

Factors Attracting Undergraduate Students Internet Use and Their Awareness of Cyber Ethics in Universities in Anambra State, Nigeria

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Abstract: The study investigated factors attracting undergraduate students to use the Internet and their awareness of cyber-ethics in Anambra State, Nigeria. The design of the study was descriptive survey. Two research questions were used for the study and one null hypothesis was tested at 0.05 level of significance. Furthermore, the probability value(p) was used in taking decisions on the null hypotheses. If the value (p) is less than or equal to .05, the null hypotheses is rejected, but if the value(p) is greater than .05, the null hypotheses is retained. An instrument which consisted of 16 questionnaire items was distributed to 120 respondents drawn from the universities located in Anambra State, Nigeria. Data collected were analysed using frequency counts and percentage. The result of the study shows that the students are fully aware of various kinds of cyber-ethics, except do not use a password that is not yours, desist from any form of cybercrime such as nuisance, theft etc, and do not snoop around in other people's computer file. It was also discovered that academic research, entertainment and online transaction are the most factors that attracted students use of the Internet. Hence, it was recommended that in view of the high Internet usage among all students for academic research, entertainment, and online transaction, university management should provide functional Internet services, Wi fi, and alternate power supply for acquisition of information ethics. The paper concludes that university students should be given proper education regarding cyber ethics and Internet usage.

Keywords: Undergraduate students, Internet Use, Awareness, Cyber Ethics, University, Nigeria.

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I. INTRODUCTION

The need for Internet in teaching and learning process in university is on the increase. Internet is playing strategic roles in all fields of human endeavour. Internet skills are essential for the effective teaching and learning and for research in this information age. The Internet is a conglomeration of computers that connect millions of people (all age group) all over the world and it use standardized Internet protocol suit (TCP/IP) to interchange data by packet switching. It is regarded as their Superhighway through which information is transmitted and shared by people all over the world. Just as a telephone, the Internet enables people to sit at his computer and exchange information with other computers and commune with users anywhere in the world. The Internet is a vast source of information to students.

There are platforms available in the Internet where students seeking formal credentials or university level courses can use and read courses without going to college, polytechnic

or university. These platforms are as follows: Coursera, edX, Blackboard, FutureLearn, Canvas, Udemy, Udacity, LinkedIn Learning, Datacamp SkillShare, Masterclass, Duolingo, Kadenze Open University for creative and hobbyist learning. Many online undergraduate and graduate programmes and students are taking advantage of such to pursue their further studies, which in most cases are combined with their job (Kowale and Oyewole, 2017). They added that this is the mostly facilitated by e-learning. Awareness means having knowledge of the existence and usefulness of something (Ndinechi and Ononi, 2015).

➤ Cyber Ethics

Cyber ethics is a broader term than computer ethics and Internet ethics (Onyancha, 2015 cited in Adetimiran, A2016). Rome (2014 cited in Adetimiran (2016) defined cyber ethics as the rules set out for responsible behavior in cyberspace and it explores the guideline for online conduct that influences the social, political, legal and business affairs. Igwe and Ibeagwam (2014) cited in Adetimiran (2016) highlighted

some cyber ethical issues to include: plagiarism, copyright, hacking, fair use, file sharing, online etiquette protocols, posting incorrect/inaccurate information, cyberbullying, stealing or pirating software, music, and video, online gambling, gaming and Internet addiction. Others are privacy, security, electronic monitoring of employees, collection and use of personal information on consumers, and identity theft. Undergraduate students need to be aware of cyber ethics as they source for different information especially from the Internet such as online databases, videos, and photographs. University students cannot utilize Internet except they are aware of the different cyber ethics activities. Students in universities and library and information science in particular need to be aware of available cyber ethics rules that they can be careful in the Internet use process.

There are various reasons why students use the Internet. Internet tools as learning strategies help students in research works, assignments, and projects in all courses. In the area of research, it provides opportunities for scholars to communicate with one another through e-mail, mailing lists and new groups chatrooms (Nwazor & Udegbumam, 2016). The authors added that they engage students and provide valuable learning opportunities. Kolawole and Oyewo (2017) opined that in the course of using the Internet, students need to understand and have proper knowledge of cyber ethics and its application.

Shivan (2025) listed the benefits of Internet to students to include: helpful researching, access to information, communication, online education, job opportunities, flexibility and convenience, skill development, global exposure, cost savings, and learning resources. The author added that through the Internet, students can connect globally and develop collaborative skills internationally. The author added that through the Internet, students can study at their own pace, which enhances their learning outcomes and enhances their learning digital literacy skills. The author further stated that the Internet allows students to actively participate in the teaching process through e-learning platforms, which use virtual learning platforms.

➤ *Statement of the Problem*

The use of Internet services and its integration in learning in universities have brought a lot changes in the life of university students. Students can now do online payments and transfer, buy airtime, do online shopping, do class assignments, prepare for examination, update their knowledge, read latest news with the aid of their Internet services. Thus the findings of Kolawole and Oyewole (2017) revealed that many factors are attracting student to using the Internet. Adedimirin (2016) cited in Kolawole and Oyewole, (2017) calls for teaching of cyber ethics education to students for them to continue adhering the principles of cyber ethics. Tiamya and Eluwa (2015) stated that the level of awareness of computer ethics of male undergraduate students seem to be higher than that of their female counterpart, and the older students are more aware of computer ethics than the younger ones.

In the light of all these, the need for this study is obvious. Experts have rightly pointed out that Internet is very much important in our universities yet, amazingly, there seem to say that some students are not fully aware of various kinds of cyber ethics.

➤ *Purpose of the Study*

The general purpose of the study is to investigate the factors attracting undergraduate students to use the Internet and students' level of awareness of cyber ethics while using the Internet. Specifically, the study is aimed to:

- Find out the factors that attracted students to the use of Internet.
- Ascertain the students' level of awareness of cyber ethics while using the Internet.

➤ *Research Question*

- What are the factors that attracted students to the use of Internet?
- What is the students' level of awareness of cyber ethics while using the Internet?

➤ *Hypotheses*

- There is no significant difference in the factors attracting undergraduate students to Internet use based on gender.

II. REVIEW OF RELATED LITERATURE

Various studies have been carried out on the Internet usage and cyber awareness in higher institutions. The study of Agbo and Igwebuike (2017) involving undergraduate students of college of Agriculture and science education in Michael Okpara University of Agriculture Umudike found that all the students make use of the Internet for learning purpose, sending of e-mails, entertainment/recreation and chatting among others. It was discovered in the study that Internet use has a very high impact on the academic excellence of the students.

Danso, Awude, Ntem, Gyasi and Ayetey (2023) investigated the Internet usage among undergraduate students in Ghana: An exploratory Study. The study revealed that students use the Internet to satisfy certain gratifications. Theme such as academic research, entertainment, news sharing and socialisation were found as the motivation behind students' use of the Internet. The study concluded that even though the Internet is important to students, they need to be cautious of its overuse in order not to be addicted.

Internet mediated in library and information science education has a number of advantages. It can be used in library and information science education to serve a variety of purposes, including but not limited to online education, information search, retrieval of information from database, virtual classroom, and searching educational content.

➤ Gender on Internet Use

The study of Tsvere, Swamy and Nyaru (2024) on gender related differences in the use of the Internet by university academics revealed a significant relationship between gender and Internet usage in favour of males. While both male and female academics used the Internet for research more than female academics did.

Safadar, Javed, Amin (2020) investigated use of Internet for education learning among female university students of Punjab, Pakistan. The study concluded that Internet usage is more common and is the source of inspiration among female for educational learning and enhanced learning trends and searching educational content.

Sharma (2018). Studied gender differences in Internet usage among research students: A comparative study. The study revealed that male and female respondents spent higher time on educational sites, pornographic sites and magazine sites. The analysis showed that significantly higher frequency score was there for class assignments/projects, searching related literature and structuring of data collection tool among

female respondents as compared to that among male respondents.

III. METHODOLOGY

The descriptive research design was adopted for this study. The study was carried out at tertiary institutions in Anambra State. The population of the study covered Nnamdi Azikiwe University, Awka, Federal College of Education Technical, (Degree Awarding Section) Umuze, Federal Polytechnic, OKoh, and Anambra State University, Igbariam. Self-structured questionnaire was used for this study which was limited to thirty (30) copies per institution. The questionnaire was divided into two sections. Section A comprised background information about the respondents while sections B consisted of questions about the factors attracting students to use Internet and the awareness of cyber ethics which require respondents to indicate statements by carefully taking the most appropriate column that satisfies his/her responses. Frequency count and percentage was used to analyze the data.

IV. RESULTS AND DISCUSSION

The result of the study was presented according to the research questions in Tables 1 and 2.

➤ Research Question 1:

What are the factors that attracted students' use of the Internet?

Table 1 Factors that Attracted Students Use of Internet

S/N	Factors Attracting Students' Use of Internet	Agree	Disagree	Total (%)
1	I use Internet for academic research (do assignment, homework, and term paper, class work, seminar)	117(97.5%)	3(3.6%)	120(100%)
2	I use Internet for entertainment and leisure (gaming, puzzle, video game)	116(96.67%)	4 (3.33%)	120(100%)
3	Social interaction	110(91.67%)	10(8.33%)	120(100%)
4	I use Internet for chatting to get stable friends	104(86.67%)	16(13.33%)	120(100%)
5	I use Internet for career and skill opportunities	108(90%)	12(10%)	120(100%)
6	I use Internet for global collaboration	100(83.33%)	20(16.67%)	120(100%)
7	I use Internet for stress relief	111(92.5%)	9(7.5%)	120(100%)
8	I use the Internet for online transaction (buying airtime)	115(95.83%)	5(4.17%)	120(100%)
9	I use Internet to send mail to friends and well-wishers.	104(86.67%)	16(13.33%)	120(100%)

Table 1 shows the response rate of respondents on factors attracted students to the use of Internet 109 respondents representing 90.83% said that they use Internet for academic research, 116 respondents representing 96.67% agreed that they use Internet for entertainment and leisure, 110 respondents representing 91.67% conceded that they use Internet for social interaction, 104 respondents representing 86.67% said that they use Internet for chatting to get stable friends, 108 respondents representing 90% said that they use Internet for career and skill opportunities, 100 respondents representing 83.33 said that they use Internet for global collaboration, 111 respondents representing 92.5% said that they use Internet for stress relief, 115 respondents representing 95.83% said that they use the Internet for online transaction, 104 respondents representing 86.67% said that they use Internet to send mail to friends and well-wishers.

➤ Research Question 2:

What is students' level of awareness of cyber ethics while using the internet?

Table 2 Respondent's Level of Awareness of Cyber Ethics.

Kinds of Cyber Ethics	Not Aware	Partially Aware	Fully Aware	Total
Do not appropriate other peoples' intellectual output	10(8.33%)	10(8.33%)	100(83.33%)	120(100%)
Do not attempt to be a bully on the Internet	20(18.33%)	4(3.33%)	96(80%)	120(100%)
Do not use a pass word that is not yours	89(9.17%)	11(16.67%)	20(74.17%)	120(100%)
Desist from any form of cybercrime such as nuisance, personal identity theft and intrusion	89(74.17%)	9(7.5%)	22(18.33%)	120(100%)
Desist from using offensive words or rude language on the Internet	40(33.33%)	4(3.33%)	76(63.33%)	120(100%)
Do not post incorrect/inaccurate information	5(4.17%)	5(4.17%)	110(91.67%)	120(100%)
Do not use computer to harm other people	10(8.33%)	14(11.66%)	96(80%)	120(100%)
Do not use computer to bear false witness	10(8.33%)	8(6.67%)	102(85%)	120(100%)
Do not use computer to steal	9(7.5%)	2(1.67%)	109(90.83%)	120(100%)
Do not snoop around in other people's computer file	102(85%)	8(6.67%)	10(8.33%)	120(100%)

Table 2: Findings indicated that student were only fully aware of 6 items such as do not appropriate other people's intellectual output, (=83.33%), do not attempt to be a bully on the Internet (=80%), do not use a pass word that is not yours(=74.17%) desist from any form of cyber-ethics (=63.33%), desist from using offensive words or rude language on the Internet (=63.33%), do not post incorrect/inaccurate information(=91.67%), do not use computer to bear false witness (= 85%), do not use computer to steal (=90.83%), do not snoop around in other people's

computer file (=100%). All these indicated that students in university were fully aware of cyber-ethics to Internet. Aderibigbe and Ocholla (2020) study also revealed that the undergraduate students were mostly aware of unethical behaviour with regard to cyber technology at the selected universities in South Africa and Nigeria.

➤ Hypothesis 1

There is no significant difference in the factors attracting undergraduate students to Internet use based on gender.

Table 3 The T-Test Summary of the Difference Between the Mean Ratings of Students on Factors Attracting Male and Female LIS Students to Use of the Internet.

Variable Gender	N	Mean	SD	Df	t-cal	p-val	Level	Remark Internet Attraction
Male	30	4.12	0.40	109	.828	.414	0.05	Not Significant
female	90	4.05	0.48					

The t-test analysis presented in Table 3 revealed that the P-Val of .414, is greater than the alpha level of 0.05 at 109 degrees of freedom. The result indicates that male LIS students in Anambra State, with mean score of 4.12, and female LIS students with mean score of 4.05 do not differ. On their rating for factors attracting undergraduate students to use the Internet.

V. DISCUSSION AND FINDINGS

The findings of this study revealed that academic research, entertainment, online transaction is the most factors that attracted students use of the Internet. In addition, the result revealed that student use the Internet to do assignment, homework, term paper, class work, and seminar. More so, the result shows that students are fully aware of 6 items listed and partially aware of three items listed such as do not snoop around in other peoples' computer file (=85%), desist from any form of cyber-crime such as nuisance, personal identity, theft and intrusion, and do not use pass word that is not yours. All these indicated that students in universities in Nigeria are also partially aware of some of the items on cyber-ethics. This was in line with the findings of Naaj and Nachouki(2021) which found out that in general, respondents were aware of cyber ethics. In particular, according to Naaj and Nachouki, gender and education level were found to directly affect cyber ethics awareness.

The t-test analysis revealed that there was no significant difference in the mean ratings of respondents in university in Anambra State on the factors attracting male and female students to use the Internet. The findings agree with

VI. CONCLUSION

Based on the findings of this study, it was concluded that the University students should be given proper education regarding cyber ethics and Internet usage. Giving proper education regarding cyber ethics and Internet may lead to a remarkable increase in the students' knowledge of Internet usage and awareness of cyber ethics in universities in Anambra State, Nigeria.

RECOMMENDATIONS

- In view of the high Internet usage among all students for academic research, entertainment, and online transaction tertiary institutions should provide functional Internet services, Wi fi and alternate power for acquisition of information ethics.
- University management should incorporate mandatory modules on plagiarism, online safety, and Internet fraud into the existing undergraduates' General studies (GST) curriculum. This will help the students to receive

foundational ethical training during their year 1. This will also enhance students 'level of mastery of cyber ethics.

- The Internet is the backbone of academic research, transforms the entire research lifecycle coupled with knowledge of cyber ethics for appropriate use and connect scholars with peers worldwide.

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