Internet Usage among University Students in Nigeria: A Case Study

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Abstract - The study looked at how students at the University of Africa, Toru-Orua (UAT), in Bayelsa State, Nigeria, used the Internet. A descriptive survey approach was chosen, and the study's execution was driven by five research questions. The population of the study consisted of 1300 undergraduate students, and the Taro Yamane sample size algorithm was used to select the sample size, which was set at 300 students. The instrument for gathering data was the questionnaire. Experts in research techniques and statistics approved the questionnaire. The instrument's dependability was determined using Cronbach Alpha, which produced a result of 0.87. Frequency counts and simple percentages were used to examine the data. The research found that the majority of students have access to Internet services on campus and that most of them regularly utilize those services for learning, personal development, and pleasure. The findings also showed that most students choose to use the university library's Internet services and that obstacles to efficient use of these services included slow Internet speed, unpredictable power supply, weak information retrieval skills, and issues identifying relevant information. The researchers' recommendations were based on the findings, and they included an upgrade to the institution's electrical infrastructure, Internet infrastructure, and the provision of Internet access in the students' dorms to maintain its efficient Internet services. The university library should also instruct students in digital literacy to enhance their search techniques and strategies.

Keywords: Internet, Internet Usage, Academic Activities, Tertiary Institutions, Learning and Research

I. INTRODUCTION

Globally, and particularly in emerging nations like Nigeria, Internet usage has been rising quickly in recent years. This device has reshaped the tertiary educational settings in terms of improving academic learning (Apuke & Iyendo, 2018). The use of the Internet at tertiary institutions has accelerated academic advancement and research, as well as encouraged students to take part in online partnerships for exchanging research findings (Hussain, 2012). Because the Internet provides a vital platform for research and a variety of other uses, including entertainment, it is widely used in higher education settings. There is a huge quantity of educational content available online today, and students can easily access these resources to help with their academic work (Alshammari, 2014). The Internet has given us access to an endless supply of information resources and is an essential tool for teaching, researching, and learning. Hundreds of millions of students worldwide have access to and

availability of these information resources at the same time (Kumar & Kaur, 2006).

According to Dogruer *et al.*, (2011), the Internet is a significant instrument that is frequently used at tertiary institutions. It has been very successful in assisting students in their comprehensive research (Devi & Roy, 2012). The Internet helps students become more competent, which benefits them in both their academic and professional lives. It also acts as a hub for research in many of their areas of study (Ugwulebo & Okoro, 2016). This is evident in the manner in which students use the Internet to conduct research, complete homework, and prepare for tests. Numerous studies have shown that college students are frequent Internet users and that utilizing the Internet is a daily habit for them.

Although there may be educational and learning advantages to the Internet, there are also many drawbacks to student access and usage. The lack of a proper Internet connection for students and instructors is one of the key challenges facing our various universities today (Awojide, 2020). Most higher education institutions in underdeveloped nations like Nigeria offer just a small number of efficient Internet services (Ureigho et al., 2006). This could be due to poor computer systems, inadequate Internet access, an epileptic power supply, etc. However, a variety of studies have been done on how students utilize the Internet, and they have found that it greatly depends on several connected variables, including the accessibility of Internet resources, the goals, and the student's abilities (Fasae & Aladeniyi, 2012). This study, therefore, investigated Internet usage among university students and the challenges they encountered in the use of the Internet for learning and research.

II. STATEMENT OF THE PROBLEM

The majority of education institutions offer staff and students access to the Internet on their campuses. The use of the Internet in higher education has improved the educational system and made a variety of information sources more accessible. Even though the Internet has many advantages and benefits for the educational system, students nevertheless face several difficulties in accessing and using it. It has been noted that many students still experience some difficulties when using Internet resources for academic learning and research. These difficulties can include inadequate computer systems, inadequate Internet access, an epileptic power supply, etc. Therefore, this study looked at how university students used the Internet and the difficulties they faced when using it for learning and research. The work seeks to proffer answers to these research questions.

- 1. Do students have access to Internet services on campus?
- 2. How frequently do students use the Internet?
- 3. For what purpose do students use the Internet?
- 4. Where is the most preferred location for using the Internet?
- 5. What are the challenges faced by students in the use of Internet services on campus?

III. LITERATURE REVIEW

Due to its many advantages, including free access to online resources and amusing features, university students have recently begun to view the Internet as a highly significant tool. The Internet is a vast network of globally interconnected computers that enables communication and information sharing. Over 84 million people used the Internet in Nigeria in 2022, according to a report from the Nigerian Communications Commission. Internet usage and relevance are becoming more widely known, particularly in the field of education. Studies on Internet usage have shown that it has altered students' attitudes toward research and learning and is progressively becoming a crucial component of the educational process (Carmona, 2013). To better serve their students, teachers, and researchers, the majority of academic and research organizations now offer Internet access (Kaur, 2008). Consequently, the Internet has developed into a useful instrument for education, research, and learning in Nigeria (Nwokedi, 2007).

There have been studies on how often university students use the Internet. A review of a few of these investigations is provided in this section. A study on Internet usage among students at the University of Dhaka in Bangladesh was conducted by Akram & Habibur (2017). According to the report, the vast majority of students regularly use the Internet for learning, communicating, and having fun. Similar research was done by Almarabeh *et al.*, (2016) at the University of Jordan on how university students use the Internet and their attitudes toward it. The majority of students, according to the report, regularly use the Internet for social networking, schoolwork, information gathering, and searching.

A study on Internet usage among first-year students at Shehu Shagari College of Education in Sokoto, Nigeria, was conducted by Gada & Sani (2017). According to the report, students mostly utilize the Internet for academic and social networking purposes. Ajanaku (2018) did a different study on university students in Ibadan, Nigeria, who use the Internet. According to the findings, the majority of students regularly utilize the Internet to conduct research and find information. Ani (2010) studied how undergraduate students at Nigerian universities used the Internet. The survey found that undergraduate students in Nigerian universities extensively utilize the Internet. These studies demonstrated the widespread everyday Internet use among college students for communication, leisure, and academic objectives.

Waithaka et al., (2018) investigated how University of Nairobi students used the Internet. The study's conclusions show that students were highly aware of the university's Internet services and that they frequently used them for socializing, communicating, and conducting research. Apuke & Iyendo (2018) investigated how students at three Northern universities used online resources for learning and research. The findings indicate that the majority of students depend on commercial Internet providers and cyber cafés, with 87% of respondents lacking appropriate access to internet resources on their campuses. The report also finds that 90% of the respondents utilize the Internet for academic purposes. A study on the evaluation of Internet usage by academic staff at the University of Africa in Bayelsa State was conducted by Ogunbodede et al., (2020). The results demonstrate that the majority of staff members have access to Internet services for research and teaching on campus.

Ogunbodede & Oribhabor (2022) looked into undergraduate students' use of digital resources and academic achievement in Nigeria. The results showed that the students used e-books, online educational videos on YouTube, e-journals, and enewspapers. It was also discovered that the students' opinions on how using digital resources affected their academic achievement were favourable. An investigation on how the Internet affects students' academic performance in Nigerian tertiary institutions was done by Ivwighreghweta & Igere (2014). The majority of those surveyed were computer proficient, and the study discovered that students commonly used cybercafés to access the Internet to find pertinent academic resources.

However, studies show that using Internet services, particularly in poor nations, is fraught with difficulties. For instance, Ivwighreghweta & Igere (2014) discovered that power outages, slow Internet speeds, a lack of computer terminals, and an inadequate number of computers were some of the issues impeding efficient Internet usage in several Nigerian higher institutes. According to Ajanaku (2018), unstable electricity, high browsing costs, and limited access to the school's Wi-Fi were the main obstacles preventing University of Ibadan students from using the Internet. According to Almarabeh et al., (2016), there are several obstacles that students at the University of Jordan face when using the Internet, including slow Internet speeds, subpar computers, a lack of knowledge about searching, difficulty finding pertinent information, and a lack of adequate computers. To overcome these current challenges, developing nations must offer the necessary financial and infrastructure support, as well as capacity building. The Internet has a lot of potentials to improve the educational system and promote simple access to information resources.

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IV. METHODOLOGY

A descriptive survey design was used for the investigation. 1300 undergraduate students made up the study's population, and 300 of them were chosen at random using the Taro Yamane sample size algorithm. A questionnaire was used to gather the data. The tool utilized to get the data was a questionnaire. The researchers gave the respondents the questionnaire, and descriptive statistics were used to examine the results. Because the items in the instrument are appropriate in terms of the topic contents, the validity of the instrument was investigated by examining the instrument's content validity. The reliability coefficient of the instrument was calculated using the Cronbach Alpha method, and a value of 0.87 was obtained. Based on the obtained coefficient, the questionnaire was thought to be reliable. A nominal scale was used to evaluate respondents' questionnaire responses. Utilizing descriptive statistics like frequency counts and sample percentages, the data were assessed. The results are displayed in the table below.

V. RESULTS OF THE STUDY

The findings of the study are presented in the following tables with explanations.

The result in table I implies that the majority of the students under study were female.

Gender	Frequency	Percentage (%)	
Male	137	46	
Female	163	54	
Total	300	100	

Answering Research Questions

This section discusses the findings of this study based on the research questions raised. The results are presented in Tables II-V.

Research Question 1: Do students have access to Internet services within the campus?

TABLE II ACCESS TO INTERNET SERVICES WITHIN
THE CAMPUS

Internet Services	Frequency	Percentage (%)	
Yes	288	96	
No	12	4	
Total	300	100	

Table II implies that the majority of the students have access to Internet services within the campus.

Research Question 2: How frequently do students use Internet services?

Sl. No.	Frequency of Internet Use	Frequency	Percentage (%)
1	Daily	176	58.67
2	Occasionally	68	23
3	Weekly	52	17
4	Monthly	2	0.7
5	Not at all	2	0.7

TABLE III FREQUENCY OF INTERNET USE

Table III shows that the majority of the students 176(59%) use the Internet services daily, 68(23%) use it occasionally, 52(17%) used it weekly whereas 2(0.7%) use it monthly and 2(0.7%) don't use the Internet services at all. This implies

that the majority of the students use the Internet services daily.

Research Question 3: Where is the most preferred location for using Internet Services?

TABLE IV MOST PREFERRED LOCATION FOR USING THE INTERNET

Sl. No.	Location	Frequency	Percentage (%)
1	University Library	156	52
2	Department	108	36
3	Laboratories/workshops	36	12
4	Hotel	-	-

Table IV shows that the majority of the students 156(52%) indicated that they accessed the Internet services in the

university library, 108(36%) accessed the Internet from their various departments while 36(12%) accessed the Internet

from laboratories and none of the respondents indicated that they accessed the Internet from their hotel. This implies that the university library is the most preferred location for the majority of the students to use Internet services. *Research Question 4:* For which purpose do students use the Internet?

Sl. No.	Purpose of Internet Use	Frequency	Percentage (%)
1	For academic activities	262	87
2	For self-development	126	42
3	For pleasure and entertainment	112	37
4	Sending/receiving e-mail messages	104	35
5	For reading and watching the news	97	32
6	For buying products online	14	5

TABLE V	PURPOSE OF	INTERNET USE

Table V reveals that the majority of the students 262(87%) used Internet for academic research and learning, 162(54%) used the Internet for registration of courses/checking of results, 126(42%) used the Internet for self-development, 112(37%) used the Internet for pleasure and entertainment, 104(35%) used the Internet for sending/receiving e-mail messages, 97(32%) used the Internet for reading and

watching the news and 14(5%) used for the Internet for buying products online. This implies that the majority of the students majorly used Internet services for academic research and learning.

Research Question 5: What are the challenges faced by students in the use of Internet services on campus?

TABLE VI CHALLENGES OF INTERNET USE

Sl. No.	Challenges of Internet Use	Frequency	Percentage (%)
1	Slow Internet speed (slow network)	224	75
2	Lack of constant electricity supply	116	39
3	Inadequate information retrieval skills	48	16
4	Difficulties in finding relevant information	38	13

Table VI shows that the majority of the students 224(75%) agreed that slow Internet speed (slow network), lack of constant electricity supply 116(39%), inadequate information retrieval skills 48(16%), and difficulties in finding relevant information 38(13%) were the major challenges in the use of Internet services in UAT. The most notable ones are slow Internet speed, and lack of constant electricity supply.

VI. DISCUSSION

The study looked at how university students at UAT used the Internet. The results of research question one indicate that most students have access to Internet services on campus. This demonstrates that the institution offers Internet services to its staff and students to improve teaching, research, and learning. This result is consistent with that of Waithaka et al., (2018), who discovered that students at the University of Nairobi had access to the Internet on campus. The results of research questions two and three showed that the majority of students regularly utilize the Internet for learning purposes, personal growth, and enjoyment. Numerous studies that show university students use the Internet frequently and as part of their daily routine support this conclusion. This finding is consistent with that of Hossain and Rahman (2017), who discovered that the majority of students regularly utilize the Internet for learning, communication, and amusement. The results of research question four show that the majority of students choose to use the Internet services at the university library. This indicates that the university library has an electronic collection with computer systems and Internet connectivity. This result contradicts that of Ivwighreghweta & Igere (2014), who discovered in their study that most students used cybercafés off campus to access the Internet. Finally, the study discovered that some of the obstacles students encountered when using Internet services included slow Internet speed (slow network), erratic electrical supply, poor information retrieval abilities, and difficulties locating pertinent information. This finding is consistent with that of Almarabeh et al., (2016) and Ivwighreghweta & Igere (2014), who discovered that power outages, slow Internet speeds and inadequate information retrieval skills were just a couple of the problems preventing effective Internet usage in a few Nigerian higher institutions. However, it can be claimed that the issue of a slow Internet connection and an unstable power supply is a recurring issue that students in Nigeria's numerous colleges confront when using the Internet.

VII. CONCLUSION AND RECOMMENDATIONS

The study looked at how university students at UAT used the Internet. It can be concluded that the majority of students Oyinkepreye Evelyn Sawyerr-George and Rachael Agina-Obu

have access to Internet services on campus, that they regularly use those services for academic purposes, personal growth, and fun and entertainment, that the majority of students use those services in the university library, and that slow Internet speed, a lack of a reliable electricity supply, poor information retrieval skills, and challenges in finding relevant information are the main drawbacks. Based on their findings, the researchers suggested that the institution should keep up its effective Internet services by upgrading its electrical supply, Internet infrastructure, and provision of Internet access in the student hostels. To improve the students' search methods and strategies, the university library should also teach them digital literacy skills.

REFERENCES

- Ajanaku, O. J. (2018). Utilization of the Internet by undergraduate students of the University of Ibadan, Nigeria. *International Journal of Science and Technology Educational Research*, 10(3), 30-36.
- [2] Akram, H., & Habibur, R. (2017). Comparative study of Internet usage among university students: A study of the University of Dhaka, Bangladesh. *European Scientific Journal*, 13, 34.
- [3] Almarabeh, T., Majdalawi, Y. K., & Mohammad, H. (2016). Internet usage, challenges, and attitudes among university students: A case study of the University of Jordan. *Journal of Software Engineering and Applications*, 9, 577-587.
- [4] Alshammari, N. (2014). The use of technology in education to improve student's reading skills in elementary schools, Saudi Arabia. *International Journal of Business and Social Science*, 5, 69.
- [5] Ani, O. (2010). Internet access and use. *The Electronic Library*, 28(4), 555-567. http://dx.doi.org/10.1108/026404710110653733
- [6] Apuke, O. D., & Iyendo, T. O. (2018). University students' usage of the Internet resources for research and learning: Forms of access and perceptions of utility. *Heliyon*, 4, e01052. DOI: https://doi.org/10. 1016/j.heliyon.2018. e01052.
- [7] Awojide, D. (2020). Nigeria's unemployment rate. Retrieved from https://www.youtube.com/watch?v=Cgb-tXv90wk.
- [8] Carmona, M. (2013). ICT trends in education: 1st annual international interdisciplinary conference, Azores, 24-26, 428-430.
- [9] Devi, C. B., & Roy, N. R. (2012). Internet use among university students: A case study of Assam University Silchar. *Pratidhwani J. Humanit. Soc. Sci., 1,* 183e201. Retrieved from https://www.thecho.in/ files/abstract,-nilratan.pdf.
- [10] Dogruer, N., Eyyam, R., & Menevis, I. (2011). The use of the Internet for educational purposes. *Procedia-Social and Behavioral Sciences*, 28, 606-611. DOI: https://doi.org/10.1016/j.sbspro.2011.11.115.

- [11] Fasae, J. K., & Aladeniyi, F. R. (2012). Internet use by students of faculty of science in two Nigerian universities. *Library Philosophy and Practice* (e-journal), 763.
- [12] Gada, B. A., & Sani, N. M. (2017). Assessment of Internet usage among undergraduate students of Shehu Shagari College of Education Sokoto, Sokoto State Nigeria. *International Journal of Advanced Studies in Economics and Public Sector Management*, 5(3), 118-130.
- [13] Hussain I. (2012). A study to evaluate the social media trends among university students. Proc. Soc. Behav. Sci., 64, 639-645.
- [14] Ivwighreghweta, O., & Igere, M. A. (2014). Impact of the Internet on academic performance of students in tertiary institutions in Nigeria. *Inf. Impact J. Inf. Knowl. Manag.*, 5(2), 47-56.
- [15] Kaur, A. (2008). Internet use for entertainment and information. Retrieved from http://www.zonalatina.com/Z1data129.html.
- [16] Kumar, R., & Kaur, A. (2006). Internet use by teachers and students in engineering colleges of Punjab, Haryana, and Himachal Pradesh States of India: An analysis. *Electronic Journal of Academic and Special Librarianship*, 1(7).
- [17] Nigerian Communications Commission report (2022). Retrieved from https://www.vanguardngr.com/2022/08/nigeria-hits-44-30-broadband -penetration-84m-internet-subscriptions/#:~:text=The%20Nigerian% 20Communication's%20Commission%2C%20NCC,internet%20 subscriptions%20in%20the%20Country.
- [18] Nwokedi, V. (2007). Impact of Internet use on teaching and research activities of the academic staff of faculty of medical sciences, University of Jos: A case study. *Gateway Library Journal*, 10(1), 13-22.
- [19] Ogunbodede, K. F., Odewusi, O. O., Oniovosa, O. N., & George, T. M. (2020). Assessment of Internet usage among academic staff in university of Africa, Toru-Orua, Bayelsa State. *Transactions on Engineering and Computer Science*, 1(2), 114. Retrieved from https://www.research.gate.net/publication/345484986.
- [20] Ogunbodede, K. F., & Oribhabor, C. B. (2022). Digital resources usage and academic performance of undergraduate students in Nigeria: A case study. *European Journal of Interactive Multimedia and Education*, 3(1), e022xx. DOI: https://doi.org/10.30935/ejimed/xxxx.
- [21] Ugwulebo, J. E., & Okoro, S. N. (2016). Impact of Internet usage on the academic performance of undergraduates students: A case study of the University of Abuja, Nigeria. *International Journal of Scientific & Engineering Research*, 7(10).
- [22] Ureigho, R. J., Oroke, G. U., & Ekruyota, G. O. (2006). The impact of Internet usage: A case study of Delta State (Nigeria) tertiary institutions. *Sci. Res. Essays, 1*(2), 054e056. Retrieved from https://bit.ly/2PxOEBg.
- [23] Waithaka, M., Onyancha, O. B., & Ngulube, P. (2018). Internet use among university students in Kenya: A case study of the University of Nairobi. *Innovation*, 57. Retrieved from https://www.researchgate.net/ publication/331889906.