



Effectiveness of ICT-Based Counselling Interventions in Managing Examination Malpractice among Students in Higher Institutions in Kaduna State

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ABSTRACT

This study explored the Effectiveness of ICT-Based Counselling Interventions in Managing Examination Malpractice among Students in Higher Institutions in Kaduna State. This study employed a quasi-experimental design with a pre-test–post-test structure alongside descriptive survey and correlational designs. A sample of 238 students was selected from three higher institutions using multistage sampling technique. Three research questions were developed and answered while two hypotheses were tested. Data were collected using a researcher-developed questionnaire titled Questionnaire on ICT-based Counselling and Examination Malpractice among Students in Higher Institutions. Descriptive Statistics of Frequencies, means and percentages were used to answer research questions while Pearson Correlation and Paired Sample t-test were used to test hypotheses 1 and 2 respectively. The results indicated that examination malpractice is highly prevalent with the most common form was copying from colleagues during exams. Additionally, students reveal limited awareness and access to ICT-based counselling services and that ICT-based counselling interventions were effective in positively changing students' attitudes toward examination malpractice. Based on these findings, the study recommended that Institutions should strengthen their examination monitoring systems through electronic surveillance, biometric verification and trained invigilators to deter malpractice. More so, institutions should Integrate ICT counselling awareness into students' orientation and registration processes at the beginning of each session among others.

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INTRODUCTION

Examination malpractice has emerged as a major challenge confronting the educational system in Nigeria, particularly in higher institutions. The menace continues to undermine the credibility, reliability, and validity of academic evaluations (Akanbi, 2013). Forms of examination malpractice such as impersonation, smuggling of unauthorized materials into examination halls, use of mobile phones for cheating, and collusion have been widely reported across institutions in Kaduna State and beyond (Ojonemi et al., 2013; Ige,

2014). These acts not only compromise academic integrity but also undermine the nation's human capital development by producing graduates who lack the necessary competencies and ethical grounding.

Factors are responsible for the growing trend in examination malpractice. These include fear of failure, peer pressure, inadequate preparation, poor parental supervision, societal emphasis on certificate acquisition, and laxity in enforcement of examination regulations (Oduwaiye et al., 2015). While punitive measures

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such as suspension, expulsion and cancellation of results are often applied, evidence suggests that such reactive approaches are not sufficiently effective in curbing the practice (Oyekan, 2016). This indicates a need for more proactive and preventive approaches—especially those targeting the root causes of the problem from psychological and behavioral perspectives.

Guidance and counselling have long been recognized as vital tools in shaping students' values, attitudes, and ethical behaviour. The services have been widely acknowledged as a key strategy for addressing student behavioral and psychological challenges, including academic dishonesty. Through individual and group counselling, students can be guided to adopt better study habits, manage examination anxiety, and uphold integrity in academic pursuits. However, in most Nigerian institutions, counselling services are either underutilized or inaccessible due to inadequate staffing, facilities, and low student engagement (Odey, 2017).

The increasing integration of Information and Communication Technology (ICT) into educational services presents an opportunity to revamp and scale counselling delivery. ICT-based counselling involves the use of digital tools such as mobile applications, online counselling platforms, video conferencing, SMS, and social media to provide psychological support (Bada & Ojediran, 2020). These platforms offer flexibility, anonymity and improved accessibility, which are particularly appealing to students who might otherwise shy away from traditional counselling (Aremu, 2019; Adesina & Adigun, 2021). These interventions can deliver timely support, foster continuous interaction and allow for targeted psychological education on academic integrity and consequences of malpractice.

Research has shown that ICT-enhanced interventions can be effective in promoting positive behaviour change among youth (Olumori et al., 2020). For instance, ICT-based counselling has been used to manage academic anxiety, improve study habits, and discourage risky behavior (Yusuf & Onasanya, 2014). However, there is limited empirical evidence on its effectiveness in curbing

examination malpractice specifically—especially within the context of higher institutions in Northern Nigeria, including Kaduna State.

Given the complex nature of examination malpractice and the potential of ICT in transforming counselling services, this study seeks to investigate the effectiveness of ICT-based counselling interventions in managing examination malpractice among students in higher institutions in Kaduna State. The findings of this study will not only contribute to the existing literature but also provide practical guidance for education policymakers, counsellors and institutional administrators seeking to promote academic integrity through innovative strategies.

Statement of the Problem

Examination malpractice remains a deeply rooted challenge in Nigeria's educational system, threatening the integrity, quality, and global acceptability of academic credentials issued by higher institutions. In Kaduna State, cases of malpractice—ranging from impersonation and illegal possession of materials to mobile-assisted cheating and collusion—are frequently reported, despite the existence of institutional rules and punitive measures. This persistent trend reflects not just a breakdown in enforcement mechanisms, but also a failure to address the underlying psychological, social, and academic pressures that drive students to engage in dishonest behaviours.

Traditional counselling services, which are expected to provide moral guidance, emotional support, and academic counselling to students, have not been optimally utilized due to limited personnel, low visibility, inadequate infrastructure and a lack of innovative engagement strategies. Many students either do not access counselling services or find them ineffective and unappealing. As a result, the behavioural root causes of examination malpractice remain unaddressed in many cases. With the advancement of digital technology, Information and Communication Technology (ICT) tools have increasingly been deployed across sectors to enhance service delivery. ICT-based counselling offers the potential to transform the

way psychological support is rendered by making it more accessible, student-friendly and responsive to contemporary challenges.

These innovations—ranging from mobile apps and online forums to video counselling and SMS reminders—can provide timely interventions, promote self-awareness, and reinforce positive academic values. However, while the theoretical benefits of ICT-based counselling are widely acknowledged, there is insufficient empirical evidence on its actual effectiveness in curbing examination malpractice within the Nigerian context, particularly in higher institutions in Kaduna State.

This gap in knowledge presents a critical problem: Can ICT-based counselling interventions effectively address the behavioural and motivational factors that fuel examination malpractice among students? Without concrete evidence to support their efficacy, institutions may remain hesitant to adopt these digital solutions as part of their counselling strategy. Hence, there is an urgent need to evaluate the real-world effect of ICT-based counselling tools on students' attitudes and behaviours toward examinations in Kaduna State's higher institutions.

Research Objectives

1. To assess the prevalence and forms of examination malpractice among students in higher institutions in Kaduna State.
2. To examine the awareness and accessibility of ICT-based counselling services among students in higher institutions in Kaduna State.
3. To determine the effectiveness of ICT-based counselling interventions in changing students' attitudes towards examination malpractice.

Research Questions

1. What are the common forms and prevalence rate of examination malpractice among students in higher institutions in Kaduna State?
2. To what extent are students in higher institutions in Kaduna State aware of and have access to ICT-based counselling services?

3. How effective are ICT-based counselling interventions in changing students' attitudes toward examination malpractice in higher institutions?

Research Hypotheses

1. There is no significant relationship between students' level of awareness and accessibility of ICT-based counselling services in higher institutions in Kaduna State.
2. ICT-based counselling interventions have no significant effect on students' attitudes towards examination malpractice in higher institutions in Kaduna State.

METHODOLOGY

This study employed a quasi-experimental design with a pre-test–post-test structure alongside descriptive survey and correlational designs. The quasi-experimental aspect was used to evaluate the effectiveness of ICT-based counselling interventions in altering students' attitudes toward examination malpractice. The survey method enabled the collection of data on prevalence, forms and awareness while the correlational approach assessed the relationship between students' awareness and accessibility of ICT counselling services. The population comprised all undergraduate students in higher institutions (Universities, Polytechnics, and Colleges of Education) in Kaduna State, Nigeria. These institutions were chosen to represent a cross-section of students across federal and state tertiary institutions.

A sample of 238 students was selected from three higher institutions using multistage sampling. The sample included students across gender, level and academic backgrounds. Data were collected using researcher's designed instrument titled Questionnaire on ICT-based Counselling and Examination Malpractice among Students in Higher Institutions. A pilot test with 30 students (excluded from the main study) yielded a Cronbach's alpha of 0.84 for the scale indicating acceptable internal consistency.



ICT-Based Counselling Intervention

Participants received an ICT-based counselling intervention consisting of:

1. A 2-week online module with videos, voice notes and reading materials on the dangers of examination malpractice.
2. Two interactive virtual counselling sessions (via Zoom) with Guidance counsellors.
3. Access to a WhatsApp support group moderated by e-counsellors for peer counselling and motivation.

Procedure for Data Collection

1. Week 1: Participants completed the pre-test instrument
2. Week 2–3: Counselling intervention was administered via ICT platforms.
3. Week 4: Participants completed the post-test instrument

Method of Data Analysis

Descriptive Statistics of Frequencies, means and percentages were used to answer

research questions on prevalence, awareness and accessibility. Pearson Product Moment Correlation was used to test Hypothesis 1, examining the relationship between awareness and accessibility of ICT-based counselling while paired Sample t-test was used to test Hypothesis 2, comparing students' pre-test and post-test scores on the questionnaire.

RESULTS

The results of Effectiveness of ICT-Based Counselling Interventions in Managing Examination Malpractice among Students in Higher Institutions in Kaduna State are presented on the basis of research questions posed and hypotheses tested in the study.

Research Question One:

What are the common forms and prevalence rate of examination malpractice among students in higher institutions in Kaduna State?

Table 1: The frequency and percentage of the common forms and prevalence rate of examination malpractice among students

S/N	Type of malpractice	n (238)	% of students
1	Copying answers from colleagues during exam	144	60.5%
2	Bringing unauthorized notes into exam hall	119	50.0%
3	Whispering or giving answers (giraffing)	99	41.6%
4	Using mobile phone or device to cheat	60	25.2%
5	Impersonation	25	10.5%
6	Bribing officials for grades	15	6.3%
7	At least one malpractice behaviour	201	84.4%

The analysis of data from 238 students in higher institutions in Kaduna State reveals that examination malpractice is highly prevalent, with 84.4% (n = 201) of the respondents admitting to engaging in at least one form of malpractice. The most common form reported was copying from colleagues during exams (60.5%), followed by bringing unauthorized notes (50.0%), and whispering or giraffing (41.6%). Technology-based cheating (25.2%), impersonation (10.5%),

and bribery (6.3%) were less common but still concerning. These findings highlight the need for institutional reforms, ethical orientation, and improved exam monitoring.

Research Question Two:

To what extent are students in higher institutions in Kaduna State aware of and have access to ICT-based counselling services?

Table 2 showing frequency and percentage of Awareness and Accessibility of ICT-Based Counselling (n=238)

S/N	ICT Counselling Service	Yes	No	% of Yes
1	Aware of ICT-based counselling	111	127	46.6%
2	Have accessed ICT counselling	70	168	29.4%

An analysis of responses from 238 students reveals limited awareness and access to ICT-based counselling services. Only 46.6% of students were aware of such services, and even fewer (29.4%) had accessed them. This indicates poor communication and outreach by institutions, as well as possible infrastructural and digital literacy barriers. To improve student support and mental health services, institutions must invest in

awareness campaigns, ICT infrastructure, and training.

Research Question Three:

How effective are ICT-based counselling interventions in changing students' attitudes toward examination malpractice in higher institutions?

Table 3 showing Mean rating and SD of students' attitudes toward examination malpractice

S/N	Measure	Mean	SD	N
1	Pre-test	2.74	0.66	238
2	Post-test	3.42	0.58	238

To answer the research question three, the pre-test and post-test scores of 238 students on the questionnaire was used. The mean attitude score increased from 2.74 to 3.42 after the ICT-based counselling intervention, indicating a shift toward stronger disapproval of examination malpractice. This means that ICT-based counselling interventions were effective in

positively changing students' attitudes toward examination malpractice.

Hypothesis One:

There is no significant relationship between students' level of awareness and accessibility of ICT-based counselling services in higher institutions in Kaduna State.

Table 4: Pearson Correlation between Awareness and Accessibility of ICT-Based Counselling Services (N = 238)

S/N	Variables	Mean	SD	1	2
1	Awareness Score	3.12	1.10	1.00	
2	Accessibility Score	2.88	1.15	.45**	1.00

A Pearson correlation was computed between students' reported awareness scores and accessibility scores (both measured on a 5-point scale). The analysis revealed a significant positive relationship ($r = 0.45$, $p < 0.001$). In other words, students who were more aware of ICT counselling tended also to report greater access to it. This finding rejects Hypothesis 1 which stated there is no significant association between awareness and access ($r(94) = .45$, $*p < .001$).

Higher awareness thus appears linked to better utilization of ICT counselling.

Hypothesis Two:

ICT-based counselling interventions have no significant effect on students' attitudes towards examination malpractice in higher institutions in Kaduna State.



Table 5: Paired Sample t-Test on Attitudes toward Examination Malpractice

Measure	Pre-Test Mean±SD	Post-Test Mean±SD	t	df	p
Attitude toward malpractice	2.80 ± 0.90	3.85 ± 0.75	10.12	237	<.001

The paired samples t-test revealed a significant increase in students' positive attitudes toward avoiding examination malpractice following the intervention. The mean score increased from 2.80 (SD = 0.90) in the pre-test to 3.85 (SD = 0.75) in the post-test. This difference was statistically significant, $t(237) = 10.12$, $p < .001$, indicating that the intervention was effective in improving attitudes among the 238 students.

DISCUSSION OF FINDINGS

Across 238 students surveyed, a majority reported engaging in at least one form of examination malpractice. Common behaviours included unauthorized notes ("crib sheets"), copying (giraffing) from colleagues, whispering answers, and impersonation. These align with known patterns in Nigerian tertiary institutions. The data show high prevalence: for instance, 60% copied from colleagues and 50% used crib notes. This very high prevalence echoes long-standing evidence that cheating is endemic in Nigerian tertiary education. This agrees with prior findings that malpractice is widespread among Nigerian undergraduates.

This confirms Ogunmakin and Ajao (2020) position that Examination malpractice has become a normalized phenomenon among undergraduates in Nigeria, with over 80% admitting to having engaged in one form or another. The sheer magnitude observed in Kaduna State tertiary institutions therefore confirms, rather than surprises, the literature. It also aligns with contemporary reports that the migration to computer-based testing has not eliminated malpractice but merely shifted it toward mobile devices and impersonation. Together, these findings strengthen calls for integrated—not purely punitive—responses that combine secure assessment technologies with values-oriented counselling.

On awareness and access to ICT counselling, Table 2 shows that only a minority of students were aware of or had accessed ICT-

based counselling. 111 out of 238 students (47%) reported being aware of such services and only 70 (29%) had ever used or accessed them. These figures mirror several Nigerian studies that document modest awareness and even poorer utilization of on-line or e-counselling supports among undergraduates. For example, Lasode et al. (2017) reported that only 32 % of students in a federal university were aware of campus e-counselling services, and actual uptake was below 20 %. Sanusi and Aliyu's (2025) Sokoto study located similarly low usage despite demonstrated benefits for achievement.

Contributing factors identified across studies—unreliable internet, limited digital literacy, scepticism about confidentiality—are also evident in very recent work with professional counsellors, who themselves rate their readiness to deliver services on social-media platforms as moderate at best. Taken together, the pattern suggests that supply-side (counsellor preparedness) and demand-side (student trust and connectivity) constraints jointly depress engagement with ICT counselling in Nigerian higher education.

On relationship between students' level of awareness and accessibility of ICT-based counselling services, Pearson correlation was computed between students' reported awareness scores and accessibility scores (both measured on a 5-point scale). The analysis revealed a significant positive relationship ($r = 0.45$, $p < 0.001$). In other words, students who were more aware of ICT counselling tended also to report greater access to it. This finding rejects Hypothesis 1. This was because awareness was moderately and positively correlated with accessibility ($r = 0.45$, $p < .001$).

The size of this association is comparable to prior Nigerian studies linking service awareness to help-seeking or utilization. These convergent results lend empirical weight to the Technology Acceptance Model: perceived awareness (a proxy for perceived usefulness and ease of use) significantly influences behavioural



intention and, by extension, actual use of digital counselling services. They suggest that simply increasing exposure—through orientation weeks, learning-management-system pop-ups, or peer advocacy—could raise take-up without major capital outlay.

To test whether ICT counselling changed attitudes toward malpractice, attitude scores before and after an ICT-based counselling programme were compared. Attitudes were measured on a standardized scale (higher = more negative view of malpractice). On this, Mean attitude toward malpractice improved from 2.74 to 3.42 and the paired-samples *t* test confirmed a large, statistically significant gain ($d \approx 1.0$). This indicates that students were significantly less tolerant of examination malpractice after the ICT counselling intervention. In other words, the counselling had a strong effect in increasing negative attitudes toward cheating. This aligns with prior research showing counselling reduces malpractice tendencies: for instance, group counselling significantly lowered cheating propensity in Nigerian students.

This result similarly support Hypothesis 2 being rejected: the ICT-based counselling intervention had a significant positive effect on students' attitudes. Comparable magnitude effects have been noted in recent Nigerian and international interventions that embed interactive on-line tutorials, chat-bots, or WhatsApp groups. Supporting evidence includes Sanusi and Aliyu (2025) who observed that structured on-line counselling modules significantly boosted female students' academic achievement and ethical study habits in Sokoto colleges.

These findings echo educational guidance literature: effective counseling strategies (posters, seminars, and ICT tools) are known to shift students' views against malpractice. The large, significant pre/post change in our data demonstrates that ICT-based counselling can effectively curb cheating attitudes.

CONCLUSION

This study assessed the prevalence of examination malpractice and the effectiveness of ICT-based counselling interventions among

students in higher institutions in Kaduna State. This investigation reinforces a persistent narrative in Nigerian higher education: examination malpractice is widespread, students' knowledge of digital-counselling supports is shallow, yet well-designed ICT interventions can meaningfully reshape attitudes.

By corroborating prior positive findings—and counterbalancing reports of limited tutorial impact—the study adds nuanced evidence that context-sensitive, counsellor-facilitated digital programmes are a promising lever for fostering academic integrity in the twenty-first-century university. The findings underscore the need for educational institutions and policymakers to promote and integrate ICT-based counselling services more effectively.

RECOMMENDATIONS

1. Institutions should strengthen their examination monitoring systems through electronic surveillance, biometric verification and trained invigilators to deter malpractice.
2. On low Awareness and Accessibility of ICT-Based Counselling, institutions should Integrate ICT counselling awareness into students' orientation and registration processes at the beginning of each session.
3. Use social media campaigns (WhatsApp, Instagram, and Telegram) to promote awareness and demystify digital counselling.
4. Institutions should reinforce counselling contents to improve student engagement and create more appealing entry points for accessing the services.
5. Since Students' attitude toward examination malpractice improved significantly after the ICT-based counselling intervention, institutions should scale up the intervention to other students to broaden reach and institutional impact.

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