
**Technology Abuse and Unethical Practices as Predictors of Examination Misconduct
Among Undergraduate Students in South-South Zone Universities, Nigeria**

BY

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ABSTRACT

The main objective of this study was to examine Technology Abuse and Unethical Practices as Predictors of Examination Misconduct among Undergraduate Students in South-South Zone Universities, Nigeria. A descriptive research design of the correlational type was used and the study population comprised 28,216 year four science students in all the six federal universities in South-South of Nigeria. A proportion of 30% of the universities was randomly selected from the six universities, which gave a total of two universities. The selected universities were University of Calabar and University of Port Harcourt. Taro Yamen formula was used to determine the sample of the study, which gave a total of 400 students. Simple Random Sampling Technique was used to select the students from the two universities. Instrument for data collection was Questionnaire on Technology Use, Unethical Practices and Examination Misconduct (QTUPEM). Pearson Product Moment Correlation Coefficient and mean and standard deviation were used to answer the research questions while the null hypotheses were tested using simple regression with the associated ANOVA and t-test at 0.05 level of significance. The instrument was developed by the researcher and validated by three lecturers, two of them were from the Department of Educational Foundations, Guidance and Counselling and the Department of Educational Technology, University of Uyo, Nigeria. The instrument yielded a reliability coefficient of .81. The findings indicated that Technology Abuse and Unethical Practices are significant predictors of Examination Misconduct among Students in South-South Zone Universities, Nigeria. There is a significant difference in the technology abuse and unethical practices of male and female students. Based on the findings of the study, it was recommended among others that educators should establish a more positive ethical environment for students during examinations.

KEYWORDS: Technology abuse, Unethical Practices, Examination Misconduct, undergraduate students, South-South Zone Universities, Nigeria.

Introduction

Background Information

Acquisition of knowledge through sound education is unquestionably needed in the well being of any individual. It should be the desire of all. Udosen and Ekukinam (2011), forcefully argue to support this position as they attempt to indicate that the training which tertiary education students receive, rather disappointingly, has not been completely fulfilling, being that most of these students are poorly equipped on expected desirable skills and competences required for job creation and self employment. The situation becomes more critical when viewed on the back-drop of the current era of global competitiveness in education generally. The authors further observed that the obscure reality of the job market which seems to stress emphasis on paper qualification instead of skills acquisition has worsened the already worrisome situation. A further dimming factor is the all evident “man

know man” factor, which strongly plays out during recruitment exercises when even lesser skilled persons are selected for engagement in preference to better skilled personnel.

Whereas the National Quality on Education (2004, Section 6), in Udosen and Ekukinam (2011), stresses the need for the inculcation of the type of values and attitudes needed for the survival of the individual and particularly, the Nigerian Citizen, the obvious observations seem to reflect the opposite. The generally accepted fact is that the advancement in technology has truly affected every sector of our lives, both positively and negatively. Examination misconduct has long graduated from the normal ‘giraffing’ (twisting and over-stretching the neck to peep) at a neighbour’s work, to more advanced and sophisticated negative malpractice attitudes. Massive applications of Information Communication and Technology (ICT) have added new dimensions to the forms of examination misconduct. According to Nnechi (2006), the rapid growth of digital technologies and their integration in education have given many students new tools to facilitate cheating.

Information Communication Technology has invariably brought about a high level of examination misconduct as some students abuse the use of diverse technologies to gain undue advantage during examinations. According to Omonijo and Fadugba (2011), technology abuse is the habit of students engaging ICT devices to indulge in examination misconduct. Examination misconduct is seen as an illegal or unethical method of using someone else position in a grading system, or any act or omission that is perpetuated to put a candidate at an unmerited advantage over other students to influence the examiner in giving unmerited grades (Examination Misconduct Act, 2012).

Nnodun (2009), asserts that cheating with the aid of technological devices is an unethical practice which has greatly affected the fortunes of the educational system. Unethical practice is an unacceptable behavior contrary to norms, rules, morals and regulations. The institutions of higher learning which are supposed to be the citadels of learning and academic excellence are gradually losing their standard as a result of unethical practices observed in the system. This therefore implies that practices contrary to the ethics of a given institution are not acceptable (Fleet, 1991). Cheating in almost all educational institutions in Nigeria has taken a new dimension with the advent of technology. Gone are the days of examination malpractices like impersonation, disorderliness, conspiracy, forgery of results, and smuggling of answer scripts into examination halls among others. The modern student is bringing in class cheating into the 21st century with the likes of programmable calculators, personal data assistance (PDA), smart phones, two-way pagers, spy cameras attached to glasses, sophisticated programmed watches among others. These diverse technologies used for examination misconducts are multi-purpose, assessable, wide spread, attainable, affordable and empowering (Assam, 2009).

In another development, pocket organizers, hand-held computers, plagiarism, electronic writing pads, pen input devices, calculators with graphical display, calculators that make noise or talk, invisible ear piece, dubious websites to hack examination question papers have equally been associated with examination fraud in developing countries (Assam, 2009). A study carried out by Akpoo and Akpoo (2006), reported that in 2004/2005 academic session, many students of University of Agriculture, Markurdi, were caught sending text messages of answers to friends during examination. Agbatogun (2007) reported that 15 students of Moshhood Abiola Polytechnic, Abeokuta, between 2004 and 2006 were charged before the student’s disciplinary committee for examination misconduct. Agbatogun (2007), reported that student’s use programmable calculators that have infrared beaming capacity for

examination misconduct. The author added that Algorithm programmes, graphs and drawings are stored and executed through this device. A study carried out by Agbatogun (2007), reported the students' affairs records of Olabisi Onabanjo University, Agolwoye, Nigeria and Tai Solarin University of Education, Ijagun, Nigeria, which indicated that between 2005 and 2007, twelve students were caught with programmable calculators which contained stored information during examinations.

Harris (2006), opines that Personal Digital Assistance (PDA) can store a wealth of information including graphics, database, text and spread sheets that could prove useful to a cheating student. Sophisticated programmable calculators can also store an entire essay or outline summary of examination topics. The internet can be utilized to cut and paste information needed for a quiz or examination. Also, two-way pagers can be utilized to send and receive messages similar to the process of passing notes in class. The author added that an unethical student may decide to use any or all of these technological tools in an effort to cheat in exams, research papers or assignments.

Darwin (2007), carried out a study on E-cheating: Are Students misusing it? The author asserts that one U.S. Study found that forty-three percent of the students admitted to unethical behaviours like plagiarism where they download research papers as their own work, or cutting and pasting information from the internet and not citing the source of the material. Overall, the average students reported performing approximately ten (10) unethical actions during the semester. Underwood (2006), reported that a lot of students stitch Bluetooth devices on their clothes. Bluetooth devices help candidates who are inside the examination hall to stay connected with people or students who are outside the examination hall. Furthermore, MP3 devices are smuggled into the examination hall. With electronic organizer, one can put an entire revision note in a hand-held organizer. In addition, microscopic earphones are wireless network device that students insert into their ears. Also optical character recognition software makes use of printed text that can be quickly imputed into a processor for 'doctoring'. It makes perfect copies of assignments in such a manner that can hardly differentiate between the original and duplicate copy. These gadgets are widely used among students for cheating in examinations.

Different views exist as to which gender involves more in examination malpractice. A study carried out by Oyeyemi and Mustapha (2018), on 'Perception of Tertiary Institution Students Towards Mobile Assisted E-Cheating' reveals that 51% representing the male gender are more involved in e-cheating compared to the female gender represented with 49%. Also, Lebon and Levanon (1998), argued that more male engaged in examination malpractice than the female. This implies that the male gender has higher tendency for anti-social behavior than the female gender.

Omonijo and Fadugba (2011), asserted that female criminals are rare. Female folks according to the author have not evolved like males, due to their inactive nature. Oredein (2004), argued that there were more female involvement in examination malpractice than the male. The author added that girls find it easy to inscribe information on any part of their body like thighs, purses and palm than their male counterparts. In another development, Anugwom, Omonijo and Fadugba (2010), conclude that male students undertake science programme more than their female counterparts. Hence, this could be the main reason why the male are more involved in e-cheating than their female counterparts. The need for tertiary institutions to advocate for continued ethical education for students is paramount. In this digital age, educators need to establish a more positive ethical environment for students during

examinations. The technological tools available to students should not be abused so as to maintain academic integrity in a rapidly changing technological environment.

Theoretical Framework

This study is anchored on the Deontological Theory of Ethics by a German philosopher, Immanuel Kant (1774). The theory of deontology is an ethical theory that uses rules to distinguish right from wrong. Deontology believes that ethical actions follow universal moral laws, such as ‘Don’t lie, Don’t steal. The theory states that people should adhere to their obligations and duties when engaged in decision making because upholding one’s duty is what is considered ethically correct. The deontologist believes that morality is a matter of duty, stating that individuals have the moral duties to do things which are right to do and moral duties not to do things which are wrong to do.

This theory is relevant to this work because technological abuse and unethical practices are geared towards the individual’s view on the use of technologies as a duty and responsibility that should not be toyed with. However, when the right things are done as regards technology usage, the issue of abuse and misuse of technology will not arise.

Statement of the Problem

The value and functionality of any educational system lies in its ability to actualize the goals of education. Till date, examinations still remain the necessary tool for an objective assessment and evaluation of what learners have achieved after a period of schooling. Our youths are no longer studying their books because “miracles” are happening in their various examination halls. Examination misconduct has spontaneously dominated many of the Nigerian schools including private schools. Examination misconduct is among the serious problems and the worm that is plaguing our educational system nowadays. The Examination Misconduct Act (1999), explains examination misconduct as any act of omission or commission by a person who in anticipation of, before, during or after any examination fraudulently secures any unfair advantage for himself or any other person in such a manner that contravenes the rules and regulations to the extent of undermining the validity, reliability, authenticity of the examination and ultimately the integrity of the certificate issued.

Examination misconduct is any irregular behaviour exhibited by a candidate or anybody charged with the conduct of examination before, during or after the examination that contravenes the rules and regulations governing the conduct of such examination. Though, examination misconduct is neither a recent phenomenon nor peculiar to Nigeria or Africa, the alarming rate of increase in examination misconduct in schools call for concern from all stakeholders in the education sector. The incidence of examination misconduct has become so widespread that there is virtually no examination anywhere at all levels and outside the formal school system without any form of shoddy practice or the other. Examination misconducts are common everywhere and every examination season witnesses the emergence of new and ingenious ways of cheating, stealing of question papers, impersonation, disturbances at examination, centres, obstruction of supervision, forgery of result slip, breach of duty, conspiracy and aiding misconduct etc. Furthermore, the introduction of electronic assessment (examination) in the country has revolutionized examination misconduct in the school system. The emergence of technological devices has spawned new and more sophisticated approaches to dishonest conduct during examinations. A lot of academic information is downloaded or stored for direct use in examination hall or for onward transfer via sms, email among others to other students anywhere in the country. It is in regard to these

ugly avoidable practices that the researcher attempts to investigate technology abuse and unethical practices as predictors of examination misconduct among undergraduate students in South-South Zone Universities, Nigeria.

Purpose of the Study

The main purpose of this study was to investigate technology abuse and unethical practices as predictors of examination misconduct among undergraduate students in South-South Zone Universities, Nigeria. Specifically, this research intends to:

1. Determine the extent to which technology abuse and unethical practices predict examination misconduct among undergraduate students in south-south zone universities, Nigeria.
2. Ascertain the extent to which technology abuse and unethical practices of male students differ from those of female students.

Research Questions

The following research questions were stated to guide the study:

1. To what extent do technology abuse and unethical practices predict examination misconduct among undergraduate students in south-south zone universities, Nigeria?
2. To what extent do technology abuse and unethical practices of male students differ from those of female students?

Research Hypotheses

The following hypotheses were formulated to guide this study and tested at 0.05 level of significance.

1. Technology abuse and unethical practices will not be a significant predictor of examination misconduct among undergraduate students in south-south zone universities, Nigeria.
2. There is no significant difference in the technology abuse and unethical practices between male and female students.

Method

The study adopted a correlational survey research design. A correlational survey according to Kpolovie (2010), is a study which tries to find out what relationship exists between two or more variables. Kpolovie maintained that correlational study is a useful tool for prediction, and that, researchers and scientists can use correlational study to make decisions. The degree of relationship is measured and expressed by the coefficient of the correlation. In this study the researcher is concerned with how technology abuse and unethical practices predict examination misconduct among undergraduate students; this makes the design suitable for the study. The study was carried out in South-South Zone of, Nigeria with a population comprising 28,216 year four science students in all the six federal universities. The sample size of 400 students was used for the study as a randomly selected proportion of 30% of the six universities, which was approximately a total of two universities. The selected universities were University of Calabar and University of Port Harcourt. Taro Yamen formula was used to determine the sample of the study and simple random sampling technique. The instrument

for data collection was the questionnaire titled; Technology Use, Unethical Practices and Examination Misconduct (QTUPEM). It consisted of three sections A, B, and C. Section A elicited information on demographic data and section B elicited information on Technology Use and Unethical Practices while section C elicited information on Examination Misconduct with a total 20 items. It was structured on a four point scale response format of Strongly agree (SD), Agree (A), Disagree (D) and Strongly disagree (SD). The instrument was developed by the researcher and validated by three lecturers; two of them were from the Department of Educational Foundations, Guidance and Counselling and the Department of Educational Technology, University of Uyo, Nigeria. Their corrections and comments were used to modify the questionnaires. To determine the internal consistency of the instrument, trial testing was carried out using 20 undergraduate students from the study area. Cronbach Alpha was used to determine the internal consistency of the items which yielded a reliability coefficient index of 0.81, which is an indication that the instrument is reliable.

Based on the geographical spread of the population, the researcher employed and trained four research assistants, two from each state. The assistants were directed on the modality for administering and collecting the instrument. The assistants were directed to administer the questionnaire on the respondents and retrieve them the same day. The data collected was analysed with the aid of SPSS version 20. Pearson Product Moment Correlation Coefficient and mean and standard deviation were used to answer research questions while the null hypotheses were tested using simple regression with the associated ANOVA and t-test at 0.05 level of significance. In order to take decision as regards the research questions, any r-value that fell between 0.10 – 0.39 was regarded as low, 0.40 – 0.59 was regarded as moderate and 0.60 – 0.99 was high. Concerning the null hypotheses, whenever the probability level (p-value) was greater than .05 alpha level, the null hypotheses were retained and whenever the probability level (p-value) was less than .05 alpha level, the null hypotheses was rejected.

Results

Research Question 1

To what extent does technology abuse and unethical practices predict examination misconduct among undergraduate students in south-south zone universities, Nigeria?

Table 1: Correlation between technology abuse and unethical practices and examination misconduct among undergraduate students in south-south universities, Nigeria

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.746 ^a	.559	.421	10.59431

a. Predictors: (Constant), technology abuse and unethical practices

Result on Table 1 showed that the correlation between technology abuse and unethical practices and examination misconduct among undergraduate students in south-south zone universities, Nigeria was 0.746. This means there was a strong positive relationship between technology abuse and unethical practices and examination misconduct among undergraduate students in South-South Zone Universities, Nigeria. The coefficient of determination associated with 0.746 is 0.559. The coefficient of determination (0.559) also known as the predictive value means that 55.9% of technology abuse and unethical practices accounted for the variation in examination misconduct among undergraduate students. This is an indication that 44.1% of variation in examination misconduct among undergraduate students is attributed to other factors other than technology abuse and unethical practices. This implies that technology abuse and unethical practices has 55.9% prediction of examination misconduct among undergraduate students in south-south zone universities, Nigeria.

Research Question 2

To what extent does technology abuse and unethical practices of male students differ from female students?

Table 2: Mean and Standard Deviation showing difference in the technology abuse and unethical practices of male students differ from female students

Gender	n	\bar{X}	SD	Mean Difference
Male	228	17.50	2.03	6.32
Female	172	11.18	4.78	

Result in Table 2 reveals that male students had a mean of 17.50 with a standard deviation of 2.03 while female student had a mean of 11.18 with a standard deviation of 4.78. The mean difference between male and female is 6.32. This implies that since the mean of male students is greater than that of the female students, technology abuse and unethical practices of male students differ from female students to a large extent.

Hypothesis 1

Technology abuse and unethical practices will not be a significant predictor of examination misconduct among undergraduate students in south-south universities, Nigeria.

Table 3: Regression Analysis with associated ANOVA showing the relationship between technology abuse and unethical practices and examination misconduct among undergraduate students

Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3115.536	1	3115.536	54.151
	Residual	22897.381	398	57.53	.000 ^b
	Total	26012.917	399		

a. Dependent Variable: Examination misconduct

b. Predictors: (Constant), Technology abuse and unethical practices

Result in Table 3 showed that the probability associated with the calculated value of F (54.151) for the significant relationship between technology abuse and unethical practices and examination misconducts among undergraduate students is 0.000. Since the probability value of 0.000 is less than the 0.05 level of significance, the null hypothesis which states that Technology abuse and unethical practices will not be a significant predictor of examination misconduct among undergraduate students in south-south zone universities, Nigeria was rejected. This implies that Technology abuse and unethical practices is a significant predictor of examination misconduct among undergraduate students in south-south zone universities, Nigeria.

Hypothesis 2

There is no significant difference in the technology abuse and unethical practices between male and female students.

Table 4: t-test analysis on the difference in the technology abuse and unethical practices between male and female students

Gender	n	\bar{x}	SD	df	t-cal.	p-value	Decision
Male	228	17.50	2.03				
				398	9.206*	0.000	Reject
H_0							
Female	172	11.18	4.78				

* = Significant at 0.05 level of significance

The result in Table 4 shows that t-calculated value of 9.206 with an associated probability value of 0.000 was obtained with regards to the difference in the technology abuse and unethical practices between male and female students. Since the associated probability of 0.000 was less than 0.05, the null hypothesis which states that there is no significant difference in the technology abuse and unethical practices between male and female students was rejected. This implies that there is a significant difference in the technology abuse and unethical practices between male and female students.

Findings of the Study

The following were the findings of the study

1. Technology abuse and unethical practices is a significant predictor of examination misconduct among undergraduate students in south-south zone universities, Nigeria.
2. There is a significant difference in the technology abuse and unethical practices between male and female students.

Discussion of findings

In hypothesis one it was found that there is a significant relationship between technology abuse and unethical practices and examination misconduct among undergraduate students. This is because adequate knowledge of Information Communication Technology have resulted in high level of examination misconduct as some students abuse the use of diverse technologies to gain undue advantage in an examination. This implies that undergraduate students in South-South Zone of Nigeria engage in technology abuse and unethical practices as a short-cut for examination success. This finding agrees with the initial finding of Akpoo and Akpoo (2006), which reported that in 2004/2005 academic session, many students of University of Agriculture, Markurdi were caught sending text messages of answers to friends during examination. Also, Agbatogun (2007), reported that 15 students of Moshood Abiola Polytechnic, Abeokuta, between 2004 and 2006 were charged before the student's disciplinary committee for examination misconduct. Similarly, the finding of this study is consistent with Agbatogun (2007), who reported that students use programmable calculators that have infrared beaming capacity for examination misconduct. Agbatogun added that Algorithm programmes, graphs and drawings are stored and executed through this device. Again Agbatogun further reported that students' affairs records of Olabisi Onabanjo University, Ago-Iwoye, Nigeria, and Tai Solarin University of Education, Ijagun, Nigeria, indicated that between 2005 and 2007, twelve students have been caught with programmable calculators which contained stored information during examinations.

Hypothesis two equally investigated on the difference in the technology abuse and unethical practices of male and female students. It was found that there is a significant difference in the technology abuse and unethical practices between male and female students. According to Table 2 male students were more involved in technology abuse and unethical practices than their female counterparts in examination. This finding is in line with that of Oyeyemi and Mustapha (2018) who found that 51% representing the male gender are more involved in e-cheating compared to the female gender represented with 49%. This implies that the male gender has higher tendency for anti-social behaviour and examination misconduct than the female gender. Similarly, Omonijo and Fadugba (2011), supported this finding by asserting that female criminals are rare. Anugwom, Omonijo and Fadugba (2010) concluded that male students undertake science programmes more than their female counterparts. Hence, this could be the main reason why the male are more involved in e-cheating than their female counterparts.

Conclusion

In this digital age, educators need to help establish a more positive ethical environment for students during examinations. The purpose of this study was to investigate technology abuse and unethical practices as predictors of examination misconduct among undergraduate students in South-South Zone Universities, Nigeria. It is observed that students use programmable calculators that have infrared beaming capacity and other technological devices for examination misconduct. The findings of the study revealed a strong positive relationship between technology abuse and unethical practices and examination misconduct among undergraduate students. Also, it was found that technology abuse and unethical practices significantly predict examination misconduct among undergraduate students; a significant difference in the technology abuse and unethical practices exist between male and female students. Thus, the technological tools available to students should not be abused so as to maintain academic integrity in a rapidly changing technological environment and need for tertiary institutions to advocate for continued ethical education for students is paramount.

Recommendations

Based on the results of the study, the following recommendations are made:

- i. Stakeholders must join hands to provide a more ethical environment during examinations. Although some maintained that a revolution could only happen in the educational sector when the Nigerian nation begins to recognize hard-work rather than politicization of the educational system, for the mere reason that most of those in the helm of affairs have their wards schooling abroad, a long correctional journey can start with a step.
- ii. Equally important is the consideration of outright ban by government on taking technological gadgets into any examination hall, if only that can check malpractices.

REFERENCES

- Agbatogun, A. O. (2007). Uses and Misuse of Information and Communication Technology in Examination Malpractices: Nigeria at a glance: *An Online Journal of African Educational Research Network*, 7(2):175 – 183.
- Akpoo, M. V. and Akpoo, J. M. (2006). Assessment of the causes and effects of examination malpractice at the tertiary level of Nigerian educational system. *Journal of the Nigerian Society for Educational Psychologists*, 4(2):346 – 356.
- Anugwom, E. E., Omonijo, D. O. and Fadugba, O. A. (2010). A review of gender performance of graduating students in a private Christian Mission University in Nigeria between 2008 and 2010. *International Journal of Gender Empowerment and Development*, 10 (1&2):44 – 54.
- Assam, N. (2009). Mobile phone and examination malpractices. IT realms on line. Available at <http://www.Istreams.com.ng/2009/09/mobile-phones-and-examination-malpractices.html>. Retrieved on June 28, 2020.
- Darwin, L. K. (2007). E-Cheating: Are students missing it? *Issues in Information System*, 7(1):71 – 82.
- Examination Malpractice Act (2012). Examination malpractice: Meaning. Available at http://www.ozelacademy.com/EJESVIN3_1.pdf. Retrieved on June 29, 2020.
- Fleet, D. D. V. (1991). *Contemporary Management*. Houghton Mifflin's. Co., Boston.
- Harris, J. K. (2006). Ethical perspectives in information security education. *Issues in Information Systems*, 7(2):179 – 181.
- Lobel, T. E. and Levanon, I. (1998). Gender difference in adolescents' cheating behavior. Available at <http://www.academicjournals.org/ijpc/pdf/>. Retrieved on June 28, 2020.
- Nnachi, R. O. (2006). Causes and remedies of examination irregularities among external candidates in Nigeria. *Journal of the Nigeria Society for Educational Psychologists*, 2(4): 233–243.
- Nnodum, B. I. (2008). Corrupt practices among academics as perceived by undergraduates: Implication for counselling and national development. *International Journal of Educational Research*, 4(1):141 – 150.
- Omonijo, D. O and Fadugba, O. (2011). Parental influence in escalation of examination malpractices in Nigeria. *European Journal of Social Sciences*, 2(3):487 – 520.
- Oyeyemi, S. and Mustaphas, B. (2018). Perception of tertiary institution mobile assisted e-cheating and Nigerian examination quality: Focus in Lagos state tertiary institutions. *Participatory Educational Research*, 5(1):74 – 85.
- Oredein, A. O. (2004). Cheating, examination malpractice in Nigeria Schools. *Journal of Education Research and Evaluation*, 5(1):1 – 12.
- Underwood, I. (2006). Digital technologies and dishonesty in examination and tests. Available at <http://www.dailymail.co.uk/pqes222/live/articles/news.html>. Retrieved on June 28, 2020.

Udosen, I. N & Ekukinam, T. U (2011). Value Re-Orientation for undergraduate Skills Acquisition through Instructional Delivery. *African Journal of Educational Research and Administration. Devon Science Company. Vol. (4) pg 12-13.*

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