

Research Article

Information Distribution, Internet, and Libraries in Educational Development: Exploring Views of Students in African Universities

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Abstract

This study explored Information Distribution, Internet, and Libraries in Educational Development: Exploring Views of Students in African Universities. The objectives were to: Find out the frequency of libraries usage by students; the perceived impact of libraries on academic performance; the views of students about facilities in libraries and the specific kind of amenity that students suggest to leverage on library capacities in select African Universities. Two theories were put to back up the work which were: the Uses and Gratification theory and the Diffusion of Innovation theory. The method of research was online survey with a population at 191,306 students in four African universities. The sample size was at 800 students with questionnaire proportionately distributed. The major findings was that a significant majority of students (50% + 25% = 75%) use the library “Not Very Often” or “Not Often”. Only 9% of students use the library “Very Often”, and 16% use it “Often”. This suggests that library usage is generally low among students in the surveyed African universities. The recommendations are: That universities should be carrying out orientations and awareness campaigns for fresh and old students to understand the significance of regular use of libraries for academic purposes.

Keywords

Educational, Development, Information, Libraries, Universities

1. Introduction

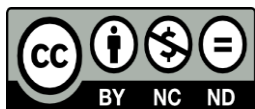
More or less undebatable, information has remained as the brain box of every happening in all societies. Information is not just the ordinary expression of ideas but the knowledge, ability and capacity of conquering social and economic challenges. Information is a product of communication without much of the unhindered borders. Since communication has existed even before the creation of human beings, communication is a universal experience. There is no person who has not

shared information, and no home, community, country, or nation where it does not occur. It takes many forms communication is an essential and universal aspect of human existence. There is virtually no individual who has not engaged in some form of communication, whether verbal, non-verbal, written, or symbolic. Likewise, there is no home, community, country, or nation where communication does not occur. Communication is not only a basic human need but also a foundational

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element of social interaction and societal development.

Folarin (2005) affirmed that communication is the process by which people share meaning through the transmission of symbolic messages. It is so fundamental that it predates organized human societies, emerging as a necessity for survival, cooperation, and cultural continuity. Communication which enables information has evolved in different stages and facilitated by the presence (McQuail, 2010). Even before the development of complex languages, early humans communicated through gestures, symbols, and sounds to convey messages, express emotions, and coordinate activities (Littlejohn & Foss, 2008). One of the many institutions that help communication in the spreading of information has been the libraries. These are purposely created institutions, buildings or enclaves where reading materials of books, magazines, leaflets, brochures, newspapers and related items can be kept for references.

Libraries are fundamental institutions for the collection, organization, preservation, and dissemination of information. In the context of communication, libraries serve as hubs where information is not only stored but also shared and interpreted. They facilitate both interpersonal and mass communication by providing access to books, media, digital resources, and community engagement platforms. Aina (2004) ascertain those libraries are instrumental in supporting lifelong learning, enabling individuals to acquire, process, and communicate information effectively.

Moreover, libraries help bridged the information gap in society by providing equitable access to information, which is essential for informed decision-making, democratic participation, and cultural development (Rubin, 2010). They act as intermediaries in the communication process, connecting information creators with users through various formats and technologies. In this way, libraries enhance information literacy, which is critical in navigating the complexities of the modern information society (Kuhlthau, 2004).

Libraries are also active participants in the communication process by organizing information in ways that make it retrievable and understandable, thus facilitating effective knowledge transfer whether in print or digital form, the information housed in libraries contributes to academic, professional, and social communication across all levels of society.

Such references can be for researches in different fields of endeavor ranging from history, communication, health care, economics, science and technology and general administration. Considering the importance of libraries, particularly in institutions of higher learning, there is no university that can safely carry out activities without the existence of a library. Such a library can be the physical library or the electronic library. The insistence of at least a size able library is on the premise that in the rapidly evolving landscape of global education, access to reliable and timely information is critical for academic success and intellectual growth. This position of

ensuring that universities and higher institutions of learning have libraries cover institutions in the advance and the developing countries. Universities, whether in advanced or developing countries, are universally expected to have libraries as integral components of their academic infrastructure. Academic libraries support teaching, learning, and research by providing access to a wide range of scholarly resources and information services. As observed by Ocholla and Shongwe (2019), university libraries play a critical role in knowledge creation and dissemination, serving as essential partners in the academic and research missions of higher education institutions across the globe.

However, the contents and the operations of libraries still hinged on many factors affecting the location and the facilities that can aid the operation. Libraries required the availability of standard buildings, trained professionals and the availability of associated matters of electricity. These elements form the essential foundation that enables libraries to support research and academic work. However, this established model now faces a new, digital landscape Akpan and Udo (2025) noted that the advent of social media technologies in universities presents a complex landscape for reading culture. While the potential for distraction and decreased reading time exists, social media can also be a valuable tool for information access and engagement with reading materials. By adopting strategies to balance social media usage with academic reading, universities can foster a vibrant and engaged reading community. In the African countries the case may not be the same as obtained in the advanced countries. African countries face difficulties of having regular electricity, the lack of professionals in libraries service, poor funding and many others. Consequently, African universities do not operate the libraries as may be operated in other countries. The differences may not be far - fetched. Libraries in universities across the advanced world often differ significantly from those in developing countries in terms of infrastructure, access to digital resources, funding, and technological integration. While libraries in developed countries are increasingly digitized and equipped with cutting-edge technologies, those in many developing nations still face challenges such as limited internet connectivity, inadequate funding, and shortages of skilled personnel. According to Adeniran and Ajiboye (2020), university libraries in developing countries often struggle to keep pace with global trends in digital librarianship due to infrastructural deficits and policy constraints, creating a gap in access to information and academic resources. In the intersection of traditional libraries and digital technologies—especially the internet— some African universities have created new pathways for learning and research. While libraries have long served as foundational pillars of knowledge dissemination, the advent of internet technologies has dramatically transformed how students seek, consume, and interact with information. This shift has significant implications for educational development,

particularly in regions where infrastructural limitations persist. Understanding students' perspectives on existing libraries is essential for inclusive and effective academic environments, as they are the prime users of the information systems. This study explores how students in African universities perceive and engage with both libraries and internet resources by examining the causal relationship between the type of information resource, functioning as the independent variable and students' perceptions and patterns of engagement, which serve as the dependent variable. The research is predicated on the understanding that the different nature of traditional libraries and internet resources in consideration of digital propinquity and huge scope influences key outcomes. These results may include students' perceived utility, frequency of use, and confidence in each resource's credibility. By associating these two distinct variables, the study aims to shed light on the respective roles, limitations, and potential, ultimately providing serious understanding into how libraries form the academic experience and the future of higher education on the continent.

Statement of the Problem

As part of the build-up to Africa's biggest library event in 2024, the 6th AfLIA Conference and 8th African Library Summit, with primary in-person events were held in Accra, Ghana. Simultaneously, a virtual hub was established in Nairobi, Kenya to facilitate online participation and engagement for attendees who could not be physically present in Ghana. The online pre-conference workshop focused on Research Data Management (RDM) for African Librarians. This workshop was jointly organized in partnership with Figshare and Africa PID Alliance was a strategic initiative to build the skills and confidence of African library professionals in supporting research data services. These sessions sprouted the success of the Open Data Management Foundational Course for African Librarians organized earlier in October 2024. It was part of continued efforts to empower librarians across the African continent with practical knowledge and tools to support open learning in science and data stewardship.

By the end of the session, participants were expected to gain a stronger understanding of open data principles and the relevance of data management in the context of African libraries with improved knowledge of fair data practices; how to increase familiarity with data repositories and how to promote practical skills of helping research communities manage and share data more effectively. Expectations were also that libraries gain opportunities to network and exchange experiences with fellow librarians across and beyond Africa. For purposes of achieving results, a significant push towards digitization and modernizing library services in African universities had emerged. This included the adoption of Web 2.0 tools, digital databases, and institutional repositories, along with efforts to improve access to resources and support for research. This was based on arguments that libraries are increasingly using

social media, blogs, and wikis for outreach, researches and online reference services. The development of digital repositories is gaining momentum, allowing for the preservation and dissemination of research outputs by libraries. With Open Access Initiatives and innovative Methods libraries have helped educators to explore open-distance libraries, mobile websites, and professional development programmes to improve academic services for students. Many libraries are expanding access to electronic resources, both on and off-campus, to accommodate remote learning and research. Libraries are offering virtual reference services, providing online assistance to users. While digital initiatives are ongoing, there are challenges that still persist arising from limited and poor access to internet, outdated ICT devices, inadequate electronic collections, inadequate funding, lack of digital literacy among students, and staff remain significant obstacles.

Furthermore, the issues of limited infrastructure (including power supply, poor managing of Copyright and Intellectual property rights, policy and Legal frameworks for digital libraries and institutional repositories are other challenges that also hinder the developmental processes in most African universities.

In spite of these challenges, the libraries in African universities play a crucial role in the educational development with unweaving support to academic work of both teaching and non-teaching staff of the universities, students, external users, community users, and non-affiliated users, aiding research, teaching and learning, and information dissemination. Providing access to resources such as referencing materials thereby promoting scholarly communication and indigenous knowledge through document preservation. There is need for African universities as centers of learning to widening the access to information, improved the infrastructural development thereby making students to be committed, have a conducive and responsive to demands of universal access to information for all.

Presently, libraries do not play host to most of the regular day-to-day activities as it used to be before during its visiting hours. People make less use of the libraries, which makes one wonder if the advancement and introduction of web 2.0 have in any way contributed to the decline in the use of the libraries. The study seeks to investigate how frequent do students make use of the libraries; how do the students rate the service of libraries and what major suggestion can be offered to bring the service of libraries in African universities to standards. This is the nexus that the study seeks to examine information distribution, internet, and the use of the libraries in educational development, exploring the views of students in African Universities.

Research Questions of the Study

1. What is the frequency of libraries usage by students for enhancement of academic performance

in select African Universities?

2. How do students perceive the contributions of libraries on their academic performance in select African Universities?

3. What are the views of students about facilities in libraries in shaping the quality of their academic performance?

4. What specific kind of amenity do students suggest to leverage on library capacities in select African Universities?

Libraries Usage by Students

Globally, the use of libraries by students remains a vital component of academic success, though patterns of usage have evolved significantly due to technological advances, digital literacy, and external factors such as the COVID-19 pandemic. Students generally perceive academic libraries positively. For instance, a 2022 survey showed that more than 75% of college students in the United States believe that their campus libraries contribute to their academic performance, even though actual engagement varies—some students make frequent visits, while others rarely use the services (Tyler, 2021).

The digitalization of educational content has driven a shift from physical library use to digital access. During 2020, global checkouts of digital books from public libraries and schools increased by 33%, reaching over 430 million. This change was largely driven by increased demand for remote learning materials, especially among children and young adults. Despite the growing prominence of digital resources, students continue to prefer libraries as study spaces. Research shows that libraries provide quiet, focused environments conducive to study. Interestingly, students with B-grade averages tend to use library spaces more than A-grade students, suggesting that library use is influenced by individual study styles and needs (Borgman, 2015).

However, global disparities exist in terms of access and infrastructure. According to the International Federation of Library Associations and Institutions (IFLA), there are, on average, 1.32 academic libraries per 100,000 people worldwide. Regions such as Africa have significantly fewer resources, with only 0.31 academic libraries per 100,000 people, reflecting challenges in educational infrastructure and access to information (Parker, 2021).

The COVID-19 pandemic catalyzed a shift in library service delivery. By 2021, over half of academic library transactions and consultations were conducted virtually, compared to just 16% in 2019. This shift underscores the growing reliance on online platforms for library services and support (Taylor, 2022).

Libraries have also broadened their roles to support student well-being, especially during stressful academic periods. Initiatives such as mindfulness programs, therapy dog visits, and mental health workshops have been shown to positively

impact student well-being (Sullivan, 2023).

In Africa and other developing regions, students face unique barriers, including limited internet access, insufficient ICT infrastructure, and low levels of digital literacy. Nonetheless, many academic libraries have adopted digital tools and expanded e-resources to maintain service delivery during crises like the COVID-19 pandemic (Shikali & Muneja, 2024). While the traditional role of libraries as repositories of books is evolving, they continue to play a central role in students' academic lives—offering not only access to resources but also space, support, and wellness initiatives. Continued investment in digital infrastructure and equitable access remains crucial for enhancing library use globally.

Assessment of Library Facilities in African Universities

The assessment of library facilities in African universities reveals a landscape marked by both commendable advancements and persistent challenges (Aina & Mutula, 2020). While several institutions have made significant strides in enhancing their library infrastructures and services, others continue to grapple with issues related to funding, technological integration, and user satisfaction.

Library facilities in African universities play a crucial role in supporting teaching, learning, and research. However, their effectiveness varies widely across the continent due to differences in funding, infrastructure, policy implementation, and technological adoption.

Some African universities have invested in developing expansive and well-equipped library spaces. For instance, the Kashim Ibrahim Library at Ahmadu Bello University, Nigeria, holds over 1.2 million volumes and can accommodate more than thousands of users simultaneously. Similarly, the Balme Library at the University of Ghana is resource-rich in West Africa, serving thousands of students with a vast collection of academic materials (Raju & van Belle, 2021).

However, other institutions report constraints related to overcrowding, outdated facilities, and inadequate seating. There exists no uniformity in the size and volume of books across university libraries. Some are characterized by notable disparities in spatial design and user-centered planning, which do not meet the requirements for modern and flexible learning environments that align with students' evolving needs.

In the area of technological integration and digital access, African university libraries are expanding but progress remains inconsistent. Some institutions have successfully digitized parts of their book collections and provide internet-connected workstations and online access to scholarly databases. For example, many universities now offer access to online databases like ScienceDirect and Research4Life to support digital learning.

Challenges Facing Libraries in African Universities

Despite these advances, many libraries still lack functional

websites and have limited online presence. University libraries revealed that more than half lacked up-to-date web platforms, hampering digital visibility and access. A significant number of university libraries in African countries lack up-to-date web platforms, which hampers their digital visibility and access to resources. This issue has been highlighted in several studies, notably by Asubiaro (2017), who conducted a comprehensive assessment of the cyber presence of academic libraries across all Nigerian 129 accredited universities and found that more than 50% of academic libraries do not have dedicated websites. Furthermore, only 42% of these libraries could be accessed through the homepages of the respective universities. This revealed that the average web impact factor of African universities libraries are negligible, and with minimal online presence and limited digital engagement. These underscore the challenges faced by academic libraries regarding digital visibility and access.

Similarly, Ndinoshiho (2022) in an investigation on the incorporation of web technologies by university libraries in the Southern African Development Community (SADC) region found that though many libraries had adopted web technologies, some were with ill-equipped information and communication technology (ICT) infrastructure. This lack of adequate ICT resources further contributes to the limited digital presence of university libraries in the African region. These collectively indicate the absence of up-to-date web platforms in many African university libraries which significantly hamper digital visibility and access to resources of students. Addressing this issue requires concerted efforts to improve ICT infrastructure, develop dedicated library websites, and enhance the digital skills of library staff across the continent for effective service delivery and satisfaction of students as major users. Hence, students' satisfaction with library services is mixed. For instance, at the Federal University Lokoja in Nigeria, students reportedly claim that the library supported their study and academic tasks, but concerns are raised about noise levels, internet connectivity, and insufficient seating (Azobuogu & Ezebuoro, 2019). Contrarily, at Cape Peninsula University of Technology in South Africa, students are noted to have valued online resources of the university library but still preferred face-to-face assistance.

A key barrier to improving library services in many African universities is underfunding. Research in public universities in western Kenya showed that many failed to meet the national recommendation of allocating 10% of their operational budget to libraries. This resulted in poorly stocked libraries, limited digital subscriptions, and inadequate physical infrastructure as quality service delivery has been affected by irregular funding, lack of staff training, and insufficient ICT infrastructure (Oladokun, 2011).

2. Literature Review

Odunlade, and Ojo, (2023) did a work on "Digital Transformation and Service Delivery in Academic Libraries: A Post Covid-19 Approach. They stated that in the library setting, digital alteration has reformed in-house repetitive and service provision such that users can contact suitable and recent information at the appointed time and the least bit. This work examined the digital willingness of academic libraries in Nigeria in relation to acceptance of the main variables measured as guides of digital transformation applicable to positioning library services. These are: kiosk technology; QR code technology; mobile technology; artificial intelligence and Radio Frequency Identification. Also, recognizing library facilities that are being deployed using the digital tools; assessing how digital transformation has jammed completely on library support and examining the trials faced in adopting digital transformation. The study population was academic libraries in Nigeria and sample was pinched purposively from 18 universities in South-West Nigeria. Findings shown that digital transformation is yet to be entirely encompassed in Nigerian university libraries. Also, there is no important modification in the use of digital know-hows in the organization of library services in Nigerian post Covid-19 era. However, the study recognized that digital transformation has wedged library patronage significantly and clearly. The utmost challenges facing digital transformation was acknowledged as scarcity of resources and dearth of infrastructure. The study suggested organisational rule that supports the implementation of digital equipment in libraries must be put in place. Also, since the yearly grant allotted to libraries was hardly adequate, library executives ought to adopt public private partnership to help in meeting certain monetary responsibilities.

Darko - Adjei, and King, (2024) studied "Academic Libraries Readiness in the Fourth Industrial Revolution: A Comparative Study between Ghana and South Africa" The compared the Fourth Industrial Revolution (4IR) preparedness of two advanced academic libraries each in Ghana and South Africa. The study used a theoretical background that originated from the Socio-Technical Theory (STT) and Global Competitiveness Index (GCI) models. Using convergent parallel mixed methods, together with questionnaires and interviews, 167 respondents, encompassing librarians, IT staff and directors, shared perceptions on trials faced by academic libraries in familiarizing to 4IR. Findings underscored a shortage in Lib 4.0 skills vital for existence in the 4IR, with South Africa showing better willingness. Both countries lack Lib 4.0 strategies and face budget restraints, insufficient ICT infrastructure and restricted backing. The findings underscored the impact of pertinent preparation of staff to hold on Lib 4.0 skills. The study then proposed a comprehensive model, highlighting the significance of librarians adopting a growth mindset and prioritizing continuous learning, relearning, reskilling and up-

skilling to effectively navigate the complexities posed by the 4IR.

Theoretical Framework

Uses and Gratifications Theory

The Uses and Gratifications Theory (UGT) is highly relevant to understanding how students in African universities use and evaluate their library services. This theory focuses on how individuals actively seek out media and information sources to satisfy specific needs such as academic support, entertainment, or social interaction (Katz, Blumler, & Gurevitch, 1973). Applying this theory to library use, students in African universities may assess library resources based on how well they meet their educational needs, such as access to up-to-date academic materials, internet services, and study environments. When comparing their experiences with those in developed countries, students' satisfaction—or lack thereof—can be explained through this theory by exploring whether their information-seeking behaviors are effectively gratified.

Diffusion of Innovations Theory

The Diffusion of Innovations Theory (DOI), developed by Everett Rogers, explains how new technologies and ideas spread within and across societies (Rogers, 2003). This theory is useful for analyzing the adoption of modern library technologies—such as digital databases, automated cataloging systems, and virtual learning platforms—in African university libraries. DOI helps explain why certain innovations that are standard in developed countries may be slow to appear in developing contexts due to factors such as limited infrastructure, funding constraints, or resistance to change. Students' views can reflect how they perceive the adoption and effectiveness of these innovations in their learning environments.

3. Methods

Research Design

The research design was the use of online surveys. Salvatori (2023) states that the use of online and mobile research methods has skyrocketed thanks to technological advances for conduct of research for a fraction of the cost and time. This makes collecting data easier over a distance. Akpan and Udo (2024) state that survey research method (online) provides a scientific approach of measuring the opinion and perception or attitude of people on the workability of a process or phenomena.

Determination of Population

The population of students from four African universities stood at 191306 drawn from University of the Witwatersrand (Wits) – South Africa 40,259, University of Lagos (UNILAG), Nigeria 57,000, University of Nairobi – Kenya, 49,047 University of Algiers 1 (Benyoucef Benkhedda) – Algeria 45,000. The population was drawn from the official registration statistics of the four selected African universities. These figures

were obtained from the Year 2022 and 2023 fact-books, annual reports, and published statistical databases of the four universities. The target population for this study was also explicitly and operationally defined as the entire body of students enrolled at the four specific universities: the University of the Witwatersrand (South Africa), the University of Lagos (Nigeria), the University of Nairobi (Kenya), and the University of Algiers 1 (Algeria). The population was defined by the key characteristics of enrollment status of students and institutional attachment. This established a fixed, handy population for the purposes of this study, with clear parameters. Respectively, university's total student enrollment was sourced thus:

University of the Witwatersrand (Wits), South Africa 40,259

University of Lagos (UNILAG), Nigeria 57,000

University of Nairobi, Kenya 49,047

University of Algiers 1 (Benyoucef Benkhedda), Algeria 45,000

Thus, the total population was determined by grouping the official enrollment numbers of students in the four universities as $40,259 + 57,000 + 49,047 + 45,000 = 191,306$ students.

Sample size

The sample size of this work was kept at 800 students. In the making of questionnaire, the sample size of 800 was taken into consideration and it was spread to cover the four African countries proportionately. The purpose was to ensure that every unit of the population had equal representation and reduce bias towards probability of generalizing of results. The study employed a stratified sampling method combined with elements of proportionate allocation. In the stratification, the total population was first distributed into equal exclusive subgroups, or strata. In this case, the four universities served as the strata. This ensured that each institution was represented in the concluding sample. The sample size of 800 students was determined using the formula of Yamane (1967) for calculation of sample size from a finite population at a 5% margin of error. The formula is $n = N / 1 + N(e)^2$.

n = sample size

N = total population 191,306

e = margin of error 5% or 0.05,

$n = 191,306 / 1 + 191,306(0.05)^2$

$n = 191,306 / 1 + 191,306(0.0025)$

$n = 191,306 / 1 + 478.265$

$n = 191,306 / 479.265 = 399.699$

$n = 400 \times 2 = 800$

The formula yielded about 399.6 respondents and was approximately corrected to 400. To build up representation and increase reliability, Krejcie and Morgan (1970) recommendation for the doubling of the sample size was applied. Thus, across the four different countries, the researchers decided to double the sum of the initial sample size to 800 respondents.

In the proportionate stratified sampling approach, the total sample of 800 was spread proportionately across the four universities, based on the size of the student population. This ensured that each university had fair representation in relation to its population size. Within each university (stratum), students were randomly selected to avoid bias and ensure generalizability. This approach in a form of probability sampling within each university stratum enabled the selection using a simple random sampling apparatus from the complete list of student list. On recommendations of Taherdoost (2016) calculation by dividing the population of each by the total population and multiplying by the desired total sample size, such was carried out per the four universities.

Thus the calculation for University of the Witwatersrand: $40,259 / 191,306 \times 800 = 168.5$, which was rounded to 169 questionnaires copies, University of Lagos computation: $57,000 \div 191,306 \times 800 \approx 238$ students/copies, Nairobi $49,047 \div 191,306 \times 800 \approx 205$ students/copies, Algiers $145,000 \div 191,306 \times 800 \approx 188$ students/copies, Each total was added to have 800 copies.

Instrument of Research

The instrument of research was a questionnaire developed from Google scholar forms with 14 open ended questions to answer the research variables raised. The 800 copies of questionnaire were distributed proportionately, such that the

University of Witwatersrand had 169 copies, 238 copies went to University of Lagos, Nigeria, the University of Nairobi took, 205 copies and the University of Algiers took 188 copies. The questionnaires were distributed proportionately, confirming the researchers' implementation of the allocation across the four strata using the specific distribution model of e-mailing to random list of student e-mails derived from targeted online university platforms and e-mail hunter websites. This unsolicited online web-based survey in a non-probability technique or by convenience procedure significantly justified fair distribution, objectivity in the response and a high rate of potential confidentiality of the respondents. Importantly, informed consents were made in the introductory part of the questionnaire which clearly stated the identity of the researchers, the purpose of the research, and how the data was to be used only for academic purposes.

Validation

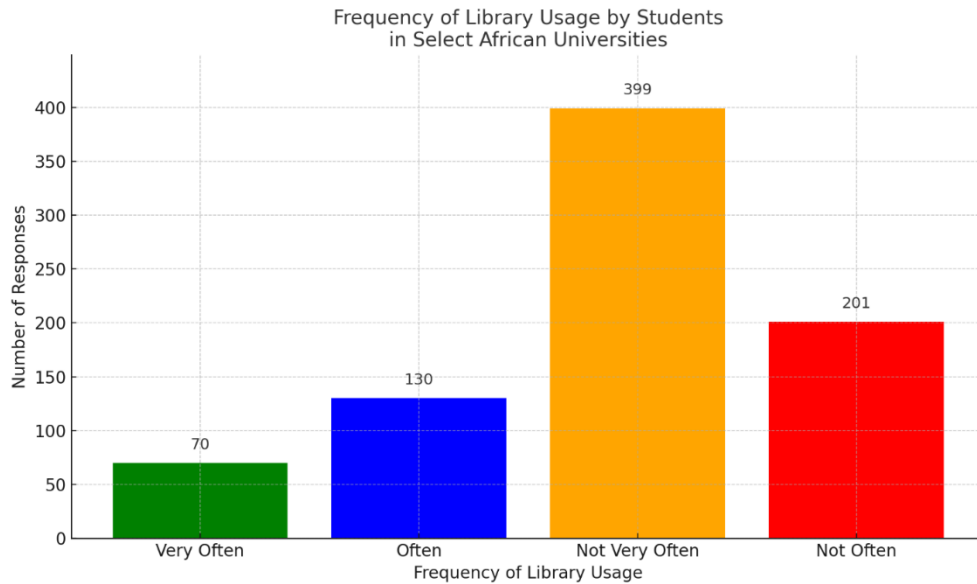
The instruments were validated through the percentage agreement method whereby two researchers were asked to cross check errors in 40 copies. Of the 40 copies, two agreed on 36. This means that $36/40 \times 100 = 90\%$. In the Percentage Agreement method of validation, results can show that the probability of chance agreement mostly remain very low.

4. Data Analysis

Data was collected by analyzing the responses. The use of Tables and supported bar Charts make it quantitative rather than qualitative. Akpan and Udo (2024) say that quantitative analysis provides the total responses and the percentages for easy readings and determination of results.

Table 1 and Bar Chart 1: *The frequency of libraries usage by students for enhancement of academic performance in select African Universities*

Variable	Responses	%
Very often	70	9%
Often	130	16%
Not Very Often	399	50%
Not often	201	25%
Total	800	100%



From Table 1 and Bar Chart 1, it shows the illustrations of the frequency of library usage by students in select African universities. It clearly shows that the majority of students use the library infrequently, with “Not Very Often” being the most common response. Low frequent users dominate the analysis. A significant majority of students (50% + 25% = 75%) use the library “Not Very Often” or “Not Often”. Only 9% of students use the library “Very Often”, and 16% use it “Often”. This suggests that library usage is generally low among students in the surveyed African universities.

It implies that libraries may be underutilized, due to lack of digital resources, poor internet access, outdated materials, or uncomfortable reading environments. It also implies that many students might be unaware of the full academic benefits of regular library use for increase access to digital libraries, e-journals, and online databases could boost usage.

Table 2 and Bar Chart 2: *Students perceived level of impact of libraries on their academic performance in select African Universities*

Variable	Response	%
Very High	32	4%
High	110	14%
Average	418	52%
Low	240	30%
Total	800	100%

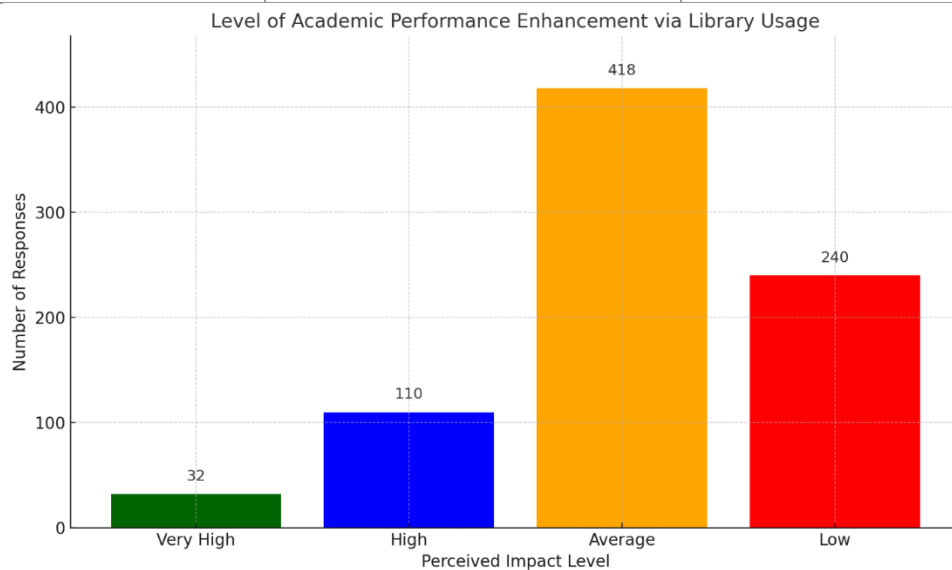


Table 2 and Bar chart 2 explains that Average level of impact dominates the responses. A majority of students at 418 or 52%

say that library usage contributes to their academic performance at an average level. The Low impact level had a substantial 240 or 30% responses, suggesting dissatisfaction or underutilization of libraries. Only 32 or 4% rated the impact level of libraries as very high, and 110 or 14% as high, indicating limited perception of strong academic benefit from library use. The fact that most students rate the library's impact as “average” or “low” calls for a reevaluation of library services from outdated materials, limited digital access, or non-aligned resources to change the poor perceived academic enhancement impacts.

Table 3 and Bar Chart 3: *The views of students about conditions of facilities in libraries for the shaping of the quality of their academic performance*

Views	Responses	Percentage
Excellent	0	0%
Very Good	50	6%
Good	170	21%
Fair	156	20%
Poor	424	53%
Total	800	100

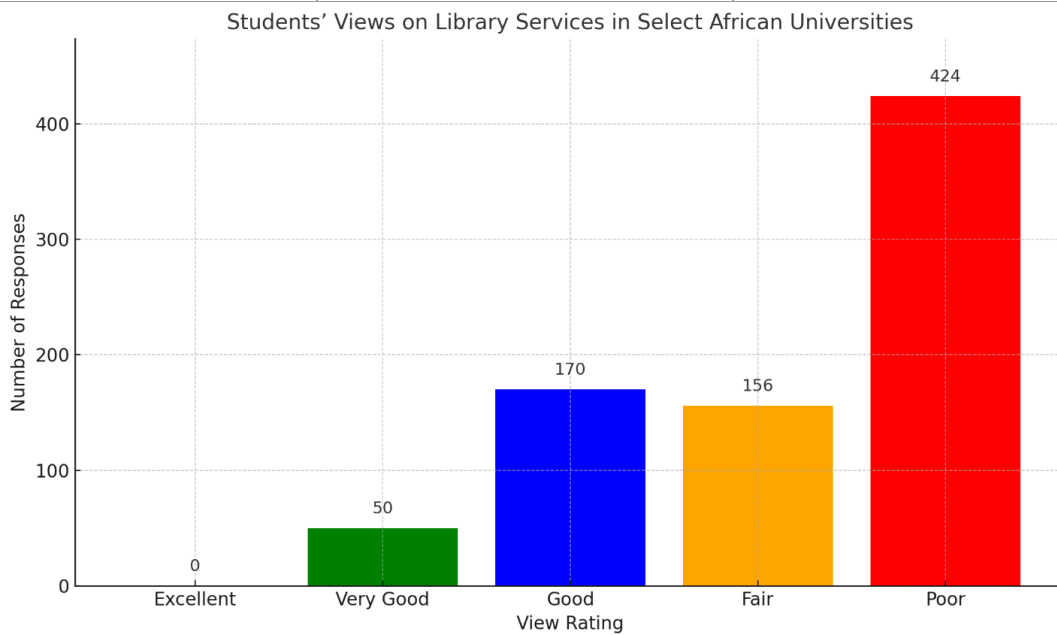


Table 3 and Bar Chart 3 show an analysis that a majority of 424 or 53% of students rated the library services as poor, indicating widespread dissatisfaction. Only 50 or 6% rated services as Very Good, and 0% chose Excellent — suggesting that exceptional service is virtually nonexistent. A combined 156 or 20 % took Fair, Good had 50 or 21% or moderate ratings, reflecting a luke-warm reception. The high percentage of poor ratings indicates systemic issues in library service delivery—possibly including outdated materials, insufficient staff, lack of digital resources, or inadequate infrastructure. If students perceive the library poorly, they are less likely to use it—limiting its effectiveness as a tool for academic enhancement.

Table 4 and Bar chart 4: *Specific kind of amenity do students suggest to leverage on library capacities in select African Universities*

Amenities	Responses	%
Internet/wi-fi	473	59%
Computers	146	18%
Electricity	113	14%
Books	68	9%
Total	800	100%

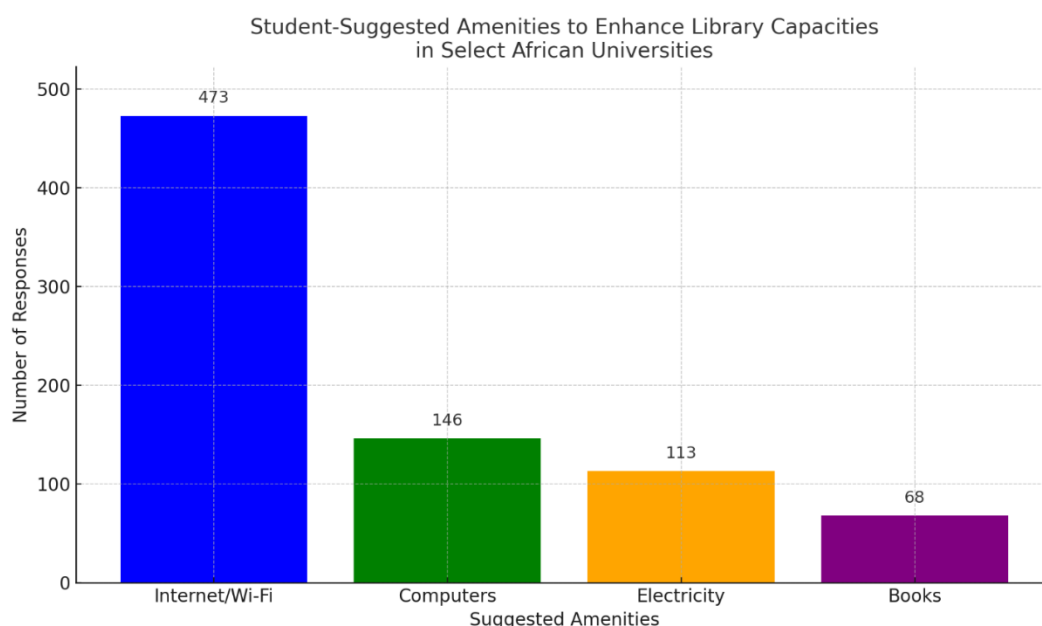


Table 4 and Bar Chart 4 shows that Internet/Wi-Fi are the most demanded amenity suggested by students, with 473 or 59% of students prioritizing it — reflecting a strong shift toward digital learning and online research needs. On Computers 146 or 18% and Electricity 113 or 14% follow, indicating infrastructure gaps that hinder effective use of library services. Only 68 or 9% mentioned Books, suggesting that physical collections, while still relevant, are no longer the top priority. The significant number of students calling for electricity and computers indicates that even foundational amenities are not adequately provided in many libraries.

5. Discussion on Findings

The discussion of the findings was in consideration of the key concepts, the statement of the problem, the research questions of the study, the theories selected and the methodology as well as the data collected. Consequently, looking at the direction of the research, the following were the findings which brought out relationship particularly with the theories and previous literature in the related topic under study.

Regarding the frequency of library usage, it was noted to be generally low among students in the surveyed African universities, often due to inadequate resources, lack of awareness, or insufficient digital infrastructure. From Table 1 and Bar Chart 1, it showed the illustrations of the frequency of library usage by students in select African universities. It clearly shows that the majority of students use the library infrequently, with “Not Very Often” being the most common response. Low frequent users dominate the analysis. A significant majority of students (50% + 25% = 75%) use the library “Not Very Often” or “Not Often”. Only 9% of students use the library “Very Often”, and 16% use it “Often”. This suggests that library usage is generally low among students in the surveyed African universities. This work agree hand in hand with Muszkiewicz (2017) that many students do not make use of libraries in African

universities to boost their academic performances.

It implies that libraries may be underutilized, due to lack of digital resources, poor internet access, outdated materials, or uncomfortable reading environments. It also implies that many students might be unaware of the full academic benefits of regular library use for increase access to digital libraries, e-journals, and online databases could boost usage.

On the impact of libraries in the academic performance of students, Table 2 and Bar chart 2 explains that Average level of impact dominates the responses. A majority of students at 418 or 52% say that library usage contributes to their academic performance at an average level. The Low impact level had a substantial 240 or 30% responses, suggesting dissatisfaction or underutilization of libraries. Only 32 or 4% rated the impact level of libraries as very high, and 110 or 14% as high, indicating limited perception of strong academic benefit from library use. The fact that most students rate the library's impact as “average” or “low” calls for a reevaluation of library services from outdated materials, limited digital access, or non-aligned resources to change the poor perceived academic enhancement impacts. This is in tandem with the position of Thanuskodi (2012) many students are unaware of the availability of e-resources and how to use them effectively,” which reflects the gap between library provisions and students' academic expectations.

Concerning, the condition of facilities of libraries in African universities, Table 3 and Bar Chart 3 show an analysis

that a majority of 424 or 53% of students rated the library services as poor, indicating widespread dissatisfaction. Only 50 or 6% rated services as Very Good, and 0% chose Excellent — suggesting that exceptional service is virtually nonexistent. A combined 156 or 20 % took Fair, Good had 50 or 21% or moderate ratings, reflecting a lukewarm reception. The high percentage of poor ratings indicates systemic issues in library service delivery—possibly including outdated materials, insufficient staff, lack of digital resources, or inadequate infrastructure. If students perceive the library poorly, they are less likely to use it—limiting its effectiveness as a tool for academic enhancement. This poor state of library services agree with the work of Lwehabura (2007) that students' lack of awareness and negative perceptions about library services hinder optimal use of library resources, thereby affecting their academic performance and research effectiveness.” This clearly aligns with the claim that poor perception leads to underutilization, limiting the library's role in academic enhancement.

On suggestions on ways of raising the status of libraries, Table 4 and Bar Chart 4 shows that Internet/Wi-Fi are the most demanded amenity suggested by students, with 473 or 59% of students prioritizing it — reflecting a strong shift toward digital learning and online research needs. On Computers 146 or 18% and Electricity 113 or 14% follow, indicating infrastructure gaps that hinder effective use of library services. Only 68 or 9% mentioned Books, suggesting that physical collections, while still relevant, are no longer the top priority. The significant number of students calling for electricity and computers indicates that even foundational amenities are not adequately provided in many libraries. The position of this work is in line with the views of Issa, Amusan, and Daura (2012) that most university libraries in Nigeria are still grappling with basic infrastructure challenges such as regular power supply, sufficient ICT facilities, and stable internet access, all of which are critical to modern library service delivery. They further emphasized that the availability and utilization of ICTs in university libraries are still hindered by poor infrastructure, lack of funding, and inadequate policy implementation. These statements affirm that even basic amenities necessary for effective academic library service remain inadequate in many African (especially Nigerian) university libraries.

In general, the provided findings posits that the synergistic development of three pillars of information distribution, internet accessibility, and libraries are fundamental to sustainable educational development. It calls for multi-stakeholder teamwork to ensure that infrastructure, digital literacy, and reasonable access remain fundamental to educational reform. These findings were rigorously aimed to assessed and strengthened alignments with two foundational communication and sociological theories of the Uses and Gratifications Theory (U&G) and the Diffusion of

Innovations (DoI). The Uses and Gratifications Theory provides a valuable framework for evaluating these findings as the audiences taken in this research as the students are active participants who selectively engage with media (libraries) to fulfill specific cognitive, affective, personal integrative, social integrative, and tension-free needs.

The findings also aligned strongly with this theoretical perspective by implicitly framing educational resources digital libraries, online databases, and internet platforms—as “media” that students actively consume. The emphasis on equitable access and digital literacy directly addresses the prerequisites for active use of libraries. Furthermore, without the skills to navigate and judgmentally assess digital information, when available resources remain unusable and inhibiting the desired gratification. Therefore, the findings can be understood as a call to create an ecosystem that empowers the active learner. By ensuring healthy infrastructure and literacy, the findings advocate for an environment where students can efficiently exercise their activity in selecting and using information resources that best fulfill their exact academic needs and goals.

The Diffusion of Innovations theory offers a complementary lens, focusing on how new technologies and ideas spread through a social system. The insistent challenges as funding and technological integration represent classic barriers to the adoption of educational innovations. The findings are theoretically robust, to address both the supply-side (diffusion) and demand-side (use) of the innovation network. To further fortify the arguments enhanced by data collected it emphasized the need to clearly integrate digital resources with academic successes, compared to traditional methods. Communicating this relative benefit is vital in moving innovations from early adoption to widespread use.

Drawn from the data collected and analysed, the findings are not just logical but deeply rooted in established theoretical philosophies. It positively joined the concerns of both theories, arguing that for contemporary education to recognize its full prospective, it must not only ensure the extensive diffusion of technology but also create the circumstances for students to aggressively and effectively use it to meet their goals. This twofold focus makes the argument inclusive and convincing

6. Conclusions

The landscape of educational development has undergone a transformative shift with the integration of information distribution channels, internet technologies, and libraries. This research has critically examined the interplay of these elements and their cumulative impact on educational advancement.

Information distribution serves as the backbone of

knowledge dissemination, enabling timely, accurate, and equitable access to academic resources. Its evolution from traditional print to digital platforms has significantly enhanced the efficiency and reach of educational content, fostering inclusive learning environments across diverse geographical and socio-economic boundaries.

The internet, as a dynamic and ubiquitous medium, has revolutionized how educational content is accessed, shared, and utilized. It supports a range of tools including online databases, e-learning platforms, open educational resources (OERs), and collaborative virtual environments. These resources have not only democratized knowledge but have also promoted lifelong learning, critical thinking, and global academic engagement. Moreover, the internet has bridged communication gaps between educators and learners, enabling real-time interaction and access to vast repositories of multimedia educational materials.

Libraries, both physical and digital, continue to play a pivotal role in educational development. Far from being obsolete, modern libraries have evolved into hybrid knowledge centers that combine traditional collections with digital repositories. They provide curated access to scholarly resources, foster information literacy, and support research through training, referencing, and technological infrastructure. The integration of ICT in libraries has enhanced cataloging, access, and resource sharing, making them more relevant in today's digital age.

Together, effective information distribution, strategic use of the internet, and the adaptive role of libraries form a synergistic framework that propels educational growth. Their integration ensures that students, educators, and researchers are empowered with the right tools and resources to pursue academic excellence and innovation.

In conclusion, the continuous development and alignment of these three pillars—information distribution, internet, and libraries—are vital for sustainable educational development. Policy makers, educators, and information professionals must collaborate to ensure that infrastructure, digital literacy, and equitable access remain central to educational planning and reform. Only through such integrated efforts can the full potential of modern education be realized in preparing learners for the challenges of the 21st century.

Recommendations

The recommendations are:

That universities should be carrying out orientations and awareness campaigns for fresh and old students to understand the significance of regular use of libraries for academic purposes.

That universities should prioritize the deliberate integration of digital resources capable of increasing access to digital libraries, e-journals, and online databases to boost usage by students.

That universities should invest in upgrading library facilities and make them more student-friendly and accessible to change negative perceptions about its service to students.

That universities should not ignore the need to improve auxiliary facilities of electricity supply in libraries since regular library use correlates with better academic performance of many studies.

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