# Awareness of Academic Ethical Standards and Practices Among LIS Undergraduates in Nigerian Universities

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ABSTRACT

The study examined awareness of academic ethical standards and practices among Library and Information Science undergraduates in selected universities in Nigeria. Ethical issues of e-learning platforms use were specifically investigated among others. Descriptive survey was adopted for the study. Population of study comprised 1483 LIS undergraduates in ten universities offering LIS programmes in South-west and North-central, Nigeria. Total enumeration technique was used to cover respondents in ten universities: four federal, three private and three state universities in the two geopolitical zones of the country. Questionnaire was used for data collection and data gathered were analysed with the use of descriptive statistics such as percentages, mean, standard deviation and frequencies. Findings showed that the most e-learning platforms used are Learning Management Systems (LMS) such as Modular Object-Oriented Dynamic Learning Environment (Moodle), Edmodo and Blackboard as well as online discussion forum such Google Meet. Finding farther revealed that LIS undergraduates hardly observe ethical procedure (such as paraphrasing sources of information used in the review and acknowledging the sources consulted) while making use of other people's intellectual works for academic pursuits. The study recommends the need to improve awareness on the danger embedded in the breach of standard procedure while carrying out academic activities and facilitate periodic training to accommodate the exploration of the e-learning platforms.

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## 1. Introduction

Academic standards are benchmarks that define what students should know and be able to do in specific subjects and grade levels (Bodang & Lengkat, 2021). These standards are set primarily to influence learning, guide research activities, instruct and inform assessment. It espouses the need to conform to the recommended ethical standards in the use of information resources such as e-learning platforms as well as other person's intellectual property. The conformity is deep rooted in the ancient Greek word ethics, which implies moral assessment or guidelines that determine right or wrong in a given task. Ethics also covers a written document or rules observed with a very high standard of respect, and that promotes moral behaviour. It is a moral principle, the rights and the wrongs, personal as well as the codes of conduct that guides an individual behaviour (Adebayo & Mabawonku, 2017).

The application of ethics is expected to help in strengthening the character of both the students and teachers to become a reliable model for others in the future. The observance of academic standards and practices in the use of e-learning platforms may depend largely on the level of awareness. Awareness explains knowledge and understanding of the existence of an issue by the target audience (Drolet et. al, 2023). The concept is synonymous with consciousness, though it is argued that someone may be aware of an issue or something without necessarily being conscious of it. Awareness explains LIS undergraduates state of knowledge and consciousness in the use of e-learning platforms and the need to comply with academic ethical standards. In connection with this, the appropriate behaviour as applied to conventional classes is expected to be replicated at the online classes even more than in the former situation. Studies such as those of Apriliaswati and Fitrianingru (2022); Hamzat and Olatokun (2023) submitted that ethics in online classrooms are more complex owing to the fact that the ethical issues to contend with are technologically enabled. They noted that if lecturers are concerned that students are showing academic dishonesty in face-to-face classrooms, then those concerns should be raised in online classrooms where 'psychological distance' can increase academic dishonesty. For example, in a face-to-face classroom, lecturers can ensure that the work submitted by students is their own especially when they are given a handwritten assignment. This, however, becomes a challenge in an e-learning classroom environment because it is unlikely that e-teacher/e-tutor be able to validate positively if the assignment submitted online is the work of a student or for someone else.

E-learning platforms are various outlets that could be adopted for teaching and learning. It is developed as a means of enhancing teaching and learning across disciplines. The e-learning platforms may include learning management systems, the synchronous and collaborative online learning platforms enabled by the Internet and social media (Tamm, 2019). The e-learning platforms may be synchronous or asynchronous. The synchronous indicates that students/learners watch instructors deliver their lectures in real time and asynchronous covers a situation whereby students playback lecture recordings at their convenience. The synchronous method promotes the use of two-way communication technologies for feedback, clearer assignment guidelines and effective use of online resources. With e learning platforms, students can be together in a classroom while going through their digital lessons and assessments. Examples of e-learning platforms include Edmodo, Modular Object-Oriented

Dynamic Learning Environment (Moodle), Google Meet, Google Classroom, ATutor, Blackboard and others.

The use of e-learning platforms by undergraduates (LIS undergraduates inclusive) could facilitate access to electronic information resources and provide flexibility in learning. Despite the benefits associated with the use of e-learning platforms, the context observations of the researchers indicated that the platforms are being used indiscreetly by LIS educators due to their poor level of awareness of academic ethical standards. The need to ascertain level of awareness of academic ethical standards and practices in the use of e-learning platforms among LIS undergraduates necessitated this study.

### *1.1 Research question*

The study addressed the following research question:

What is the level of awareness of academic ethical standards and practices in the use of e-learning platforms by LIS undergraduates in selected universities in Nigeria?

### *1.2 Hypothesis*

The study tested the null hypothesis at 0.05 level of significance:

There is no significant influence between awareness of academic ethical standards and practices on e-learning platform use by LIS undergraduates in selected universities in Nigeria.

## 2. Literature Review

The review of literature was structured to cover ethics/academic standards, student awareness of ethical standards, e-learning platforms and ethical challenges.

### *2.1 Ethics/Academic standards*

Information ethics, normative ethics and others have been extensively described (Kundu, 2018; Adetimirin, 2018; Dunmade et al., 2023). For instance, academic ethics is explained as a set of standard principles and values that guide the behaviour and actions of individuals within the academic community. It encompasses a wide range of responsibilities and expectations, with emphasis on honesty (accurately representing other people's work and ideas, as well as properly crediting the work through citations and references). Others include the citation and referencing (originality - applies to assignments, papers, projects, theses, and research projects), collaboration (applies to the transparency about the contributions to collaborative work and acknowledging the contributions of others). These principles contribute essentials needed for credibility, honesty, and fairness in academic work maintenance. The concept ethics cover copyright, inappropriate behaviour, academic dishonesty, libel, slander, poor/wrong citations, cut and paste, plagiarism, cyber behaviour, outright stealing of another person' intellectual property and others.

Thus, ethically behaved undergraduates will create a sense of friendship through the exchange of positive ideas and be able to invite fellow students to engage in discussions. An ethically behaved

undergraduate is equally open to new ideas and relate with humility when dealing with peers. Generally, every university has the code of ethics usually written in the student handbook which contains a set of guidelines that governs the rules to be followed. The code of ethics can contain information on discipline, manner, student engagement, honesty and responsibility. Well-behaved undergraduates are the ones who follow the standard procedure when making use of another person's intellectual content. They are expected to safeguard other people's copyright and avoid any form of action that can breach authors' rights, especially in cyberspace. Above all, the need to safeguard academic ethical standards and practices, particularly in the use of other people's intellectual outputs, has been espoused in literature.

Mol and van den Hoven (2022) discussed the gender differences in the attitudes and behaviour of Life Sciences students regarding integrity issues in Utrecht University, Janskerkhof, Netherlands. Factors relating to students' attitudes towards integrity-related issues, self-reported misconduct, suspicions of misconduct and willingness to report fellow students were specifically examined. The study comprised 1266 first-year master students. Their findings indicated that male students were significantly more likely to report not doing their fair share in group work and putting their name on work without checking it. Though no significant differences were found regarding attitude and suspecting and reporting other students. In Montenegro, Vučković, et al (2020) assessed students' and teachers' attitudes towards cheating with reference to students' performance. The research sample of students (120) includes participants from three basic study programs and two postgraduate programmes in the field of education. They reported that older students (master's level and senior years of study) anticipate more severe consequences in not adhering to academic integrity as compared to the younger students.

In the Netherlands, Van-Stekelenburg et al (2020) explored the moral ideas and experiences of applied sciences students in seven Dutch universities. Semi-structured interviews were held with 36 fourth-year Bachelor students divided over four institutions and three different programmes (Initial Teacher Education, Business Services and Information and Communication Technology). The findings showed that the students say they strive to be(come) moral professionals, but that they have difficulties recognising and articulating the moral aspects of their professional roles. The study of Wang et al (2020) on students' Internet ethical behaviour in South Korea based on a cross-sectional survey design indicated that the intention to observe Internet ethical behaviours is influenced by attitude toward ethical behaviour, subjective norms, and perceived behavioural control. They noted that other factors, such as agreeableness and conscientiousness, are positively related to attitude toward ethical behaviour and subjective norms.

In Nigeria, Abduldayan et al (2023) examined plagiarism in final year research projects in the Department of Library and Information Technology, Federal University of Technology, Minna. Turnitin anti-plagiarism software was used to check the similarity index and percentage of plagiarised content in the students' projects. The study determined different tricks and methods adopted by students in manipulating the results of Turnitin in order to get acceptable percentages. The findings revealed the lack of basic paraphrasing skills; time constraints, and lack of continuous monitoring of students' progress by Turnitin instructors as some of the challenges faced by students while using Turnitin for plagiarism check. In examining the level of examination malpractices among LIS undergraduates,

Chidiadi (2022) conducted a study to examine the peer group influence and gender as correlates of Library and Information Science students' attitude towards examination malpractice and its implication for all-around development of students. The study applied a correctional research design with a population sample of 259 LIS randomly selected from seven public universities in Nigeria offering degree programs in LIS. The outcome of this study indicated that LIS students generally have a negative attitude towards examination malpractice, irrespective of gender.

### *2.2 Student awareness of ethical standards*

Studies such as Rodzalan and Saat (2021) focused on moral processes; awareness, judgment, intention and behaviour with 2000 undergraduates from six public universities in Malaysia. They reported that students' ethical level was mixed as those from engineering faculty demonstrated a low level of ethics, as compared to social science and science students. In terms of gender differences, female students appear to have a higher level of ethics than their male counterparts. The result is in consonance with those of Karim et al (2020), who claimed that students at a public university in Malaysia engage in unethical behaviour with the results from the big five personality model. The personality traits examined include the agreeableness, conscientiousness and emotional stability. These indices were significantly and negatively correlated with unethical Internet behaviour among the university students. The study concluded that there existed significant differences in facility misuse among the three academic faculties.

Similarly, Udem et al (2023) tested the knowledge of 868 Library and Information Science (LIS) undergraduates towards plagiarism in Federal Universities in South-East, Nigeria. Their findings showed that the respondents have moderate knowledge of plagiarism. The findings further indicated that the knowledge of the respondents about plagiarism varies across their academic years. Makinde et al (2023) evaluated the research competency, attitude towards research, and information literacy of undergraduates studying LIS in universities in South-West Nigeria. Questionnaire and Focus Group Discussions (FGD) were the data collection instruments used in the study. The findings showed that the LIS undergraduates showed a mixed attitude towards research, low information literacy, and a passable level of research competency. The findings further showed that IL has a significant influence on the research proficiency of the LIS undergraduates in South-West Nigeria. Nwadibe and Anaehobi (2023) investigated the attitudes of Library and Information Science (LIS) undergraduates towards plagiarism in four federal universities in South-East Nigeria. Their findings showed that the respondents have a negative attitude towards plagiarism.

Alnajjar and Hashish (2021) assessed academic ethical awareness and moral sensitivity of Saudi University nursing college undergraduates. Descriptive correlational research study with a convenient sample of nursing students was adopted. Their findings showed that nursing students exhibited moderate academic ethical awareness and moral sensitivity. Other factors of academic level, integrated classroom and clinical learning experiences were further reported to positively impact students' academic ethical awareness. Selvan and Kalaiyarasan (2022) discussed awareness of digital education ethics among the higher education students. A total of 105 arts and science students were drawn from the Alagappa University, India. Issues bothering on cost, complexity and safety were critically

assessed. The study concluded that there is an emergent need not only to develop a proper understanding of digital ethics among arts and science students but also to provide them with facilities to develop and follow digital ethics in their regular classroom learning. In India, digital education will be bright in the future. Okougbo et al (2021) examined the role of ethics intervention curriculum (EIC) on the ethical awareness of undergraduate accounting students. An experiment of final year students drawn from five faith-based private universities in Nigeria was conducted to identify changes in ethical awareness. This study observed a significant difference in the ethical awareness of the students in the treatment group compared to those in the control group. The study concludes that the ethics intervention curriculum has a positive impact on the ethical awareness of the students. Sibarani and Wiharsianti (2024) investigate the impact of self-awareness and behavioural biases on undergraduate students' ethical compliance in Yogyakarta, Indonesia. The study sampled 100 respondents consisting of high school students and college students. The data gathered for the study is analyzed with the help of SmartPLS and the results showed that self-awareness has a positive impact on students' ethics compliance. Behavioural biases were reported to have a negative impact on students' ethical compliance.Almseidein and Mahasneh (2020) evaluated awareness level of undergraduate students of Al Balqa Applied University in Jordan to ethics as a means of ascertaining whether there is gender and academic level variables difference when using an e-learning system. Self-developed questionnaire was designed to measure awareness of ethics among the participants. Issues bothering on Intellectual property rights, vandalism and privacy were examined. Their finding showed that students' awareness level is low in all three categories regarding their commitment to the ethical issues when using an e-learning system. Their result further revealed that, there are no significant differences between undergraduate students' gender and academic level in relation to awareness level of ethical issues.

### *2.3 E-learning platforms and ethical challenges*

Studies such as those of Abdulrahman et al (2025) investigated undergraduate students' perceptions of online learning platforms at the University of Ilorin, focusing on their effectiveness, usability, and impact on academic performance. Specifically, the study examined the most commonly used platforms, students' motivations, and demographic influences, aiming to identify challenges and opportunities for improving the teaching-learning process through these technologies. Findings revealed that students most commonly use platforms are Telegram, Zoom, and Google Meet. Their perceptions toward the usability and impact of online learning platforms are largely positive, with significant benefits noted for academic performance and time management. Balida (2023) examined the ethical challenges of online teaching and learning in virtual classrooms. Data was collected through interviews and observations, and analysed using thematic analysis informed by Rest's moral decision-making model. The study revealed that ethical challenges emerge from the complex interplay of technological, social, and pedagogical factors, influenced by broader cultural, institutional, and policy contexts of online education. Online tool features, users' technical skills and digital literacy, virtual community norms, power dynamics, instructional strategies, learning outcomes, regulations, accreditation standards and ethical codes of conduct are ethical factors reported to affect behaviour.

Mehrfar et al (2023) evaluated ethical principles in e-learning with focus on key issues in instructional design and teaching methods. The study reviewed 49 articles on e-learning ethics published during 2005-2022. Manuscripts were retrieved via Google Scholar, ERIC, and Education Source databases utilising “online learning ethics,” “e-learning ethics,” “academic integrity,” and “learner privacy keywords. The articles were analyzed using qualitative synthesis. The study concluded that ethical complexities can enhance academic integrity in digital classrooms, but sustainable engagement with the evolution of e-learning requires continuous participation. Barikzar et al (2024) examined the challenges and strategies in e-learning adoption in emerging economies. Comprehensive literature search was conducted across major databases. One hundred and ninety-one (191) records were screened, of which 127 were assessed for eligibility and 84 studies met the inclusion criteria. The systematic approach adopted revealed four key themes: critical success factors, critical failure factors, implementation recommendations, and future research directions in e-learning. The study findings illuminate the nascent stage of e-learning adoption in emerging economies, highlighting both the potential for enhanced educational access and multifaceted challenges faced by these nations.

Devaraj et al (2025) examined role of e-learning in transforming Coimbatore arts and science students towards campus recruitment amid COVID-19 in India. Perceptions of online education, flexibility, accessibility, engagement barriers and technical issues were examined. Their findings showed efficacy of e-learning for online assessments in recruitment processes and that students’ awareness of available e-learning platforms and courses is limited. The need to address technological barriers, foster interactive learning environments, and integrate hybrid models to ensure inclusive education and improved career readiness in the university was recommended. Bhale and Dongre (2025) surveyed the ethical dimensions of e-learning use with focus on equity, privacy and academic integrity in Jalgaon. Qualitative method was employed in reviewing peer-reviewed publications from the year 2018 to 2024 based on literature available in academic databases (Google Scholar, ERIC and Education Source). The study concluded that promoting ethical awareness and collective efforts of stakeholders is essential for development of ethically accountable e-learning ecosystems that support the principles of quality and equitable.

## 3. Methodology

Descriptive survey method was adopted for the study. The population comprised 1,483 LIS undergraduates in ten universities offering LIS programmes in both the South-west and North-central, Nigeria. Total enumeration was used to cover all the students due to their manageable size. Of 1483 students, only 1463 representing 98.65% of the respondents participated in the study. An adapted questionnaire from similar studies was employed to fit into the study’s context. Questionnaire used for data collection on level of awareness is structured into two constituents of high level and low level to ensure that no respondents sit on the fence. Part A of the questionnaire contained information regarding the institution, level of study, age range, gender and religion of the respondents. Part B of the questionnaire focused on the types of e-learning platforms being used. Part C concentrated on level of awareness of academic ethical behaviour. Researchers placed premium on respondents’

privacy by not linking responses to anyone directly. Copies of questionnaire were condensed into Google form for wider and convenient participation. Incentive such as 4 gigabyte of data was provided for all undergraduates who participated in the study. Respondents were assured that their decision to participate or not, did not impact their academic performance or employment prospects. A pre-test of the instrument was carried out at Bayero University Kano (located in the Northwest of Nigeria) using 30 LIS undergraduates. The measuring scale established the psychometric properties of the following using Cronbach Alpha: Section B: types of e-learning platforms being used (α = 0.72) and Section C: awareness of academic ethical behaviour (α = 0.83). The data gathered on socio-economic characteristics of the students, the types of unethical practices engaged in, attitudes towards unethical practices, as well as the factors influencing ethical decision-making among LIS undergraduates were analysed with the use of descriptive statistics such as percentages, mean, standard deviation and frequencies. The analysis is presented in Tables 1-5.

## 4. Results

Table 1. Institution and Level of Study of LIS Students that Participated in the Study

| Variable | Frequency | Percentage |
|---|---|---|
| **Institution** | | |
| Adeleke University | 37 | 2.49 |
| Al-Hikmah University | 19 | 1.28 |
| Federal University of Technology, Minna | 200 | 13.49 |
| Federal University, Oye-Ekiti | 198 | 13.35 |
| Kwara State University | 167 | 11.41 |
| Lead-City University | 37 | 2.49 |
| Tai-Solarin University of Education | 200 | 13.67 |
| University of Ibadan | 205 | 14.01 |
| University of Ilorin | 200 | 13.67 |
| University of Jos | 200 | 13.67 |
| **Student's Level of Study** | | |
| 100 (First year students) | 214 | 14.62 |
| 200 (Second year students) | 593 | 40.53 |
| 300 (Third year students) | 337 | 23.03 |
| 400 (Fourth year students) | 319 | 21.80 |

The profile of the institutions and level of study of LIS students who participated in the study is presented in Table 1. The highest number of study participants, 205, constituting 14.01% was recorded at the University of Ibadan, Ibadan, among others, while the least, 19, representing 1.28% of the respondents, were found in Al-Hikmah University. As regards level of education, the lowest were in the 100 level (14.43%) that is the first year of study.

Table 2. Distribution of LIS Students by Socio-demographic Characteristics

| Variable | Frequency | Percentage |
|---|---|---|
| **Age Range** | | |
| 16-20 | 686 | 46.88 |
| 21-25 | 665 | 45.45 |
| 26-30 | 77 | 5.26 |
| >30 | 35 | 2.39 |
| Mean | 21.37±3.42 | |
| **Gender** | | |
| Male | 839 | 57.34 |
| Female | 624 | 42.65 |
| **Religion** | | |
| Christianity | 877 | 59.94 |
| Islam | 585 | 39.98 |
| African Traditional Religion | 1 | 0.06 |

The socio-demographic characteristics of LIS students were presented in Table 2. Almost 47% and 47% of the students fell in the 16-20 years and 21-25years age categories with an average age of 21.37±3.42years. Almost 58% of the students were male, mainly Christians (59.94%), with an average household size of 6±2persons.

The types of e-learning platforms used by LIS undergraduates in selected universities in Nigeria are presented in Table 3

Table 3. Types of E-learning Platforms used

| S/N | Types of e-learning Platforms | Used | Not Used |
|---|---|---|---|
| 1 | Edmodo | 865 (59.12%) | 598 (40.87%) |
| 2 | Modular Object-Oriented Dynamic Learning Environment (Moodle) | 1, 210 (82.70%) | 253 (17.29%) |
| 3 | ATutor | 214 (14.62%) | 1,249 (85.37%) |
| 4 | Bazaar | 613 (41.90%) | 850 (58.09%) |
| 5 | Blackboard | 1126 (76.96%) | 337 (23.03%) |
| 6 | Google Meet | 1139 (77.85%) | 324(22.14%) |
| 7 | Google Classroom | 1060 (72.45%) | 403 (27.54%) |

The results indicated that Modular Object-Oriented Dynamic Learning Environment (Moodle) 1, 210 (82.70%) top the list of the types of e-learning platforms being used by LIS undergraduates in the selected universities. Other types include Edmodo and Bazaar, while ATutor constitutes the least used e-learning platforms among the study respondents.

*Research Question: What is the level of awareness of academic ethical standards and practices by LIS undergraduates in selected universities in Nigeria when using e-learning platforms?*

The results of the level of awareness of academic ethical standards and practices by LIS undergraduates in selected universities in Nigeria when using e-learning platforms are presented in Table 4

Table 4. Level of by LIS Undergraduates' Awareness of Academic Ethical Standards and Practices

| Ethical Adherence Statement | VHL | | HL | | ML | | LL | | Mean | SD |
|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | | |
| **Plagiarism** | | | | | | | | | | |
| I always acknowledge sources of information whenever there is a need to submit an assignment or project. | 816 | 55.77 | 569 | 38.89 | 51 | 3.48 | 27 | 1.84 | 3.49 | 0.65 |
| I sometimes engage in the act of copying word for word from a book or journal without acknowledgement so as to meet deadlines | 228 | 15.58 | 493 | 33.69 | 448 | 30.62 | 294 | 20.09 | 2.45 | 0.98 |
| I copy from the Internet without citing the source once in a while since the volume of information on the Internet is huge | 317 | 21.55 | 460 | 31.44 | 466 | 31.85 | 270 | 18.45 | 2.52 | 1.00 |
| I support the buying of term paper or assignment from people who make already prepared papers available to students and I feel it is not a big deal. | 221 | 15.10 | 358 | 24.47 | 453 | 30.96 | 431 | 29.46 | 2.25 | 1.03 |
| I have submitted assignments without references on so many occasions | 261 | 17.84 | 497 | 39.97 | 461 | 31.51 | 244 | 16.67 | 2.53 | 0.96 |
| I sometimes paraphrase the words of other people but fail to acknowledge them | 265 | 18.11 | 518 | 35.40 | 463 | 31.64 | 217 | 14.83 | 2.57 | 0.95 |
| I copy images and data on the Internet which I sometimes include in my term papers or assignments but do not include where I got them | 298 | 20.36 | 586 | 40.05 | 382 | 26.11 | 197 | 13.46 | 2.68 | 0.94 |
| **Copyright Infringement** | | | | | | | | | | |
| I download and share audio and video files without the permission from the copyright owner | 319 | 21.80 | 495 | 33.83 | 466 | 31.85 | 183 | 12.50 | 2.65 | 0.93 |
| I do not see the need to seek permission before I can use any logo belonging to corporate organizations. | 256 | 17.49 | 477 | 32.60 | 513 | 35.06 | 217 | 14.83 | 2.52 | 0.92 |
| I do not consider scanning a published photograph or image without permission as a problem | 188 | 12.85 | 413 | 28.22 | 563 | 38.48 | 299 | 20.43 | 2.33 | 0.89 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Academic Cheating** | **293** | **20.02** | **432** | **29.52** | **476** | **32.53** | **262** | **17.90** | **2.51** | **0.91** |
| I always wait for others to complete our group assignments because I do not have the time | 132 | 9,02 | 170 | 11.61 | 614 | 41.96 | 547 | 37.38 | 1.92 | 0.99 |
| I do not see anything wrong with copying from a nearby student during continuous assessment and examination when I cannot remember the needed points to answer the questions | 144 | 9.84 | 272 | 18.59 | 511 | 34.92 | 536 | 36.63 | 2.00 | 0.97 |
| I sometimes use my mobile phone to send and receive answers to continuous assessment and examinations | 153 | 10.45 | 201 | 13.73 | 500 | 34.17 | 609 | 41.62 | 1.92 | 0.98 |
| I allow friends to copy from me during examinations | 158 | 10.79 | 395 | 26.99 | 501 | 34.24 | 409 | 27.95 | 2.20 | 0.96 |
| **Software Theft** | | | | | | | | | | |
| I do not have the money to purchase licensed software so I sometimes download pirated software | 260 | 17.71 | 431 | 29.46 | 486 | 33.21 | 286 | 19.54 | 2.45 | 0.99 |
| I share my licensed software with my friends | 186 | 12.71 | 504 | 34.44 | 495 | 33.83 | 278 | 19.00 | 2.42 | 0.93 |
| I sometimes sell downloaded software to my colleagues when I am in need of money | 150 | 10.25 | 280 | 19.13 | 637 | 43.54 | 396 | 27.06 | 2.12 | 0.92 |
| I purchase one version of a software and install on multiple devices even when the software license states it should be installed only once | 177 | 11.94 | 324 | 21.85 | 625 | 42.14 | 357 | 24.07 | 2.22 | 0.94 |
| I have made use of an unauthorized activation code or registration number to install a software before | 170 | 12.09 | 341 | 23.30 | 549 | 37.52 | 403 | 27.54 | 2.19 | 0.96 |

KEY: VHE=Very High Level, HL= High Level, ML=Moderate Level, LL=Low Level***Decision Rule if mean is 1 to 1.79=Very Low Level; 1.80 to 2.59 = Low Level; 2.60 to 3.39 = Moderate Level; 3.40 to 4.19= High Level; 4.20 to 5= Very High Level

The level of awareness of academic practice level of awareness of academic ethical standards and practices by LIS undergraduates in the studied universities was high ($\bar{x}$=3.49) as they claimed to always acknowledge sources of information used for assignment or project. Though, the respondents maintained moderate level of awareness ($\bar{x}$=2.68) as they claimed that they do not include source of the image copy on the Internet for assignment. The analysis further showed that they fail to acknowledge the source of information used for their works ($\bar{x}$=2.57) despite using paraphrasing. Specifically for academic cheating, the respondents maintained very low level of awareness as they allow to be copied by friends during examinations ($\bar{x}$=2.20). For software theft, they have very low level of awareness as they download pirated software ($\bar{x}$=2.45) and sell same to colleagues

($\bar{x}$=2.12).

The findings indicate that LIS undergraduates faintly recognized the danger embedded in making use of another person's intellectual contents without acknowledging the owner. This suggests that the LIS undergraduates do not take the need for giving credit to the intellectual contents owner to be serious due to the varying level of awareness they have about the academic standard and practice. However, while some students acknowledged the need to reference the sources of materials used for academic works, some of them are not even aware of the need to safeguard other person's rights.

Table 5. Influence of Awareness of Academic Standard and Practice on E-Learning Platform use

| Variables | B | Std. Error | Beta (β) | t | p | Adj.R2 | F | df(residual) | P |
|---|---|---|---|---|---|---|---|---|---|
| (Constant) | 12.382 | 1.852 | | 6.685 | .000 | 0.53 | 136.50 | 3(358) | 0.000 |
| Source of awareness | -.551 | .184 | -.192 | -2.997 | .003 | | | | |
| Level of awareness | -.527 | .176 | -.197 | -2.989 | .003 | | | | |
| Dependent Variable: Use of E-Learning Ptaforms | | | | | | | | | |

*Note: β= Standardized Coefficient, significant at 0.05*

The results as depicted in Table 5 showed that awareness of academic standard and practice has a significant influence on the use of e-learning platform by LIS undergraduates in the studied Nigerian universities (Adj.R2 = 0.53, F(3, 358) = 136.50, $p < 0.05$). This implies that the linear combination of the indicators of awareness would enhance the use of e-learning platforms by LIS undergraduates in Nigerian universities. In addition, the analysis shows that awareness could explain 53% (Adj.R2 = 0.53) variation in the use of electronic learning platforms by students in Nigerian universities. Consequently, the null hypothesis was rejected.

## 5. Discussion

The current study examined the self-reported responses of LIS undergraduates on their awareness of academic ethical standards and practices when using e-learning platforms in selected universities in Nigeria. Other descriptive and preliminary results were obtained from the survey. The study found that the LIS undergraduates make use of e-learning platforms such as Moodle, Edmodo, Google Classroom, Google Meet among others. Findings revealed that the LIS undergraduates hardly observe academic ethical standards and practices. This result is in tandem with previous studies in Nigeria and elsewhere (Abduldayan, et al 2023; Chidiadi, 2022; Makinde et al 2023) and earlier foreign studies such as those of Van-Stekelenburg et al 2020; Rodzalan and Saat (2021). All these studies affirmed that students usually engage in unethical behaviour in their academic pursuits. Similarly, majority of the respondents had made use of unlicensed materials, attempted to copy the exam answers from others without their permission and did not see anything wrong with doing other students' coursework or assignments for them, especially if they would be financially rewarded. Findings correspond with Nwadibe and Anaehobi (2023) study that revealed that LIS undergraduates

in federal universities in South-East Nigeria have a negative attitude towards plagiarism, with particular emphasis on their year of study.

## 6. Conclusion

Despite the statistical analysis showing a moderate level of awareness of academic standards and practice possessed by the respondents, the weighted data show an undesirable degree in application of same (referencing sources of information used, avoid cheating in examinations, avoid software theft). Overall, the findings showed that proper awareness level is important in present-day where emphasis is placed on ownership and plagiarism avoidance. With the lackluster indicators of awareness of academic standards and practice of the respondents, the study called for pragmatic transformation. Challenges that center on plagiarism, academic cheating, software theft and other issues must be addressed as a means of keeping academic standards and practice alive among LIS undergraduates in Nigerian universities. In terms of limitation, the type of instrument used for the study is a mono-method approach, where all the construct measures were included in the same questionnaire, and the data were collected at the same time. In this case, responses to some items of the instrument might affect answers to other items because of the way the items are grouped together on the instrument. In a follow-up study, it would be appropriate to compare findings of actual misconduct with the self-reported results on awareness of academic ethical standards and practice. Another limitation is that the study targeted only LIS undergraduates in universities in the South-west and North-central, Nigeria. This may have generalisation implications for undergraduates in other regions not covered by the current study.

It is therefore recommended that:

ⅰ. Various LIS departments across universities in Nigeria could consider the incorporation of an orientation programme at least once in every semester to sensitise the students on the danger of engaging in unethical academic practices. Discussion during the orientation programmes can center on danger of copying without paraphrasing, undertaking coursework or assignments for others and downloading unauthorised online contents.

ⅱ. As a means of institutionalising ethical principles among the LIS students, the academic regulatory bodies in Nigeria (National Universities Commission, National Association of Library and Information Science Educators) could consider the development of a curriculum that will centre on ethical issues in academic activities. Issues bothering on the use of plagiarism detection software, formulation of Artificial Intelligence Policy and clearly state tolerance level among other conditions will have a far-reaching impact in helping LIS undergraduates to develop a high level of adherence to appropriate behaviour on issues like plagiarism, copyright infringements, cheating and software theft.

## 7. Practical Implication and Future Direction

The study has practical implications for universities, LIS educators, curriculum developers, and academic regulatory bodies due to its emphasis on the need to strengthen academic integrity education. As a means of strengthening academic integrity, every university can formulate institutional policies that will clearly accommodate efforts on plagiarism awareness initiatives, academic writing training and the integration of information ethics into LIS education. Future researchers may consider comparative studies involving other academic disciplines as well as inclusion of other geopolitical regions of Nigeria not covered by this study to facilitate generalizability of the findings.

## Statements and Declarations

**Author Contributions:** Saheed Abiola Hamzat: Conceptualization, methodology, data collection, and analysis. Airen E. Adetimirin: Conceptualization, methodology, data collection, and analysis. Priscilla Ayooluwa Jacob: Conceptualization and data collection. Olawale Oyewole: Conceptualization, methodology, data collection, and analysis. Ayodele John Alonge: Conceptualization and data collection. All authors have read and approved the final manuscript.

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