

# Enhancing Examination Integrity: Comparing Intelligent Surveillance Systems versus Traditional Methods in Ogun State Universities

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## Abstract

*The burgeoning issue of examination malpractice in Nigerian universities has prompted the investigation into more effective surveillance solutions. This study addressed this persistent challenge by comparing the efficacy of Intelligent Surveillance Systems (ISS) with traditional surveillance method of curbing examination malpractices. Utilizing mixed research design (descriptive and experimental). Using a sample of 394 lecturers obtained from seven selected public and private universities in Ogun State, Nigeria the researcher carried out a survey to determine respondents' perception on the use of ISS relative to traditional approach for controlling examination malpractices. Quantitative analysis (t-test and standard deviation) of data collected through a structured questionnaire, indicated that ISS significantly outperforms traditional methods in both detecting and controlling examination malpractices, as highlighted by statistical measures such as t-values and standard deviations values obtained. These findings suggest that ISS can play a crucial role in enhancing the integrity of examinations. The study recommends the adoption of ISS in universities in Ogun and other Nigerian states with similar challenges.*

**Keywords:** *Examination malpractice, Intelligent Surveillance Systems (ISS), Traditional surveillance methods, Nigerian Universities, Integrity of examinations.*

## 1. Introduction

Examination malpractice, defined as deliberate wrongdoing to gain an unfair advantage in examinations (Wilayat, 2019), has become a menace affecting the quality and integrity of education in Nigeria. Despite efforts to curb this unethical practice, it continues to proliferate across all levels of education, thereby undermining the integrity of examination bodies and devaluing associated exam results. Examination malpractice has evolved into a complex phenomenon involving various stakeholders: students, parents, educators, and policymakers (Fasasi, 2016; Akinrefon, Ikpah, Bamigbala & Adeniyi, 2016). This unethical act not only compromises the standard of education but also poses a threat to the nation's educational system by eroding core values and fostering a culture of mediocrity (Amadi & Opuiyo, 2018; Fasasi, 2016). Factors such as declining societal values, psychological issues, economic challenges, and inadequate teaching/learning environments had contributed to the prevalence of examination malpractice (Anderman & Murdock, 2017; Hughes & McCabe, 2016; McCabe & Trevino, 2017). Traditional methods of examination

supervision, involving invigilators and subjective devices, have been ineffective in curbing malpractice, leading to a growing interest in technological solutions to monitor and control examination malpractice (Hussein, Al-Ahmad, El-Salhi, Alshdaifat & Al-Hami, 2022). Recent advancements in Intelligent Surveillance Systems (ISS) offer promising solutions for detecting and analyzing abnormal behaviors during examinations. ISS relies on computer vision, pattern recognition, and artificial intelligence technologies to identify suspicious activities in real-time, thereby complementing or replacing traditional surveillance methods (Zablocki et al., 2014; Hussein et al., 2022).

Despite numerous studies on ISS and traditional approaches for examination malpractice detection and control, there remains a dearth of empirical comparative analysis using standard metrics in literature. This study therefore conducted a comparative analysis of ISS and traditional methods to determine their efficiency and effectiveness in detecting and controlling examination malpractice. This study provides insights that can influence decision makers at educational institutions to invest in and implement surveillance systems for enhanced examinations integrity.

## 2. Related Works

Nurudeen et al. (2022) explored the impact of smartphones on examination malpractice in Nigerian tertiary institutions, focusing on the rise of electronic device cheating. Adopting content analysis, they found that the widespread availability of smartphones has facilitated the prevalence of electronic device cheating among students. Additionally, the study proposed an Intelligent Surveillance System framework for examination monitoring in Nigerian universities. However, the study did not implement the proposed framework, leaving its effectiveness untested as a limitation.

Dajwan et al. (2021) investigated the causes of examination malpractices in Nigerian educational institutions and their implications for national productivity and the economy. Utilizing a structured questionnaire titled "Examination Malpractices: A Threat to Educational Reforms in Tertiary Institutions in Nigeria (EMATERTIN)," the study achieved a reliability coefficient of 0.84 from a trial test with 150 respondents. Data analysis employed simple percentage scores, revealing a need to prioritize practical performance over paper qualifications and to avoid politicizing education. While the study provided insights into the issue, it did not explore solutions like Intelligent Surveillance Systems, leaving a gap in examination monitoring methods.

Damare & Kawugana (2021) explored the impact of examination malpractice on the quality of graduates in tertiary institutions in Bauchi State using a mixed-methods approach. Data were collected through questionnaires and interviews, and analyzed using STATA. The study identified a need to instill good moral values in youth and counsel parents against aiding exam cheating. However, the study did not delve into advanced monitoring solutions like Intelligent Surveillance Systems, indicating a potential gap in examination oversight methods.

Agwi et al. (2021) assessed the effectiveness of video surveillance systems in monitoring examinations in Nigerian tertiary institutions. They surveyed lecturers and ICT personnel familiar with exam invigilation and surveillance. Using online questionnaires distributed to 200 participants, data were analyzed with Microsoft Excel and ANOVA. Results indicated CCTV systems are increasingly relevant but conventional use is ineffective. Automated CCTV systems

showed significantly better effectiveness. The study was limited as it fail to compare it to traditional method to determine the efficiency and effectiveness in controlling exam malpractice.

Agboluaje (2021) examined the effectiveness of CCTV in reducing examination malpractice during the Unified Tertiary Matriculation Examination (UTME). Employing both primary and secondary data collection methods, the study found CCTV surveillance reduced candidates' willingness to cheat. Additionally, CCTV was deemed more effective than human invigilation in identifying cheaters. UTME supervisors viewed CCTV positively in reducing malpractice. However, the study focused on returning students, not prospective UTME candidates, limiting its scope. Overall, CCTV significantly curbed exam malpractice in UTME. However, the study did not compare it to traditional method to evaluate the most effective in controlling examination malpractice.

Ossai et al. (2020) developed and validated the Tertiary Examination Behavior Inventory (TEBI) to identify students with tendencies towards academic dishonesty. Initially comprising 50 items, the inventory was refined to 35 through pilot testing with test-retest reliability and factor analysis. Data from 1000 students across Nigeria's six geo-political zones were used for validation, and 3500 students for standardization. The TEBI demonstrated strong psychometric properties, with an acceptable Cronbach Alpha of .7.8 and 13 factors explaining 62.73% variance. TEBI's national 'norms' indicated reliability and validity, focusing on returning students. The study was limited to validation of students tendencies toward academic dishonesty.

Situma and Wasike (2020) investigated the types, causes, and implications of examination malpractices in Kenyan higher education institutions. Utilizing a sample of 295 respondents, including students, examination administrators, and department chairpersons from five universities, data were collected via interviews and questionnaires. The study identified exam leakage, collusion, unauthorized writings, copying, and impersonation as prevalent malpractices. Causes included poor exam preparation, lack of integrity, financial gain, and sexual favors. Implications encompassed undeserved degrees and compromised service quality. The study was limited in scope to the causes and implications of examination malpractice in Kenyan higher institutions.

Nganchi & Charlotte (2020) explored the impact of intimidation on students' futures and proposed solutions to address examination malpractice. Analyzing data from 120 respondents using simple percentage counts, they found that impersonation, bribery, and intimidation negatively affect students' futures. The study revealed a relationship between cheating, impersonation, and exam malpractices, emphasizing their detrimental effects on students' prospects. The study fails to adopt the intelligence system nor compare it to the traditional method to determine the most efficient and effective in curb exam malpractice.

The literature review explored the Intelligent Surveillance System (ISS) for exam monitoring in Nigerian universities, discussing examination malpractice, its causes, forms, effects, and ISS operation. Theoretical frameworks like the Theory of Planned Behaviour and Social Learning Theory were applied. A gap identified was the lack of comparative studies between ISS and traditional invigilation methods using standard metrics. While some institutions use CCTV successfully, others rely on conventional human invigilation. The study aims to address this gap by evaluating the efficiency of both methods.

### 3. Methodology

This section outlines the research methodology and procedures for answering research questions and testing hypotheses. It covers key aspects including research design, population, sampling techniques, research instrument validation, reliability, and data collection and analysis methods.

### 3.1 Research Design

A descriptive survey design was chosen for this study to gather responses for research questions and test hypotheses efficiently. This design facilitated data collection through a questionnaire in a short time.

### 3.2 Population of the Study

The study included 2,624 lecturers from seven selected universities in Ogun State, Nigeria. These public and private universities are listed in Table 1.

**Table 1.** Distribution of the population (Establishment Offices of each University, 2023)

S/N	UNIVERSITIES NAME	POPULATION
1.	Tai Solarin University of Education, Ijagun	263
2.	Olabisi Onabanjo University, Ago-Iwoye	628
3.	Federal University of Agriculture, Abeokuta	658
4.	Babcock University, Ileshan-Remo	507
5.	Bell University of Technology, Otta	176
6.	Chrisland University, Abeokuta	203
7.	Covenant University Ota.	189
	<b>Total</b>	2,624

### 3.3 Sample and Sampling Techniques

The study's sample comprised 394 lecturers from seven universities in Ogun State: Tai Solarin University of Education, Olabisi Onabanjo University, Federal University of Agriculture, Babcock University, Bells University of Technology, Chrisland University, and Covenant University. Sample selection employed random stratified and proportionate sampling techniques. Stratified sampling was chosen for its ability to represent diverse subgroups effectively, ensuring gender balance. Proportionate sampling allocated 15% of lecturers from each university. The distribution of the sample across universities is detailed in table 2.

Table 2. Distribution of the sample size (Source: Field Survey, 2023)

S/N	UNIVERSITIES NAME	POPULATION	SAMPLE SIZE (15%)
1.	Tai Solarin University of Education, Ijagun	263	40
2.	Olabisi Onabanjo University, Ago- Iwoye	628	94
3.	Federal University of Agriculture, Abeokuta	658	100
4.	Babcock University, Ileshan-Remo	507	76
5.	Bell University of Technology, Otta	176	26
6.	Chrisland University, Abeokuta	203	30
7.	Covenant University Ota.	189	28
	<b>Total</b>	<b>2,624</b>	<b>394</b>

### 3.4 Research Instruments

A self-developed questionnaire, titled 'Intelligent Surveillance System, Traditional Approaches and Examination Malpractice Questionnaire (ISSTAEMQ),' was used. The questionnaire was structured into two sections. Section A contained six items focusing on respondents' demographic characteristics is gender, highest academic qualification, status, tribe, marital status, length of service  
 Section B included items on the prevalence and factors of examination malpractice among university students, its effects on the education system, and the effectiveness of the Intelligent Surveillance System (ISS), traditional approaches, and their combination in detecting and controlling malpractice

### 3.5 Validity of Research Instruments

The research instrument underwent both content and face validity assessments. Content validity ensured the instrument covered all research objectives and questions comprehensively. Face validity is assessed if the instrument appears to measure its intended constructs on the surface. For relevance and appropriateness, the instrument was reviewed by experts from the Department of Computer Science, Tai Solarin University of Education. It was also checked for grammatical

structure by the research supervisor. After necessary revisions, the final instrument was subjected to reliability

### 3.6 Reliability of the Research Instruments

The ISSTAEMQ instrument's reliability was assessed through a pre-test with 15 lecturers, not in the study sample. Data from the pre-test were analyzed using Cronbach's alpha, yielding a reliability coefficient of 0.93. This high coefficient indicates that the instrument effectively collects the required data for the study.

### 3.7 Methods of Data Collection

Data were collected using a validated questionnaire as the primary method. A letter of introduction from the Head of the Department of Computer and Information Sciences was presented to selected universities to indicate researcher interest. Seven trained research assistants assisted in administering the questionnaires. Respondents were briefed about the study to ensure comprehension. The researcher trained assistants on questionnaire distribution and retrieval. Of the 394 questionnaires distributed, 386 were retrieved, resulting in a 98% retrieval rate used for data analysis.

### 3.8 Method of Data Analysis

Demographic data, including gender, academic qualification, and marital status, were presented using frequency counts, percentages, and pie charts. Mean and standard deviation were employed to answer research questions 1 and 2, providing average respondent responses. Hypotheses were tested using regression analysis at a 0.05 significance level.

## 4. Results and Discussion

This section presents the study's results, descriptive analyses of research questions, hypothesis testing, and discussion of findings. Demographic data were analyzed using frequency counts, percentages, and pie charts. Mean and standard deviation addressed research questions 1 and 2, while regression analysis tested hypotheses at a 0.05 significance level.

### 4.1 Demographic Characteristics of the Respondents

Table 3. Gender distribution of the respondent lecturers (Source: Field Survey, 2023)

GENDER	FREQUENCY	PERCENTAGE
Male	296	76.68
Female	98	23.32
Total	386	100

Table 3 shows that 296 respondents (76.68%) were male, and 23.32% were female. This indicates a higher proportion of male lecturers among the respondents.

Table 4. Highest qualifications distribution of the respondent lecturers (Field Survey, 2023)

HIGHEST QUALIFICATIONS	FREQUENCY	PERCENTAGE
B.Ed/B.Sc (Ed)	14	3.627
PGDE	7	1.813
M.Ed	102	26.42
PhD	263	68.13
Total	386	100

Table 4 above shows that 3.627% held B.Ed/B.Sc (Ed), 1.813% had PGDE, 26.42% had M.Ed, and 68.13% had PhDs, indicating a majority were PhD holders.

Table 5 Status distribution of the respondent lecturers (Source: Field Survey, 2023)

STATUS	FREQUENCY	PERCENTAGE
Graduate Assistants	21	5.440
Assistant Lecturer	102	26.42
Lecturer II	55	14.24
Lecturer I	99	25.65
Senior Lecturer	49	12.69
Associate Professor	38	9.844
Professor	22	5.700
Total	386	100

Table 5 shows that 5.44% were graduate assistants, 26.42% were assistant lecturers, 14.24% were lecturers II, 25.24% were lecturers I, 12.69% were senior lecturers, 9.844% were associate professors, and 5.7% were professors.

Table 6. Tribe distribution of the respondent lecturers (Source: Field Survey, 2023)

TRIBE	FREQUENCY	PERCENTAGE
Yoruba	337	87.31
Hausa	5	1.295
Igbo	41	10.62
Others	3	0.777
Total	386	100

Table 6 shows that 87.31% were Yoruba, 1.295% Hausa, 10.62% Igbo, and 0.777% belonged to other tribes not captured in the questionnaire.

Table 7. Marital status distribution of the respondent lecturers (Source: Field Survey, 2023)

MARITAL STATUS	FREQUENCY	PERCENTAGE
Single	29	7.512
Married	296	76.68
Divorced	49	12.69
Widow	12	3.109
Total	386	100

Table 7 shows that 7.512% were single, 76.68% married, 12.69% divorced, and 3.109% widowed.

Table 8. Length of service distribution of the respondent lecturers (Source: Field Survey, 2023)

Length of Service	Frequency	Percentage
0-5 years	14	3.627
6-10 years	45	11.65
11- 15years	113	29.27
16-20 years	189	48.96
21 and above	25	6.476
Total	386	100

Table 8 shows that 3.627% had 0-5 years of service, 11.65% had 6-10 years, 29.27% had 11-15 years, 48.96% had 16-20 years, and 6.467% had 21 years and above.

#### 4.2 Descriptive Analysis

Table 9. Level of examination malpractice in selected universities in Ogun State (Source: Field Survey, 2023)

FORMS OF EXAMINATION MALPRACTICE	MEAN	SD
Impersonation	3.37	.793
Leakage of questions	3.38	.981
Tampering with results.	2.51	1.224
Computer fraud to fraudulent practices by invigilators.	2.93	1.060
Collusion.	3.45	.687
Giraffing	3.60	.669
Inscription	3.50	.912
Irregular activities inside and outside the examination hall.	3.29	.950
Scientific malpractice/ the use of mobile phones during examinations.	2.78	.972
Bribery	3.09	.990

Intimidation/assault on examination officials	2.96	1.086
Use of coded sign languages by some candidates	3.38	.807
Exchanging of answer booklets for note comparison.	3.26	.924
Cluster Mean	3.19	

Table 9 shows that the cluster mean was 3.19. This exceeded the benchmark value of 2.60 by 0.59. This suggests that examination malpractice in selected Ogun State universities occurred but at a medium level.

Table 10. Factors fueling examination malpractice among university students in Ogun State (Source: Field Survey, 2023)

<b>FACTORS FUELING EXAMINATION MALPRACTICE</b>	<b>MEAN</b>	<b>SD</b>
Laziness to read by the study	3.07	1.152
Inadequate concern to students' welfare	3.08	1.057
Parental factor	3.31	.880
Peer attitude.	3.40	.878
Academic dishonesty	3.44	.916
Belong to fraternities	3.39	.894
Societal value system (too much emphasis on paper qualification)	3.03	.968
Inadequate teaching/learning environment or facilities	3.07	.986
Fear of failure	3.01	1.060
Desire of parents to have their children in choice professions	3.23	.894
Ill-equipped library facilities	3.22	.866
Dubious admission policy	3.29	1.016
Cluster Mean	3.21	

Table 10 reveals that the cluster mean was 3.21, surpassing the benchmark of 2.50 by 0.71 . This indicates that the listed factors significantly contributed to examination malpractice among university students in Ogun State.

**Test of Hypothesis**

**H<sub>01</sub>:** Adoption of an Intelligent Surveillance System over the traditional approach for examination invigilation offers no significantly better examination invigilation control

**Table 11: Adoption of Intelligent Surveillance System over traditional approach for examination invigilation** (Source: Field Survey, 2023)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	63.691	5.899		10.796	.000
	Traditional approach	.235	.120	.098	1.962	.040
	Intelligent Surveillance System	.361	.042	.389	8.681	.000
Dependent Variable: Examination control						

Table 11 shows that both the Intelligent Surveillance System ( $\beta = .389$ ,  $t = 8.68$ ,  $P < .05$ ) and Traditional approach ( $\beta = .098$ ,  $t = 1.96$ ,  $P < .05$ ) significantly influence examination control, with p-values below 0.05. However, since the standardised coefficients beta value of .389 for the Intelligent Surveillance System is higher than .098 for the Traditional approach, the null hypothesis is therefore rejected in favour of the alternative. This implies that adoption of an Intelligent Surveillance System over the Traditional Approach offers significantly better examination invigilation control

**Ho<sub>2</sub>:** There is no significant difference in the use of intelligent surveillance system (ISS) and traditional approaches (TA) for the control of examination malpractices.

Table 12: Significant difference in the use of intelligent surveillance system (ISS) and traditional approaches (TA) for the control of examination malpractices

Variables	Mean	SD	T	P	Decision
Intelligent surveillance system (ISS)	40.6991	4.31543	3.37	0.01	Reject Ho <sub>2</sub>
Traditional approaches (TA)	42.3352	3.82564			

Source: Field Survey, 2024

**Dependent variable:** Control of examination malpractices

The analysis presented in Table 12 reveals a significant difference between the intelligent surveillance system (ISS) and traditional approaches (TA) for controlling examination malpractices, as indicated by a t-value of 3.37 and a p-value of 0.01 ( $p < 0.05$ ). This result leads to the rejection of the null hypothesis, affirming the effectiveness of ISS over TA. Specifically, ISS shows a higher standard deviation of 4.31543 compared to 3.82564 for TA, suggesting greater efficacy of ISS in managing examination malpractices in Ogun state Universities in Nigeria.

**Ho<sub>3</sub>:** There is no significant difference in the efficiency of intelligent surveillance systems (ISS) and traditional approaches (TA) using standard metrics.

**Table 13: Significant difference in the efficiency of intelligent surveillance system (ISS) and traditional approaches (TA) using standard metrics** Adoption of an Intelligent Surveillance System over the traditional approach for examination invigilation offers no significant positive benefits (Source: Field Survey, 2024)

Variables	Mean	SD	T	P	Decision
Efficiency of intelligent surveillance system (ISS)	47.5133	4.78673	2.32	0.008	Reject Ho <sub>3</sub>
Traditional approaches (TA)	47.3352	4.45628			

**Dependent variable:** Control of examination malpractices.

Table 13 indicates a t-value of 2.32 with a degree of freedom of 384 and a p-value of 0.008, falling below the 0.05 threshold. This significant result leads to the rejection of the null hypothesis, confirming a marked difference in efficiency between the intelligent surveillance system (ISS) and traditional approaches (TA).

In this study that compared the performance of Intelligent Surveillance System (ISS) with that traditional approaches for monitoring examinations in Ogun state universities in Nigeria revealed that ISS outperformed TA. Statistical analysis highlights a significant difference in effectiveness, with ISS demonstrating a higher standard deviation in controlling examination malpractices than traditional methods (ISS: 4.31543, TA: 3.82564), as reflected by a t-value of 3.37 and a p-value of 0.01. This outcome confirmed that adoption of ISS in mitigating examination malpractice incidences will better enhance the integrity of conducted examinations in Ogun state universities than how Traditional Approach will do.

This study further revealed the various forms of examination malpractices to look out for which include impersonation, exam question leakages, tampering with results, compromised invigilators, collusion, giraffing, use of inscriptions, bribery, abuse of electronic gadgets such as mobile phones, intimidating and assaulting the invigilators exchange of solutions, use of coded signs among others. Apparently, ISS proves significant in effectively detecting all but one form of examination malpractice - tampering with results, which does not occur inside they examination hall during examination invigilation. This ability of ISS to effectively detect all the 12 listed inside-the-hall forms of examination related malpractices represent 100% efficiency for inside-the-hall examination monitoring and a 92.4% advantage over TA for both inside and outside-the-hall examination monitoring.

In addition, studying the footage of the ISS used for examination invigilation could also help in generating indisputable evidence against a compromised result submitted. Furthermore, this study reveals ISS's increased robust performance over traditional surveillance methods, with a t-value of 2.32 and a p-value of 0.008 which is much less than the critical value of 0.05. The results suggest that ISS being more effective that the TA in monitoring conduct of examination advocates for a transition towards technology-enhanced surveillance systems within educational policies and practices. By leveraging the advanced capabilities of ISS, institutions can significantly improve the fairness and integrity of examinations, thus fostering an academic culture that values and upholds ethical standards.

## 5. Conclusion

The study investigated the effectiveness of an Intelligent Surveillance System (ISS) when compared with traditional surveillance methods in monitoring examination practices in Ogun state universities in Nigeria. The study, conducted across seven purposively selected universities in Ogun State, involved a sample of 394 lecturers. The study compared performance ISS with TA in controlling and monitoring inside-the-hall examination malpractices. Findings from the study indicated that ISS significantly outperformed traditional approaches in both detecting and controlling examination malpractices. This was evidenced by statistical analyses which highlighted significant differences in effectiveness and efficiency between the two methods, supporting the superiority of ISS over TA in enhancing the integrity of examinations. This study's findings underscore the advantages of adopting Intelligent Surveillance Systems over traditional methods for examination supervision in universities in Ogun state and by extension, in entire Nigerian universities. ISS demonstrated higher effectiveness and efficiency in controlling examination malpractices, which suggests that educational institutions should consider transitioning to these advanced surveillance technologies. The implementation of ISS is recommended as a strategic measure to enhance the fairness and integrity of examinations. This transition not only supports the upholding of academic standards but also contributes to a culture of honesty and diligence within the academic community. Further adoption and integration of ISS across educational institutions are crucial for sustaining educational reforms and ensuring the credibility of academic evaluations. This study strongly advocates the adoption of Intelligent Surveillance Systems (ISS) in Ogun state universities and the entire Nigerian nation for effective monitoring and enhancing examination integrity. To further combat malpractice, universities should implement strict penalties, moderate exams rigorously, install ISS systems such as Close Circuit Television, CCTV in all examination halls to enhance examination integrity. Additionally, it is recommended that institutions enforce stricter supervision and discipline through targeted counseling initiatives. The rigorous implementation of the Examination Malpractice Act of 1999 is imperative, as are continued efforts in assessment, moral counseling, and public enlightenment to uphold academic integrity. A strict ban on mobile phone usage during examinations should be enforced without exceptions.

It is advised that other examination bodies and institutions other than Ogun state universities, such as colleges of education, polytechnics and pre-tertiary institutions adopt ISS for monitoring examination invigilation. This will ascertain that the performance of the candidates are actually the true reflection of their abilities and thus prevent misleading the public and would-be employers and decision makers. The study also suggests that counseling and rigorous interviews should be integral to admissions and employment processes to ensure the selection of candidates who uphold ethical standards. Finally, amending the Examination Malpractice Act of 1999 to incorporate the punitive measures from Decree 20 of 1984 will strengthen the legal framework against examination malpractice.

The study enriches knowledge by revealing forms of examination malpractice, discouraging parental support for malpractice, aiding policy formulation in favour of examination integrity, and assisting exam bodies with suggestions to improve the sanctity of examinations they conduct. Future research should expand the scope beyond Ogun State to other Nigerian regions. Besides, as online exams come to be commonplace lately, future studies should examine how such examinations can be free from malpractices and cheating given the remote and online nature of such examination settings.

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