

# The Impact of Information-Seeking Behaviour and Electronic Information Resource Utilization on Academic Performance among Nigerian Undergraduate Students

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## ABSTRACT

In today's rapidly changing world, technological innovation has significantly impacted various disciplines including universities libraries. This study investigates the influence of undergraduate students' information-seeking behaviour and the use of electronic information resources (EIRs) on academic performance in Federal Universities in Northeastern of Nigeria research in this aspect has stalled in the region. To address the prevalent and worrying issues among the undergraduate students' low information-seeking and under-utilization of EIRs, an exploratory research approach has been adopted. These issues significantly impact students' information-seeking behaviour on their academic performance by utilizing electronic information resources. Hence, prioritizing undergraduate students in maintaining their individuality by enhancing, maintaining, and nurturing their mindset in utilizing EIRs for academic purposes can be advantageous for academic institutions, faculty, and students. These resources and services are primarily intended to help them complete their academic tasks. The study concludes by revealing mixed and conflicting findings, among the limited information-seeking behavior and under-utilization of electronic information resources.

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## **INTRODUCTION**

In recent years, the proliferation of technological innovations has profound potential to impact, enrich, and renew every aspect of society, including universities and their libraries. Now, this has permitted universities to prepare and enrich students and researchers for personal fulfilment and future employment opportunities. As such, these universities can raise a skilled workforce that can fill existing gaps in the labour cycle (Timotheou 2023, Eje & Dushu 2018, and OECD 2016). This ultimately contributes significantly to the socio-economic, political, and technological advancement of the nation (Federal Republic of Nigeria, (2014). The success of this depends on the level of commitment of university libraries in providing enabling space for undergraduate students' information seeking towards use of electronic information resources (EIRs) for their academic accomplishment.

This led undergraduate students, particularly those in their final-year, actively seek and use EIRs for academic research writing. It remains indispensable to serve as a key factor for sustaining, provision and utilization of EIRs towards achieving the university library overall objectives of satisfying their users' information needs that permits them to compete with the global standard. The potentials of EIRs for academic pursuits include their perceived ease of accessibility, flexibility, reliability, convenience, accuracy, authenticity, and usefulness of information, which have significantly transformed and impacted their pursuit of educational excellence. These information resources can be easily accessed in the university libraries via the Internet tools, by competently bridging the faculty members and students' knowledge and information gaps (Osinulu, 2020, Adeleke & Nwalo, 2017, and Sunil, 2017).

Nowadays, the increased need for information-seeking, and utilization of EIRs by students have raised academic concerns in developing nations, including Nigeria. Therefore, there is a pressing demand for a solid novel framework to promote innovative pattern of EIRs usage for efficient academic success and gather data from undergraduate students to justify huge EIRs funds spend. The study aims to explore undergraduate students' information-seeking behaviour in Nigerian Federal Universities particularly in northeast. This study aimed to boost students' academic research projects, and assignments, and stay updated on scientific discoveries.

In this regard, little or none-research on this topic information-seeking behaviour and electronic information resource usage in Nigerian universities has been substantial. Yet, its correlation with academic performance has yet to be reasonably studied, particularly in the Northeastern Federal Universities in Nigeria.

## **PROBLEM STATEMENT**

The 21st century's proliferation of electronic information resources (EIRs) presented students flexible, time-saving learning tools, and EIRs' access and usage, potentially enhancing their academic performance and learning abilities. But, the surge in low academic performance within the university system is a worrisome issue which can be ascribed to flaws in educational institutions, predominantly in the digital age. In recent years, electronic information resources, (EIRs) e-databases and related technologies have become invaluable information sources for academics use. These EIRs, are accessible and usable via university libraries worldwide, including those in many developing countries like Nigeria. However, despite these resources' availability, insufficient information-seeking level, under-utilization of EIRs among undergraduate students continue to persist thereby affecting their research and utilization of EIRs for academic performance. Therefore, there are many uncertainties about their knowledge and information needs gaps which require to be premeditated to identify the causes and explore potential solutions to addressed the menace and to justify huge EIRs investments made by the libraries. Hence, cognitive skill and information skills are critical for efficient use of EIRs in academic pursuits.

Research indicates that universities often fail to adequately teach students on optimal use of EIRs for their academics. With the support drive from the faculties, it is possible to address undergraduate students' issues to learn about information searching skills, and participate actively in using the EIRs for their research, assignment, knowledge up-date, leisure and many more academic tasks and beyond. These information skills and resources significantly broaden students' learning experiences to deliver a diverse insight across varied academic disciplines. Yet, students often perceive EIRs and their e-databases as complex, rigid, inflexible, and difficult to access, (Ransome & Jean 2020). Despite vast e-resources available, students often struggle, face issues in accessing, retrieving, and utilizing credible information sources due to inadequate information searching skills. This issue has been testified in studies by (Alazemi 2023, Tachie-Donkor & Ezeama 2023, Humbhi et al., 2022, Shuhidan et al 2019, and Okoh & Ijiekhuamhen 2014).

Despite studies in students' information-seeking behaviour in Nigeria, the state remains a unique distinct research expanse. That need to address the issue of insufficient information and knowledge gaps among undergraduate students in developing nations including Nigeria, universities under study must focus on improving the quality, accessibility, and usage of EIRs. This plays a key role to enrich students learning experiences and academic concerns, thereby attracting global social identity. Therefore, in light of the issues mentioned, this study investigates whether the proper use of electronic information resources can improve the growth of Nigeria's educational system, including students' academic achievements in the study context.

## **RESEARCH OBJECTIVES**

The specific research objectives of this study are:

- a) To ascertain the relationship between information-seeking behaviour (ISB), electronic information resources (EIRs), use and students' academic performance among the final-year undergraduate students in selected Federal University Libraries in the North-East, of Nigeria.
- b) To find out whether the use of electronic information resources (EIRs) mediate the relationship between information-seeking behaviour (ISB) and students' academic performance (SAP) among the final-year undergraduate students in selected Federal University Libraries in the North-East of Nigeria.

## **LITERATURE REVIEW**

In today's world, people tend to entail information for personal, professional fulfilment, and social survival needs. Recently, few or even no studies have mostly ignored the impacts of undergraduate students' information-seeking EIRs towards academic performance particularly in the Federal University Northeast, of Nigeria. Here are a few literatures related to this study:

### **Information-Seeking Behaviour (ISB)**

Information serves as a vital basic in daily life, influencing innumerable aspects such as schooling, work, and various situations. University libraries are devoted to satisfying user information needs and equipped with various resources and services to maintain user confidence. Recently, studying information-seeking behaviour is distinctive due to the significant advancements in education systems, psychological effects, and technological novelty (Le et. al., 2019). Case and Given (2016) note that information-seeking behaviour is an aspect of human existence, becoming increasingly significant when faced with life decision making. According to Miraj et al (2021), students with strong information-seeking skills often view themselves as highly proficient in searching for and retrieving information.

Students who have strong information skills can quickly complete most academic tasks that require seeking information (Al-Samarraie et al., 2017). According to Miraj et al (2021) and El-Maamiry (2017) individuals are considered to have information skills once they can navigate spreadsheets, e-databases, PowerPoint, statistical applications, and access library catalogues. It is hypothesized that students with information skills will likely achieve better academic performance when conducting research tasks.

A recent study by Humbhi et al, (2022) reveal that undergraduate students seek information for semester academic work, job-related information, social media use, and visit the library for political news and study. A study by Shuhidan et al (2019) found that university students research information-seeking processes and needs, analyzing barriers and coping mechanisms. The foremost barriers students face includes their inability to seek and evaluate information, their struggle to locate necessary academic information, limited information skills, and network and internet access. The students also claim that strong internet bandwidth and library access are crucial for meeting information needs. A study in Nigeria by Buba and Adamu (2017) found undergraduates use common search strategies like Boolean operators and keyword searching. Okocha and Owolabi (2020) research found that search engines are the preferred information sources because they are considered authoritative, reliable, accessible, and suitable. A study by Adekunle (2014) exposed that coursework, examinations, reading, seminars, and workshops significantly influence students' information-seeking behaviour. Moreover, the complexity of information and low information skills are linked with difficulties in accessing and using e-databases, which can impede the student research process in the library. It's imperative therefore, to study the undergraduate students 'level information-seeking in terms of semester academic coursework, information skills, job and social-related information, in Federal University Libraries in Nigeria.

### **Use of Electronic Information Resource (EIRs)**

In view of the use of EIRs by undergraduate students. In a separate study by (Sahabi et al., 2020, Osinulu 2020, Akuffo 2019, Adedokun & Fawole 2018, Ankrah & Acheampong 2017, Madondo et al., 2017, Owolabi et al, 2016, and Alhassan, 2015), disclosed that EIRs significantly facilitate undergraduate students in academic tasks like retrieving literature, exam preparation, research, classwork completion, leisure time, staying updated with latest discoveries, enhancing performance, promoting educational excellence, and competitiveness in the fast-changing information landscape.

Besides, studies indicated that EIRs offer numerous myriad benefits, including improved academic attainment, unrestricted access, ease of use, and increased user readership, leading to productive research output and academic excellence, fostering knowledge sharing, team spirit, critical thinking skill, and instant access to diverse user preferences (Yusuff 2022, Buba et al., 2021, Anyim 2020, Odede 2018, Adeleke & Emeahara, 2016, and Anjana 2016). However, the perceived usefulness of EIRs and under-utilization significantly affects undergraduate students within a wide range of electronic resources, including e-books, journals, and databases, from the convenience and flexible of their homes, dormitories, or any other setting, thereby enhancing their engagement in academic coursework, research, projects, and for other academic pursuits (Ogunbodede et al., 2022, and Adetunla, 2016).

In a study by Ternenge and Kashimana (2019), Adeniran and Onuacha (2018), and Ankrah and Atuase (2018) found that the inability to access and utilize electronic information resources (EIRs) in universities impedes academic performance and the quality of graduates. Even when EIRs are accessible, students' inadequate information skills hinder their efficient use of these resources for academic research. In contrast, developed countries have better access to EIRs and internet services. In contrast, a study by Alhassan and Macaulay (2015) revealed that the use of EIRs by students at the two universities was extremely encouraging, and weighty for academic pursuit.

In several empirical studies scholar has found that undergraduate students' full realization and optimization of EIRs for academic purposes remain underutilized. The use of EIRs by undergraduate students in developing countries, including libraries in Nigerian universities, has seen a decline over the years. This presents a dual burden issue, which comprises low information-seeking behaviour and low optimal under-utilization of EIRs, both of which significantly affect students' academic success (Osinulu 2020, Adedokun & Fawole 2018, Madondo et al., 2017, and Toyo 2017).

Therefore, this study seeks to examine the undergraduate students' use of electronic information resources (EIRs) in university libraries, on the dimension of perceived usefulness and ease of use for academic tasks like literature retrieval, exam preparation, research, completing classwork, leisure reading, and staying abreast of recent discoveries.

### **Students' Academic Performance (SAP)**

Prior studies assessed academic performance using criteria, conditions, and standards. Students' academic performance is an excellent concern for educational institutions across all academic stages (Alsaman et al., 2019). Indeed, surveying academic performance has been a long concern for higher educational institutions across all academic field. Diverse standards have been employed to survey using factors such as grades, test scores, class participation, and extracurricular activities.

In a recent empirical study by Ogunbodede and Oribhabor (2022) the results reveal that the first hypothesis established a significant relationship between the use of digital resources (DR) and the academic performance of undergraduate students at the University of Africa, Toru-Orua, Bayelsa State, Nigeria. The second hypothesis reported a significant impact of digital resource usage on students' academic performance at the (UAT). These findings imply that an increase in the usage of digital resources leads to an improvement in students' performance at these institutions. In recent study by Miraj et al. (2021) reveals that information-seeking, information skills, reading/writing capacities, and resilience significantly impact academic performance. Stressing the crucial role of these variables have positive impacts on students' academic performance.

In a similar study conducted in Nigeria by Olabode (2016) impact of using digital resources on the academic performance of undergraduate students. The findings indicated that the use of digital resources, such as DRs, has a significant effect on students' academic achievement. Anjana (2016) noted that the better convenience of Internet services and DR in higher education can improve students' academic achievement by promoting remote access, ease of use, increased readership, and enhanced services, leading to productive research output within a short time. Hence, this study seeks to reveal undergraduate students' academic performance in university libraries, converging on research quality, assignment quality, and knowledge updates.

### **THEORETICAL FRAMEWORK**

In order to facilitate the context to this study, there are two different research models that support the research variables and constructs:

- a) Information Search Process (ISP) model, by Carol Kuhlthau's 2004 and
- b) Technology Acceptance Model (TAM) Davis in 1986

Thus, the framework will support to examining information users' patterns and behaviours when using electronic resources to seek information becomes unique as a result, especially when it comes to

undergraduate students. Figure 1 illustrates the conceptual relationship between the research construct and the hypotheses of the study.

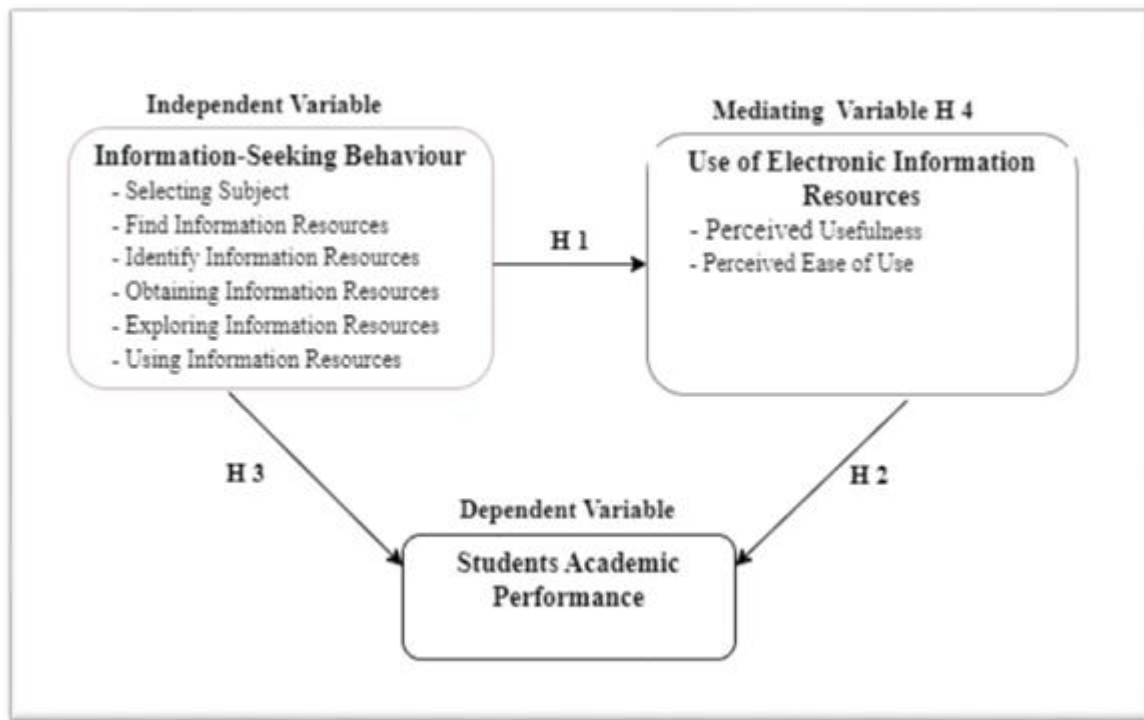


Figure 1: Research Framework of this Study

## METHODOLOGY

This study uses an exploratory research approach to investigate how undergraduate students in Nigerian Federal Universities seek information and utilize electronic resources to improve their academic performance. Adopting this approach would enrich the study by generating initial insights, draw suggestions, formulate new ideas, evaluate feasibility to conduct empirical investigations, and establish edges future research inquiries and methodologies. The study is reinforced by secondary data gathered from reviewed literature. Neuman (2020) characterizes exploratory research as a type of research primarily aimed at investigating an unfamiliar issue or phenomenon to gain initial understanding and progress towards more sophisticated or detailed research questions, with an emphasis on addressing 'what' questions.

## CONCLUSION

Over the years, university libraries have maintained intellectual lives among undergraduate students through provision of emerging electronic information resources (EIRs). There is much concerned about how university students use library and electronic resources to locate, synthesize, and use information for academic purposes. Prior research findings of a few studies on undergraduate students' information-seeking behaviour and the use of electronic information resources significantly differ. This has reflected

the fact that the undergraduate students often exhibit overconfidence in their ability to access and use credible information, neglecting the support and resources provided by library professionals. Therefore, they have missed out on valued and credible information obtained, as highlighted by Limas (2020) and Karas and Green (2007).

However, not all reviewed literature yielded positive results; in fact, some revealed more problems than benefits, resulting in a mix of contradictory findings. Findings suggested that EIRs play a significant role in enabling undergraduate students to perform various academic tasks such as retrieve literature, preparing for exams, conducting research, completing classwork, managing leisure time, staying updated, improving performance, and staying competitive in the rapidly evolving information environment. Moreover, the findings also indicated that there is a low level of information-seeking behaviour, leading to underutilization of EIRs. Additionally, these imply that the increased availability, accessibility, and utilization of EIRs lead to a significant impact on students' academic success. Overall, students' inability to access and utilize EIRs in universities impede academic performance and can affect the quality of graduates' value. In the future, the study can be expended to the whole country specifically at the Nigerian colleges and universities that offer undergraduate studies.

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