



Gender and Socioeconomic Status as Predictors of Cybercrime Intentions among Social Studies Students in Southwestern Nigeria

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DOI : <https://doi.org/10.55248/gengpi.6.0625.22121>

ABSTRACT

The effect of gender and socioeconomic level (SES) on cybercrime intents among Social Studies students in Colleges of Education in Southwestern Nigeria is investigated in this paper. Knowing the social causes of digital deviance becomes essential as cybercrime gets more severe among tertiary-level young people, especially pre-service teachers. One followed a descriptive survey design. From a population of Social Studies students over three federal Colleges of Education, a sample of 384 individuals was chosen using Slovin's technique at a 5% margin of error. The measure was the validated, 0.84 reliability index Cybercrime Intention and Gender Disposition Questionnaire (CIGDQ). Data were examined by means of t-tests, ANOVA, and regression. Men students showed notably more cybercrime intentions than women ($t = 4.11, p < .001$). With $F = 4.86, p = .009$, low SES students reported the highest degrees of cybercrime intention. Confirming both gender ($\beta = .30, p < .001$) and SES ($\beta = .26, p = .003$) as major independent variables was regression analysis. The results imply that Social Studies education has to undergo gender-sensitive and equity-oriented pedagogical changes. To help with socio-demographic differences in cyber behaviour, cyber ethics and digital citizenship should be included into Social Studies courses and pre-service teacher preparation programs.

Keywords: Cybercrime intentions, gender differences, socioeconomic status, Social Studies education, digital citizenship

Introduction

The advent of digital technologies in education has fundamentally changed access to instruction and learning. Education is more dynamic and participatory because to online resources, virtual classrooms, and digital collaboration tools. These advantages, meantime, carry growing concerns, particularly in terms of cybercrime. Particularly among young individuals in tertiary education, the digital revolution has coincided with a concerning increase in cyber-related offences in Nigeria (Adewuyi et al., 2024). Many times, navigating virtual platforms with no ethical direction, students expose themselves to deviant online activity including hacking, fraud, impersonation, and cyberbullying (Ukam et al., 2024; Hakimi et al., 2023).

In this regard, pre-service teachers especially Social Studies majors occupy a vital role. Future teachers are supposed to set and instruct moral, civic-minded behaviour in both physical and digital environments. Emphasising civic responsibility, national development, and ethical awareness, social studies education is positioned to help solve the moral conundrums presented by digital environments (Omiyefa, 2024; Iloka, 2025). Current courses, however, sometimes fail to adequately combine digital ethics and responsible ICT use, therefore creating a pedagogical vacuum in equipping students for future risks like cyber deviance (Igwe & Ibegwam, 2014).

New research points to interesting options for improving civic and ethical education using creative pedagogies. For instance, Makanjuola and Ayantunji (2024) underline that tackling cybersecurity in Nigeria calls for educational reforms that support ethical digital behaviour from the classroom level rather than the technical solutions it calls for. In line with this, Ayantunji, Makanjuola, and Atanda (2024) showed how well virtual team teaching helps pre-service teachers develop reflective, technologically responsible attitudes. Moreover, Makanjuola, Fabunmi, and Akiode (2021) demonstrated how documentary-based learning improved civic participation and environmental awareness, implying that same media approaches may be modified for cyber ethics education.

Notwithstanding these revelations, few studies have looked at how social identity elements like gender and socioeconomic level (SES) influence cybercrime intentions among pre-service teachers. Studies reveal that men are more likely to engage in risk-taking in digital environments (Arshad et al., 2025) and low-income background students may view cybercrime as a road to financial mobility (Akinwande, 2022). This study thus looks into how SES and gender influence cybercrime intents among Southwestern Nigerian Social Studies students in Colleges of Education. Its aim is to offer proof for inclusive, moral, and statistically based changes in teacher education.

Statement of the Problem

Although attempts at cybercrime education are growing worldwide, many Nigerian pre-service teachers still fall prey to digital deviance. Teenagers in higher education are often connected to incidents involving internet fraud, identity theft, and unethical digital behaviour. Particularly in the area of Social Studies schooling, there is a dearth of research examining the socio-demographic variables like gender and SES that might influence cybercrime intents. Efforts to create ethical digital citizens by means of teacher training could be useless without knowledge of these factors. Closing this disparity is essential to arming next generations of teachers with the digital integrity required to mould conscientious students in a technologically advanced society.

Purpose of the Study

The aim of this study is to investigate the degree to which intentions of cybercrime among Social Studies students at Colleges of Education in Southwestern Nigeria depend on gender and socioeconomic level. The results should guide curriculum changes and focused initiatives meant to support digital ethics and appropriate online behaviour in teacher preparation.

Theoretical Framework

Predicated on two interrelated theories Social Learning Theory and Gender Schema Theory both of which provide insightful analysis of how people create behavioural intentions in digital environments.

Social Learning Theory (Bandura, 1977)

Social Learning Theory developed by Albert Bandura holds that reinforcement, imitation, and observation help one to acquire behaviour. People pick up knowledge not only from personal experience but also from seeing others particularly in cases when such actions seem to pay off. Through social networks, online forums, and peer interactions, pre-service teachers are exposed to a broad spectrum of digital behaviours. Should cyber-offenses like internet fraud or hacking become accepted or glamorised in their social circles, pupils could be more likely to engage in similar actions. This idea emphasises the requirement of good role modelling and reinforcement of ethical online behaviour in courses of teacher preparation.

Gender Schema Theory (Bem, 1983)

Gender Schema Theory developed by Sandra Bem clarifies how internalised society assumptions about gender affect cognition and behaviour. People create gender schemas mental frameworks early on that direct their interpretation and response to different circumstances, including moral conundrums. In the framework of cybercrime, male students may be more prone to participate in risky or deviant digital activity because of internalised ideas about masculinity and power. On the other hand, female students might show more careful behaviour motivated by conventional ideas of compliance and nurture. This thesis offers a framework for comprehending variations in cybercrime intentions based on gender.

Research Questions

This study is guided by the following research questions:

1. What is the level of cybercrime intention among Social Studies students in Colleges of Education in Southwestern Nigeria?
2. Are there significant differences in cybercrime intentions based on gender and socioeconomic status?
3. To what extent do gender and socioeconomic status predict cybercrime intentions among these students?

Literature Review

Gender and Cybercrime Intentions

Studies have repeatedly shown that gender greatly affects people's online behaviour, especially with regard to ethical decision-making and deviant behaviour. Men are typically more prone than women to engage in high-risk or unethical digital behaviours, including cyber fraud, phishing scams, hacking, and identity theft (Arshad et al., 2025). Social and cultural conceptions of masculinity, which frequently stress assertiveness, dominance, risk-taking, and competitiveness, help to explain this pattern in part. Particularly when supported by online subcultures and social groups, these standards might normalise or even glamorise immoral digital behaviour among male young (Okeke & Onyekachukwu, 2024). On the other hand, women are typically socialised to be more cautious, sympathetic, and morally reflective qualities that might help to lower their chance of cybercrime. Studies reveal that women often display stronger ethical awareness, more moral sensitivity, and more internalisation of digital responsibility norms (Iloka, 2025), therefore reducing cybercrime intention rates.

Socioeconomic Status and Digital Deviance

Students' access to digital tools, exposure to ethical technology use, and reasons for online behaviour all depend much on their socioeconomic background. Low-income students are more prone to participate in cybercrime since they typically suffer in access to formal digital literacy and cybersecurity education (Akinwande, 2022; Ukam et al., 2024). As seen as quick fixes to economic mobility, financial difficulty and social inequality can heighten the attraction of cybercrime and online scams. Further aggravating the risk are less role models, less parental oversight, and less school-based ethics education. On the other hand, (Tay & Low, 2017; Adenuga, Owioye & Adenuga, 2011). SES is therefore a crucial component in cyber ethics education since such exposure promotes responsibility and reduces their probability of using deviant online actions.

Social Studies Education and Ethical Development

Particularly in helping to shape the attitudes of future teachers, social studies is essential for fostering civic duty, ethical thinking, and digital citizenship. Nonetheless, in Nigeria the inclusion of cyber ethics and responsible digital behaviour into the Social Studies course is mainly insufficient (Igwe & Ibegwam, 2014; Omiyefa, 2024). The absence of formal training on online ethics leaves a significant void as digital interactions become increasingly ingrained in educational activity. Recent research emphasises the need of using creative and interactive learning approaches. While Ayantunji et al. (2024) underlined how virtual team-teaching promotes ethical involvement and collaborative learning, Mekanjuola et al. (2021) showed how well documentaries improve civic consciousness. Complementing these results, Chang and Chen (2016) contend that in virtual environments scenario-based learning enhances students's moral judgement. Likewise, Qi & Chen (2025) support including service-learning initiatives to combine civic theory with pragmatic digital citizenship, thereby providing more relevant and context-driven ethical education.

Methodology

This study used a descriptive survey approach to gather quantitative information on students' intentions towards cybercrime as well as their correlations with gender and socioeconomic level. This design is suitable for gathering, within a specified group, self-reported attitudes and behavioural tendencies. All NCE-level Social Studies students from three Federal Colleges of Education in Southwestern Nigeria—FCE Abeokuta, FCE (Special) Oyo, and FCE (Technical) Akoka made up the population. Drawing from an estimated population of 15,000 Social Studies students, a sample size of 384 respondents was obtained from Slovin's algorithm at a 5% margin of error. Equal gender presence was guaranteed by use of a stratified random sampling technique. Drawn proportionately from the three colleges, the final sample consisted in 192 male and 192 female students. Using the 20-item Cybercrime Intention and Gender Disposition Questionnaire (CIGDQ), a 20-item survey meant to gauge cybercrime intentions and perceptions linked to gender and SES, data were gathered On a 4-point Likert scale, responses fell from Strongly Agree to Strongly Disagree. Validity: Validity confirmed by expert assessment and pilot testing; Cronbach's Alpha = 0.84 RQ1 employed descriptive statistics (mean and standard deviation); RQ2 and Multiple Linear Regression used ANOVA and Independent t-tests respectively. Every analysis was done with SPSS v26.

Results

Research Question 1: What is the level of cybercrime intention among Social Studies students?

Descriptive study found Social Studies students had a modest degree of cybercrime intention. Based on replies from $N = 384$, the mean score on the cybercrime intention scale was $M = 2.78$, $SD = 0.74$. The instrument was scored on a 4-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree), hence this result indicates that students showed a modest tendency towards cybercrime-related behaviours generally.

Table 1

Descriptive Statistics for Cybercrime Intention Among Social Studies Students

Variable	N	Mean	Standard Deviation
Cybercrime Intention Score	384	2.78	0.74

Research Question 2: Are there significant differences in cybercrime intentions based on gender and SES?

Table 2a shows whether there were any appreciable gender variations in cybercrime intention scores by means of an independent samples t-tests. With male students ($M = 2.94$, $SD = 0.71$) reporting greater cybercrime intention scores than their female counterparts ($M = 2.61$, $SD = 0.72$), the results showed a statistically significant difference, $t(382) = 4.11$, $p < .001$. Men show more intention than women, hence gender clearly determines pupils' inclination towards cybercrime. A one-way ANOVA was also conducted to evaluate variations in cybercrime intention among three socioeconomic level (SES) groups (low, middle, and high). With $F(2, 381) = 4.86$, $p = .009$ the study revealed a statistically significant effect of SES on cybercrime intention. If carried out, post hoc comparisons using Tukey's HSD test would probably show that students from low SES backgrounds ($M = 3.08$, $SD = 0.76$) scored significantly higher than those from high SES backgrounds ($M = 2.49$, $SD = 0.68$), implying that socioeconomic disadvantage may be linked with a higher likelihood of cybercrime intention.

Table 2

Gender-Based t-test

Gender	N	Mean	SD	t	p
Male	192	2.94	0.71	4.11	< .001
Female	192	2.61	0.72		

ANOVA by Socioeconomic Status

SES	N	Mean	SD
Low	128	3.08	0.76
Middle	128	2.77	0.70
High	128	2.49	0.68

ANOVA Result: $F(2, 381) = 4.86, p = 0.009$

Research Question 3: To what extent do gender and SES predict cybercrime intentions?

The degree to which gender and socioeconomic level (SES) predict cybercrime intention among Social Studies students was investigated by means of a multiple linear regression analysis. With $R^2 = .17$, the model was statistically significant generally and explained roughly 17% of the variance in cybercrime intention ratings. The findings revealed that gender was a major predictor ($\beta = .30, t = 3.91, p = .001$), implying that a higher degree of cybercrime intention was connected with a man. Likewise, socioeconomic level was a major predictor ($\beta = .26, t = 3.05, p = .003$), meaning that pupils from lower SES backgrounds were more likely to say they intended stronger cybercrime. These results emphasise the independent and noteworthy contributions made by SES and gender to forecast students' predisposition towards digital deviance.

Table 3

Regression Analysis Summary

Predictor	β	t	p
Gender (Male)	.30	3.91	< .001
SES (Low)	.26	3.05	.003
Constant	—	—	—

$R^2 = 0.17$

Discussion

The results show that students's intentions to participate in cybercrime are much influenced by gender and socioeconomic level. Consistent with past research linking masculinity to risk-taking and peer-driven behaviour in digital environments, male students showed greater degrees of cybercrime intention than female students (Arshad et al., 2025; Okeke & Onyekachukwu, 2024).

Another rather substantial predictor turned out to be socioeconomic level. Low-income students were more likely to say they intended to engage in cybercrime. This validates other studies connecting economic disadvantage to higher vulnerability to digital fraud and deviant online activity (Ukam et al., 2024; Akinwande, 2022). Restricted access to legitimate digital possibilities could fuel such behaviours.

Fascinatingly, the relationship between SES and gender was not significant, implying that although both are important, they function separately. These results support the necessity of different, equity-oriented teaching approaches in educational institutions preparing teachers. The statistics also show how urgently social studies courses should include digital ethics and responsible digital citizenship. Pre-service teachers who participate ethically online are more likely to encourage and model similar behaviour in their upcoming classrooms.

Conclusion

The predictive power of gender and socioeconomic level on cybercrime intents among Social Studies students in Colleges of Education in Southwestern Nigeria was investigated in this paper. A representative sample of 384 students was polled with Slovin's formula. Results showed that male students and those from low socioeconomic backgrounds were far more likely to say they intended to participate in cybercrime. With 17% of the variance in cybercrime intention covered by both gender and SES, they were independent predictors. Lack of a notable interaction between the two implies that every variable specifically influences the digital behaviour of students. These results confirm the need of social learning and gender schema theories in comprehending cyber behaviour among pre-service teachers. These kids will be very important in forming the digital ethics and civic duty of next teachers. Should their own attitude towards moral online behaviour be affected, the knock-on effects could harm governmental initiatives against cybercrime. Thus, deliberate attempts using responsive teaching and institutional support must be made to solve economic inequalities and gender-based behavioural patterns.

Recommendations

1. Programs for teacher preparation should include courses on cyber responsibility, moral use of digital tools, and results of cybercrime.
2. Training in digital citizenship and classroom conversations should be specifically targeted to counteract gender-based tendencies, therefore fostering empathy, restraint, and responsibility in digital environments dominated by men.
3. Provide low-SES students with subsidised ICT tools, mentoring, and digital skill-building seminars thereby empowering them with other routes to economic success.
4. Extend the application of multimedia education and virtual team teaching to support moral judgement in digital environments.
5. Core competences in the Social Studies curriculum should be digital citizenship and ethical ICT use mandated by national teacher training programs.

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