books and students' academic achievement in universities in Lagos State

**Table 1.** Chi-Square Analysis of the difference in the use of electronic books and students' academic achievement in universities in Lagos State

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	246.462 <sup>a</sup>	4	.000
Likelihood Ratio	315.207	4	.000
Linear-by-Linear Association	167.838	1	.000
N of Valid Cases	450		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.65.

Table 1 shows a significant relationship between the use of electronic books and students' academic achievement in universities in Lagos State. The result gave an  $X^2 = (4, N = 450) = 246.462$ ,  $P = .000$ . The null hypothesis states that there is no significant relationship between the use of electronic books and students' academic achievement in universities in Lagos State is not accepted.

## Hypothesis 2

There is no significant relationship between computer literacy and students' learning with electronic books in universities in Lagos State

**Table 2.** Chi-Square Analysis for Hypothesis of the relationship between computer literacy and students' learning with electronic books in universities in Lagos State

<b>Chi-Square Tests</b>			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	206.431 <sup>a</sup>	4	.000
Likelihood Ratio	266.343	4	.000
Linear-by-Linear Association	156.004	1	.000
N of Valid Cases	450		

a. 0 cells (.0%) have an expected count of less than 5. The minimum expected count is 9.27.

Table 2 shows a significant relationship between computer literacy and students' learning with electronic books in universities in Lagos State. The result gave an  $X^2 = (4, N = 450) = 206.431$ ,  $P = .000$ . The hypothesis states that there is no significant relationship between

computer literacy and students' learning with electronic books in students' learning with electronic books in universities in Lagos State is not accepted.

### Hypothesis 3

There is no significant relationship between students' perception of the use of electronic books for academic progress and students' academic achievement in universities in Lagos State

**Table 4.** Chi-Square Analysis for Hypothesis of the significant relationship between students' perception of the use of electronic books for academic progress and students' academic achievement in secondary schools

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	262.109 <sup>a</sup>	4	.000
Likelihood Ratio	334.641	4	.000
Linear-by-Linear Association	182.159	1	.000
N of Valid Cases	450		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.02.

Table 3 shows a significant relationship in students' perception on the use of electronic books for academic progress and students' academic achievement in universities in Lagos State. The result gave an  $X^2 = (4, N = 450) = 262.109, P = .000$ . The null hypothesis which states that there is no significant difference in students' perception on the use of electronic books for academic progress and students' academic achievement in universities in Lagos State is not accepted.

### Discussion of Findings

The finding in hypothesis one revealed a significant difference in electronic books' use and students' academic achievement in universities in Lagos State. The finding aligns with the finding of Wells (2018), which states that e-books are loaded with great potential for knowledge that allows readers to access different sought of information of their interest at a click but the mode of its usage by most users does not align with the reasons for its production. Likewise, Abdulrahman *et al* (2020) opined that e-books are meant to serve as students' educational companions and not as tools for negative social vices. Nonetheless, despite the positive influence of multimedia and e-book tools on improving teaching and learning activities, they may be counterproductive if the computer-based tools are not

correctly developed or instructional materials are not adequately produced. They also discovered in their research that most multimedia and e-book solutions used for teaching and learning target the solution to the pedagogical content of the subject of interest as well as the solution's user audience. Al-Harbi, (2019) believes that the assessment of e-books for educational performances among students differ in usage among male and female. He further stated that, nowadays, students misuse most of these gadgets meant to give them vital information and to improve their academic performances by either watching films, chatting or listening to music, thereby turning away from its original use.

Hypothesis two's findings revealed a significant relationship between computer literacy and students' learning with electronic books in universities in Lagos State. The finding is in consonance with the submission of Clem (2018) opined that knowledge of information communication technology is needed for students to make good use of e-books for academic purposes and performances. Also, Odunkaye *et al.* (2019) stated that students of the 21<sup>st</sup> century need the knowledge of information communication technology to thrive in today's educational world, and their academics hence the promotion of their skills for further discoveries.

Lastly, hypothesis three's findings revealed a significant relationship between students' perception on the use of electronic books for academic progress and students' academic achievement in universities in Lagos State. The finding agrees with Gibson and Gibb (2011), which state that using all educational support gadgets to improve students' performance is in their interest to access. Abram (2011) advocated that students' perception of using e-books facilitates their use for excellence with access to various information.

## CONCLUSIONS

Based on the findings, it was concluded that e-book readers are the electronic gadgets common among the student populace. Electronic gadgets play a significant role in the learning acquisition of students and enhance effective teaching on the part of teachers. It was observed that due to the lightweight and graphical environment of e-book readers, students feel more comfortable when reading on e-book readers than when reading textbooks. Thus, students no longer spend much time in the library as they used to; they rather spend more time on their gadgets which are e-library supported. The frequent reduction in prices of e-book readers and high order of e-books by libraries will make learning more meaningful to students as e-book readers are applicable to all spheres of life. More so, existing e-book utilisations studies clearly indicate that as libraries continue to transit to e-books, users themselves are in transition; therefore, educational planners must endeavour to integrate e-books into the curriculum to drive learning in line with global standards over time, as faculty and students gain more experience with e-books, their feedback, and academic achievement may also change for improvement.

Educational planners must recognize that perceptions of faculty and student intellectual processes may be impacted differently by print, while e-texts provide an exciting opportunity for further research as users acclimatize to e-books. Further investigation is also needed into the yet-to-be-known effects of patron-driven e-book purchase models on users, collections, and academic libraries' character. Future researchers and libraries must carefully investigate the interaction between users and e-books to ensure that research libraries meet the needs of their constituents, even as a steady shift toward e-books appears inevitable from the perspective of educational planners for institutional change.

## RECOMMENDATIONS

Based on the findings from this study, it was recommended that students' use of e-books should be strictly focused on improving their academics, making use of the potential embedded in the e-book gadget. The universities should monitor students' use of e-books among male and female students for appropriate use of such devices for equity in optimum academic achievement. Students and lecturers should endeavour to get themselves an e-book reader so as to have access to varieties of information for update sake and for personal improvement. Students' information communication technology skills should be applied towards the progress of their e-books assessment and academic improvement. Government should make provisions and improve the ICT laboratory in universities so as for the students to be ICT compliance such as be able to make use of e-books for the improvement of their academic performance. A monitoring team/committee should be set up in schools to regulate the students' use of e-books.

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