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Upsurge of Cybercrimes among Undergraduate Students of Delta State University, Abraka

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Research Article

ABSTRACT

Nigeria has become notoriously famous for the increasing rate of youth involvement in cybercrime. Similarly, literature has captured Abraka as a cybercrime hotspot for youths. This study focused on the prevalence of cybercrimes among undergraduate students of Delta State University, Abraka by identifying the socio-economic factors, examining the role of technology, and assessing societal influences on this phenomenon. A cross-sectional survey design was employed by way of a structured questionnaire to gather data from 100 respondents selected through systematic random sampling. The analysis was conducted with the statistical package for social sciences (SPSS Version 25); and its results included descriptive and inferential statistics. Findings indicated a high level of cybercrime involvement among students of the university; and this is primarily driven by financial incentives and facilitated by technological advancements. Also, the study established that societal norms and peer pressure significantly influence students' involvement in cybercrimes. Based on the findings, the study recommended introducing educational interventions, digital literacy programmes, peer support networks, community engagement initiatives, economic empowerment strategies, policy interventions, research collaborations, and public awareness campaigns to de-escalate the socio-economic and societal forces that promote cybercrimes involvement among youth.

Keywords: Crime, cybercrime, internet, undergraduate students, upsurge

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INTRODUCTION

The invention of the internet marked a significant moment in human history, ushering in an era of unprecedented connectivity and information sharing. It stemmed from the need for a robust communication system that could endure nuclear attacks during the Cold War, leading to ARPANET, the precursor to the modern internet (Gartzke, 2013). This evolution revolutionized communication, work, learning, and entertainment (Dainow, 2017). Tim Berners-Lee's creation of the first web browser and server at CERN democratized information access, shaping the internet as we know it today (Boyle, 2019). Despite its transformative potential, the internet has also brought about challenges, notably the rise of cybercrime (Dahlgren, 2005). This includes offenses like hacking, identity theft, phishing scams, online harassment, romance scams, and cyberbullying, with youths increasingly involved in these activities (Aransiola & Asindemade, 2011; Holt & Bossler, 2015). Statistics indicate that about 40% of cyberattacks are perpetrated by individuals under 25 (Ntembo & Casimir, 2023; Daengsi et al., 2022; Apenov et al., 2021; Vannucci et al., 2020;). In Nigeria, the convergence of digital advancements and socioeconomic complexities has led to various cyber offenses, including the infamous "419 fraud" (Cross & Mayers, 2021). Nigerian youths, adept in navigating online spaces, engage in scams like email frauds thereby exploiting trust for financial gain (Wang & Topalli, 2024). Phishing and identity theft are also prevalent, with culprits using sophisticated tactics to extract sensitive information for illicit purposes (Soghoian, 2009). While youth involvement in cybercrimes is not new, there's a notable concentration among university students in Nigeria and Delta State University, Abraka is not an exception (Oni, 2021). This study aims to delve into the factors driving

cybercrime participation among undergraduate students in this region, building upon previous research highlighting Abraka as crime and cybercrime hotspot (Agbamu & Irogbo, 2024; Ehiane & Olumoye, 2023; Uviekovo & Idjakpo, 2023; Oyemndu & Gilbert, 2020; Lamidi, 2020). The goal is to uncover the motivations behind this trend and explore potential interventions (Wahua, 2015; 2017).

The phenomenon of cybercrimes among undergraduates in Abraka, as evidenced by studies conducted by Ehiane & Olumoye (2023), Uviekovo & Idjakpo (2023) Oyemndu & Gilbert (2020) and Lamidi (2020), is a matter of growing concern. These studies collectively establish Abraka as a hotspot for such activities within the context of Delta State University. However, a significant gap persists in understanding the driving factors behind the involvement of undergraduate students from this institution in cybercrimes. The existing literature provides valuable insights into the prevalence and nature of cybercrimes among undergraduates, yet fails to establish the underlying motivations and circumstances that lead students to engage in such illegal activities (Uche & Uche, 2023). It is believed that understanding these factors is crucial for several reasons. Firstly, it allows for a comprehensive understanding of the root causes behind the observed trend, which can inform the implementation of strategies to combat cybercrimes (Sarkar & Shukla, 2023). Secondly, it enables stakeholders, including educational institutions, law enforcement agencies, policymakers, and community organizations, to develop evidence-based interventions that address the specific needs and vulnerabilities of at-risk individuals and communities (Kingston, Mihalic & Sigel, 2016). The questions answered by the research are: What socio-economic factors contribute to the upsurge of cybercrime

among the youths? How do technology and the internet facilitate youth involvement in cybercrimes? What is the impact of societal norms on youth cybercrime involvement?

CONCEPTUAL CLARIFICATION

Crime encompasses a vast spectrum of behaviors deemed harmful or unlawful within societies (Bansal et al., 2023). Its definition varies with cultural, legal, and historical contexts, reflecting evolving social norms and values (Lamond, 2007). Fundamentally, crime involves acts violating laws, regulations, or moral codes, potentially harming individuals, communities, or institutions (Lamond, 2007). Legally, crime refers to prohibited acts punishable by the state (Alexander et al., 2009), categorized by severity from minor offenses to serious crimes like homicide (Hagan, 2010). However, in a cultural sense, crime's definition can vary, and have substantial impact on law enforcement and societal responses (Brown & Geis, 2015). Morally, crimes often align with ethical wrongs, shaping public attitudes on justice and punishment (Boutellier & Boutellier, 2002). In essence, different communities and cultures may perceive crimes, including cybercrime differently as either morally justifiable or unjustifiable, which can impact crime rate. These dynamics force Criminologists to study crime across numerous perspectives.

Criminologists study crime causes, patterns, and consequences, exploring individual, social, and economic factors (Birks et al., 2012). On the contrary, criminal justice systems focus on law enforcement, prosecution, and rehabilitation, guided by deterrence and societal protection goals (Daly & Sarre, 2017). In so doing, a demarcation between social and legal constructions of deviance and social control concepts intersect with crime have emerged, regulating behavior through norms,

sanctions, and surveillance (Fagan & Meares, 2008). One fundamental agreement in the literature, however is that crime evolves with societal, economic, and technological changes (Aas, 2013), and this is evidence by the trans-dimension of crime manifesting as cybercrime, white-collar crime, and organized crime challenges (Vilks & Kipane, 2018). Nonetheless, the dimensions and typologies of crime offer insights into its complexity (Lettieri et al., 2017). Legally, crime distinguishes between prohibited and lawful acts, guiding global criminal justice systems (Ashworth & Horder, 2013). Socially, norms, values, and inequalities shape criminal behavior (Brown & Geis, 2015). Psychological factors influence decision-making and emotional states, contributing to crime (Bonta & Andrews, 2016). There is however well documented evidence of the economic dimensions that drive motivations for crimes like theft and fraud (Sarkar & Shukla, 2023), accelerated by historical, spatial, and technological factors such as cyber-dimensions of crime (Elmaghraby & Losavio, 2014; Holt & Bossler, 2015).

Hence, this study adopts the following working definition: Crime refers to criminal activities carried out through digital or online channels. It includes a broad spectrum of illegal behaviors like hacking, phishing, distributing malware, committing identity theft, perpetrating online scams, and engaging in various forms of digital fraud (Elmaghraby & Losavio, 2014; Holt & Bossler, 2015). Cybercrime spans various illegal activities using digital technologies, including fraud (like phishing and identity theft), hacking (exploiting vulnerabilities for data breaches or DDoS attacks), cyberstalking/harassment, and cyberterrorism (Moise, 2014). Nigeria is known for cybercrimes such as phishing scams, BEC, ransomware, and fraud, driven by socio-economic factors and tech

advancements. Cybercriminals in Nigeria range from individuals engaging in fraud to sophisticated organized groups offering cybercrime services, highlighting diverse motivations and capabilities (Tsado et al., 2023).

Nigeria Youths and Cybercrime

The involvement of Nigerian youths in cybercrime is a multifaceted issue that requires a nuanced understanding of its underlying factors. One significant factor contributing to this involvement is the challenging economic landscape faced by many young Nigerians. Nigeria, like many developing countries, grapples with high levels of unemployment and underemployment, particularly among its youth population. This lack of sufficient opportunities for economic empowerment can push individuals towards illegal activities as a means of survival or to achieve material wealth quickly (Akeusola, 2023; Agbamu & Irogbo, 2024). The economic challenges are compounded by the rapid advancement of technology and widespread access to the internet. With the proliferation of digital tools and platforms, cybercrime has become increasingly accessible to individuals with technical skills. Many young Nigerians, often self-taught in computer programming and IT, find themselves enticed by the potential financial gains offered by cybercriminal activities such as phishing, identity theft, online scams, and hacking. The allure of quick and substantial profits can be particularly tempting for those facing financial hardships and limited job prospects (Abubakari & Blaszczyk, 2023).

Moreover, the socio-cultural context in Nigeria plays a crucial role in shaping attitudes towards wealth and success. (Abubakari & Blaszczyk, 2023) In many Nigerian communities, there is a strong emphasis on material possessions and status

symbols as markers of achievement. The societal pressure to attain wealth, coupled with the glamorization of illicit riches in media and popular culture, can influence some young people to pursue illegal means of acquiring money, including cybercrime. The portrayal of wealthy individuals engaging in extravagant lifestyles without apparent regard for the legality of their wealth can create a distorted perception of success, leading some youths to believe that similar wealth and status are attainable through illicit activities (Abubakari & Blaszczyk, 2023). Additionally, the lack of effective law enforcement and regulatory mechanisms to combat cybercrime contributes to its prevalence among Nigerian youths. Weak enforcement of cybercrime laws and limited resources dedicated to cybersecurity create an environment where cybercriminals can operate with relative impunity. This perception of low risk and high reward further incentivizes individuals, including young people, to engage in cybercriminal activities without fear of significant consequences (Abubakari & Blaszczyk, 2023).

THEORETICAL FRAMEWORK

The current study adopts two theoretical frameworks to explain youth involvement and the upsurge of cybercrimes among Delta State University undergraduate students. The two frameworks used are the strain theory and differential association theory.

Strain Theory

Strain Theory, conceptualized by Robert Merton, elucidates how societal structures propel individuals towards deviance due to incongruities between culturally endorsed aspirations and the means available to achieve them. Central to Strain Theory is the dichotomy between cultural goals, such as

wealth and status, and the institutionalized means to attain them, like education and employment. When individuals encounter impediments like economic disparities or discrimination hindering their access to these means, they experience strain (Froggio, 2007). Merton delineated five adaptive responses to strain: conformity (embracing both goals and means), innovation (accepting goals but resorting to unconventional means), ritualism (abandoning goals but rigidly adhering to means), retreatism (rejecting both goals and means, often manifesting as withdrawal), and rebellion (rejecting and substituting societal goals and means) (Agnew, 2017). For many young people, especially in regions with economic disparities and limited opportunities like Nigeria, the cultural emphasis on wealth, success, and status can clash with the reality of insufficient avenues for legal attainment of these goals. This disjunction creates a strain that pushes some youths towards innovative but deviant strategies, such as cybercrime, as a way to bridge the gap between their aspirations and the constrained pathways to success offered by traditional institutions like education and employment (Froggio, 2007).

Moreover, Strain Theory's emphasis on adaptive responses to societal pressures resonates strongly with the patterns observed in youth involvement in cybercrime (Agnew, 2017). Rather than a simplistic view of criminal intent, this theory acknowledges the nuanced interplay of social structures, individual aspirations, and coping mechanisms (Froggio, 2007). It recognizes that cybercrime may not stem solely from malicious intent but can also result from a pragmatic response to systemic barriers and limited opportunities, making Strain Theory a robust analytical tool for unpacking the complex dynamics driving

youth engagement in cybercriminal activities (Agnew, 2017).

Differential Association Theory

Differential Association Theory, proposed by Edwin Sutherland, explores how individuals acquire and engage in criminal behavior through social interactions (Armstrong & Matusitz, 2013). This theory posits that people learn criminal conduct akin to any other behavior, primarily within close social circles like families, peers, and close friends (Winfree & Freng, 2015). It suggests that exposure to both criminal and non-criminal norms within these social groups influences individuals' attitudes and behaviors, with a focus on learning criminal behavior through interactions with deviant individuals (Matsueda, 2006).

In the Nigerian context, this theory offers insight into youth involvement in cybercrime. It underscores how social structures and norms, coupled with socio-economic factors like high unemployment rates, create an environment where cybercrime may be viewed as a viable economic option (Winfree & Freng, 2015). The theory's premise aligns with the observation that Nigerian youths are exposed to cybercriminal activities through their social networks, both online and offline, which may normalize and even encourage such behavior by providing justifications, techniques, and motivations (Winfree & Freng, 2015).

Moreover, Nigeria's socio-economic challenges, including limited opportunities for economic advancement, reinforce the appeal of cybercrime as a means of livelihood, reinforcing the principles of frequency, duration, and intensity of interactions highlighted by Differential Association Theory (Winfree & Freng, 2015). By recognizing these socio-cultural factors and applying insights from the theory, policymakers and stakeholders can

develop targeted interventions to address the root causes and reduce the allure of cybercriminal activities among Nigerian youths (Winfree & Freng, 2015).

METHODOLOGY

The chosen research design for this study was a cross-sectional survey. This design was selected for its efficiency in gathering quantitative data on cybercrime experiences, perceptions, and behaviors among Nigerian youths within a specific timeframe, specifically targeting year 1 to year 4 students at DELSU and the town's youth aged 18-35. The study was conducted in Abraka, Delta State, Nigeria. Abraka was selected as the study area due to its characteristics as a town with a significant youth population, high internet usage rates, and the presence of DELSU, making it an ideal setting to explore cybercrime among Nigerian youths. The study population comprised individuals residing in Abraka, totaling approximately 42,940, consisting of 36,000 students and 6,940 indigenous residents. The sample size was determined to be 100 respondents, calculated using Taro Yamane's formula to ensure representativeness while considering practical constraints. A systematic random sampling technique was employed to recruit participants, involving the selection of 15 respondents from the indigenous population, 48 DELSU students and 37 others who doubled as both DELSU students and Abraka indigenes. Respondents from DELSU were selected across faculties, departments and levels. This method aimed to capture diverse perspectives within the target population.

Data were collected using a structured questionnaire distributed in-

person. The questionnaire focused on investigating the correlation between cybercrime and socio-economic factors, technology usage, internet access, and societal norms among Nigerian youths in Abraka. Quantitative data from the questionnaires were analyzed using the Statistical Package for the Social Sciences (SPSS Version 25). This analysis included descriptive statistics, frequency distributions, and correlation analyses to systematically examine cybercrime trends and patterns among the respondents. Ethical principles were upheld throughout the study, including obtaining informed consent, ensuring confidentiality and anonymity, providing clear instructions, and adhering to ethical guidelines for research involving human participants.

DATA PRESENTATION AND ANALYSIS

Data collected from the field were presented, analyzed and interpreted with the use of tables. Table 1 summarizes responses related to cybercrime awareness, residency in Abraka and affiliation with Delta State University, understanding of cybercrimes including scams and "419," motivations for cybercrime, and the impact of societal pressures. 89% of respondents were aware of cybercrime involvement, knew Abraka residents who are DELSU students, and understood cybercrimes such as online scams. Motivations for cybercrime varied: 37% strongly agreed, 33% agreed, 11% were neutral, 9% disagreed, and 10% strongly disagreed with financial gain as a motivation. Additionally, 82% believed societal pressures influence cybercrime involvement.

Table 1:
Research Items 1-5

S/N	ITEMS	Responses	Frequency	Percent (%)
1.	<i>Are you aware of any individuals currently involved in cybercrimes?</i>			
		Yes	89	89.00
		No	11	11.00
	Total		100	100.00
2.	<i>Do you any who currently resides in Abraka and a student of Delta State University?</i>			
		Yes	85	85.00
		No	15	15.00
	Total		100	100.00
3.	<i>Cybercrimes include online scams, online romance scams and “419”</i>			
		Yes	76	76.00
		No	24	24.00
	Total		100	100.00
4.	<i>Financial gain is a key motivation factor in the decision for cybercrime involvement for these individuals?</i>			
		Strongly Agree	37	37.00
		Agree	33	33.00
		Neutral	11	11.00
		Disagree	9	9.00
		Strongly Disagree	10	10.00
	Total		100	100.00
5.	<i>Societal pressures or expectations influenced involvement in cybercrimes?</i>			
		Yes	82	82.00
		No	18	18.00
	Total		100	100.00

Source: Author's Field Survey (2024)

Table 2:
Research Items 6-8

<i>S/N</i>	<i>ITEMS</i>	<i>Responses</i>	<i>Frequency</i>	<i>Percent (%)</i>
6.	<i>Advancements in technology made cybercrimes more accessible to young individuals involved in cybercrimes?</i>			
		<i>Yes</i>	82	82.00
		<i>No</i>	18	18.00
	Total		100	100.00
7.	<i>Technologies like smartphones and computers help with cybercrimes?</i>			
		<i>Strongly Agree</i>	58	58.00
		<i>Agree</i>	34	34.00
		<i>Neutral</i>	8	8.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00
8.	<i>Technology makes it easier to commit cybercrimes?</i>			
		<i>Strongly Agree</i>	55	55.00
		<i>Agree</i>	37	37.00
		<i>Neutral</i>	8	8.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total	100	100	100.00

Source: Author's Field Survey (2024)

Table 2 illustrates respondents' perceptions of technology's role in facilitating cybercrimes, particularly among young individuals. 82% believed that technological advancements have increased accessibility to cybercrimes. Moreover, 92% agreed that

smartphones and computers aid in cybercrimes, with 58% strongly agreeing and 34% agreeing. Similarly, 92% believed that technology makes committing cybercrimes easier, with 55% strongly agreeing and 37% agreeing.

Table 3:
Research items 9-14

S/N	ITEMS	Responses	Frequency	Percent (%)
9.	Societal norms and cultural attitudes affect the perception of cybercrimes?	<i>Strongly Agree</i>	58	58.00
		<i>Agree</i>	34	34.00
		<i>Neutral</i>	8	8.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00
10.	Peer influence impacts the decision to engage in cybercrimes?	<i>Strongly Agree</i>	57	57.00
		<i>Agree</i>	37	37.00
		<i>Neutral</i>	6	6.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00
11.	Students feel pressured by peers or societal expectations to participate in cybercrimes?	<i>Strongly Agree</i>	60	60.00
		<i>Agree</i>	36	36.00
		<i>Neutral</i>	4	4.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00
12.	Individuals learn about cybercrimes before their studentship in Delta State?	<i>Strongly Agree</i>	55	55.00
		<i>Agree</i>	37	37.00
		<i>Neutral</i>	8	8.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00
13.	If individuals learned about cybercrimes during their studentship in Delta State University.	<i>Strongly Agree</i>	57	57.00
		<i>Agree</i>	30	30.00
		<i>Neutral</i>	11	11.00
		<i>Strongly Disagree</i>	0	0
		<i>Disagree</i>	0	0
	Total		100	100.00

Source: Author's Field Survey (2024)

Table 3 outlines respondents' views on factors influencing their perception of cybercrimes and exposure to information about cybercrimes during their time at Delta State University. A significant majority (92%) noted that societal norms and cultural attitudes impact cybercrime perception, with 58% strongly agreeing and 34% agreeing. Similarly, 94% agreed on the influence of peer pressure, with 57% strongly agreeing and 37% agreeing. Additionally, 96% believed that students feel pressured to engage in cybercrimes due to societal expectations, with 60% strongly agreeing and 36% agreeing. Most respondents (90%) learned about cybercrimes before and during their university years, with 55% strongly agreeing and 35% agreeing. Moreover, 89% agreed on learning about cybercrimes sources during university years, with 59% strongly agreeing and 30% agreeing, underlining the importance of understanding these sources among students.

DISCUSSION AND CONCLUSION

The findings of this study revealed a high level of awareness and involvement in cybercrimes among undergraduate students in Abraka, aligning with previous research highlighting the prevalence of cybercrimes among Nigerian youths (Aransiola & Asindemade, 2011; Holt & Bossler, 2015). The overwhelming majority of respondents were aware of individuals engaged in cybercrimes, indicating the pervasiveness of such activities within the student community. This echoes the findings of Agbamu & Irogbo (2024); Uviekovo & Idjakpo (2023) and Lamidi (2020), who identified Abraka as a hotspot for cybercrimes among youths, particularly within the context of Delta State University. By implication, it is possible to generalize that a large number of undergraduate students in public universities might be deeply involved in cybercrime.

Demographically, the study captured a diverse range of respondents, with a slightly higher percentage of male participants, which is consistent with existing literature on cybercrime demographics (Ntembo & Casmir, 2023). The age distribution of respondents, with a concentration in the 23-27 age group, resonates with studies highlighting young adults as particularly susceptible to cybercrime influences (Daengsi et al., 2022; Vannucci et al., 2020).

Motivations for cybercrime involvement were found to be primarily driven by financial gain, echoing the findings of Wang & Topalli (2024) and Tsado et al. (2023), who emphasized the allure of quick monetary rewards as a key factor in cybercrime participation among Nigerian youths. Furthermore, societal pressures and cultural attitudes were identified as influential factors shaping perceptions and behaviors related to cybercrimes, consistent with the differential association theory (Armstrong & Matusitz, 2013). The theory posits that individuals learn criminal behavior through social interactions and norms, highlighting the role of peer influence and societal expectations in cybercrime involvement among university students (Winfrey & Freng, 2015).

The strain theory also provides valuable insights into the motivations behind cybercrime participation, particularly in regions with economic disparities and limited opportunities like Nigeria (Froggio, 2007). The incongruities between culturally endorsed aspirations, such as wealth and success, and the limited means available to achieve them, create strain and push some youths towards innovative yet deviant strategies like cybercrime (Froggio, 2007). This theory helps contextualize the findings regarding financial motivations and societal pressures observed in this study.

Conclusion

The research findings offer a nuanced understanding of cybercrime dynamics among undergraduate students in Abraka, Nigeria. The high awareness and involvement in cybercrimes underscore the need for targeted educational initiatives, digital literacy programs, and ethical guidance within university settings. Addressing the economic drivers behind cybercrime, such as financial gain, requires holistic approaches that tackle socio-economic disparities and provide alternative avenues for economic empowerment.

Moreover, the influence of societal norms and peer pressure on cybercrime involvement calls for community-based interventions that promote positive social values, ethical behavior, and responsible digital citizenship. Collaborative efforts involving educational institutions, law enforcement agencies, policymakers, and civil society organizations are essential to combating cybercrime effectively.

Recommendations

- i. **Educational Initiatives:** There is a need to develop comprehensive educational programs within universities focused on digital literacy, ethical behavior online, and the legal consequences of cybercrimes. Incorporating these topics into the curriculum can help ensure widespread awareness among students.
- ii. **Peer Support Networks:** Establishment of peer support networks within universities to promote positive peer influences and discourage involvement in cybercrimes is also essential. This fosters a culture of mutual support, accountability, and ethical conduct among students.

- iii. **Community Engagement:** Engaging with local communities, families, and stakeholders to raise awareness about cybercrimes and their impact can be very innovative. Such community-based initiatives can promote cyber safety, responsible online behavior, and digital citizenship.
- iv. **Economic Empowerment:** Similarly, creating economic opportunities and entrepreneurship programmes targeted at young individuals, especially those facing socio-economic strains can minimize motivation to become involved in cybercrimes. This provides viable alternatives to cybercrime by fostering innovation, creativity, and sustainable livelihoods.

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