



An Investigation of the Influence of Social Media on Cybercrime among Undergraduates in Tertiary Institutions: A study of Federal Polytechnic, Ilaro

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Abstract

The widespread usage of social media in recent years has changed how people engage, communicate, and carry out different activities on the internet. Social media platforms provide a lot of advantages, such as networking possibilities, information sharing, and connection, but they also come with a lot of drawbacks, especially when it comes to cybercrime. Undergraduate students at postsecondary institutions are among the groups most impacted by this phenomenon. This statement attempts to explore the intricate connection between cybercrime and social media use in this population, stressing the causes, impacts, and proposed remedies to lessen its negative effects. The structured survey was divided into many sections to ensure the collection of dependable data from the participants. Throughout each segment, targeted inquiries were directed towards the chosen participants. The initial portion employed data analysis to assess the extent to which undergraduate students utilising social media platforms are vulnerable to cybercrime. The subsequent section examines the elements that often contribute to the behaviour of undergraduate students at Federal Polytechnic, Ilaro. A total of 400 students were selected as participants for this study.

Keywords: Cybercrime, Social media, Tertiary Institution, Undergraduates.

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Introduction

Cybercrime is a pervasive global occurrence. Calum (2014) suggests that as internet usage and accessibility increase, there is a higher likelihood of people using the internet for unlawful activities. This is due to the growing trend of storing public and private assets online instead of in physical form. Over two billion individuals globally use the internet, according to Javelin Strategy and Research in 2009. With the advancement of internet use and technology, hackers now have a wider range of targets to attack and more lucrative opportunities to exploit (Lance, 2019). According to Longe et al., (2019), Ghana, Nigeria, and Cameroon are among the top 10 nations globally in terms of cybercrime

production. Cybercrime in Ghana has emerged as a relatively recent occurrence (Warner, 2021).

As stated in a 2014 report published by the Centre for Strategic and International Studies [CSIS], cybercrime results in yearly economic losses of billions of dollars worldwide. Research data and several studies indicate that young individuals often engage in unethical behaviour during online contacts, leading to an increased risk of victimization for any internet user (McQuade, 2019). Cybercrime has been prevalent in Nigeria, especially among undergraduate students. Cybercrime, sometimes referred to as computer-related crime, involves the use of computers and networks. The possibility of a recession or economic crisis may tempt first-year

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students at tertiary institutions to engage in cybercrime. Certain cyber criminals utilise it as a powerful social instrument for enhancing oneself, amusement, education, and the quest for monetary profit (Igba et al., 2018).

Cybercrime is rampant among college students, and it's mostly due to pervasive poverty and rampant corruption. According to Akpan (2016), the increasing accessibility of hacking tools has led to a rise in students' desire to make money by becoming skilled hackers or starting profitable businesses. It has been reported that a significant number of Nigerian undergraduates are living in poverty, struggling to make ends meet with less than one thousand naira per day. To lay the groundwork for what's to come, a significant number of Nigerian undergraduate students have resorted to engaging in cybercrime. They seem uncertain about their post-graduation plans, according to a study conducted by Igba et al., in 2018. Cybercrime has become an unexpected and peculiar presence in our daily lives. The frequency and severity of disturbing cybercrimes have been steadily increasing over the past few years. (Okeshola & Adetola, 2013). In light of this context, this article examines the extent to which undergraduate students who use social media are vulnerable to cybercrime. It also explores the factors that commonly contribute to the involvement of Federal Polytechnic, Ilaro undergraduate students in cybercrime.

Conceptual Issues

Social Media

Social media is an application that allows users to converse and contact one another, claim Boateng & Amankwaa (2016). It is a virtual platform that people use for a variety of purposes, including interacting, communicating, exchanging information, and establishing and maintaining connections. With the use of social media, people may connect with others who share their interests in life or work, who share their background, who participate in similar activities, or who they know in real life. The term "social media" describes the idea and information

sharing that takes place over networks between people. Nevertheless, social media significantly relies on a range of electronic gadgets, including PCs, tablets, iPads, and Internet-based technologies, to enable interpersonal connection. Technology platforms that promote global social interaction, collaboration, and communication among people are referred to as social media.

Cybercrime

Cybercrime pertains to problems with computers and information technology, while crime is any action that violates the law, frequently carried out by people with malicious intent. Cybercrimes are actions deemed illegal that aim to harm the physical or mental health of specific individuals or organisations or tarnish their reputation. Modern telecommunication networks, including mobile phones, email, chat rooms, notice boards, and groups on the Internet, are used to carry out these crimes (Halder & Jaishankar, 2021). According to Završnik (2019), the definition of cybercrime is still unclear. Cybercrime is a common occurrence on a worldwide scale. Cybercrime is the term used to describe a variety of actions taken by individuals who have the purpose of compromising networks, stealing private information, documents, and bank account information from other people, and then move the money to their accounts. Because computers are becoming more and more essential in the fields of business, entertainment, and government, the importance of cybercrime—specifically, cybercrime over the Internet—has increased (Goni et al., 2022). It is illegal to use ICT for traditional criminal purposes or to carry out actions that jeopardise the safety of ICT's network and information.

Effect of Social Media on Cybercrime among Undergraduates

According to Suleiman (2019), Nigeria now ranks third worldwide in terms of cybercrime. African cultures, socialisation patterns, and social institutions have been significantly impacted by the introduction of information and communication technologies, particularly in regards to phone and the internet.

Internet fraud has proliferated in Nigerian culture, with undergraduate students taking the lead in cybercrime. The presence of bad guys at higher education institutions has introduced a novel dimension to the participation of college students in cybercrime. Consequently, a significant number of undergraduate students in Nigerian colleges have embraced cyber fraud as a way of life. While certain individuals have attained affluence, law enforcement agencies have detained other individuals (Tade & Aliyu, 2021). Certain academically gifted college students, motivated by their inquisitiveness and a need for entertainment, may unintentionally form connections with an unsuitable set of people. As a result, individuals may participate in activities that they consider to be innocent or playful, such as hacking or using others' online profiles without permission. Engaging in these actions, however, has the potential to subject individuals to legal consequences (Arasi & Praneetha, 2016).

The apprehension of joblessness has been recognised as a motivating factor for undergraduates' engagement in cybercrime. Undergraduates engaging in cybercrime may be using imaginative strategies to survive economic bankruptcy. Undergraduate students are enticed into engaging in cybercrime due to economic downturn or recession. According to Igba et al., (2018), undergraduates engage in cybercrime as a means of personal growth,

enjoyment, acquiring knowledge, and pursuing financial gain. Undergraduates may engage in illicit actions such as downloading unauthorized software, obtaining pirated data, and engaging in unauthorized intrusion and exploitation of other internet users' computers or even corporate systems. networks with the intention of spreading infections.

Methodology

The structured survey was divided into many sections to ensure the collection of dependable data from the participants. Throughout each segment, targeted inquiries were presented to the chosen participants. The initial portion employed data analysis to assess the extent to which undergraduate students utilising social media platforms are vulnerable to cybercrime. The subsequent section examines the factors often associated with undergraduate students at Federal Polytechnic, Ilaro. A total of 400 students were selected as participants for this study.

Data Presentation and Analysis

The primary objective of this session was to present and analyse the data that was gathered from the participants. The study was divided into many stages, which included a reliability test to evaluate the questionnaire's dependability and the responses received. Furthermore, it included the demographic profiles of the participants and the presentation of the results obtained from the study questionnaires.

Table 1: Reliability Statistics

Cronbach's Alpha	Number of Items
.907	16

The Table 1 displays the reliability statistics of the questionnaire utilised for the survey research. The Cronbach's alpha value of 0.907 exceeds the 70% criterion. This suggests that the questionnaire utilised

in the research study is quite dependable. Therefore, more analysis may be conducted on the outcome acquired from the field in order to further advance the research.

Table 2: Using Social Media Influence using Computers Illegally for Criminal Purposes



		Frequency	Percentage	Valid Percentage	Cumulative Percent
Valid	Strongly Agree	111	27.8	27.8	27.8
	Strongly Disagree	289	72.3	72.3	100
	Total	400	100	100	

The Table II shows the result that from the 400 respondents, 111 which represent 27.8 % strongly agreed that using social media influence using computers illegally for criminal purposes and 289

respondents representing 72.3 % Strongly disagree that using social media influence using computers illegally for criminal purposes.

Table 3: The Usage of Social Media Expose to Online Stalking

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	118	29.5	29.5	29.5
	Strongly Agree	282	70.5	70.5	100
	Total	400	100	100	

The Table 3 shows the result that from the 400 respondents, 118 which represent 29.5 % strongly disagreed that the using social media expose to online

stalking and 282 respondents representing 70.5 % strongly agree that the usage of social media expose to online stalking.

Table 4: Does the Surge in Criminal Activity Correlate with Internet Usage and Accessibility

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	113	28.3	28.3	28.3
	Strongly Agree	287	71.8	71.8	100
	Total	400	100	100	

The Table 4 shows the result that from the 400 respondents, 113 which represent 28.3 % strongly disagreed that the surge in criminal activity correlate with internet usage and accessibility and 287

respondents representing 71.8 % strongly agree the surge in criminal activity correlate with internet usage and accessibility.

Table 5: Does Students' Use of Social Media Expose them to Cybercrime Known as Yahoo Yahoo.

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
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Valid	Strongly Disagree	175	43.8	43.8	43.8
	Agree	48	12	12	55.8
	Strongly Agree	177	44.3	44.3	100
	Total	400	100	100	

The result of Table 5 shows that 175 respondents representing 43.8% strongly disagreed that student use of social media expose them to cybercrime known as yahoo yahoo, 48 respondents or 12%

Agreed while, 177 respondents or 44.3% Strongly Agree that student use of social media expose them to cybercrime known as yahoo yahoo.

Table 6: Does The ‘Get Rich Quick’ Mentality put Students at Risk for Cybercrime

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	166	41.5	41.5	41.5
	Strongly Agree	234	58.5	58.5	100
	Total	400	100	100	

The Table 6 shows the result that from the 400 respondents, 166 which represent 41.5 % strongly disagreed that get rich quick mentality put students at

a risk for cybercrime and 234 respondents representing 58.5 % strongly agree that get rich quick mentality put students at a risk for cybercrime.

Table 7: Are Popularity and Power on Campus Contribute as Factors Exposed Students to Cybercrime

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	131	32.8	32.8	32.8
	Strongly Agree	269	67.3	67.3	100
	Total	400	100	100	

The Table 7 shows the result that from the 400 respondents, 131 which represent 32.8 % strongly disagreed that popularity and power on campus contribute as factors exposed students to cybercrime

and 269 respondents representing 67.3 % strongly agree that popularity and power on campus contribute as factors exposed students to cybercrime.

Table 8: Parent’s Low Socioeconomic Standing Encourage Cybercrime



		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	114	28.5	28.5	28.5
	Strongly Agree	286	71.5	71.5	100
	Total	400	100	100	

The Table 8 shows the result that from the 400 respondents, 114 which represent 28.5 % strongly disagreed that parent’s low socioeconomic standing encourage cybercrime and 286 respondents representing 71.5 % strongly agree that parent low socioeconomic standing encourage cybercrime.

Table 9: Greed/ Avarice

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	131	32.8	32.8	32.8
	Agree	45	11.3	11.3	44
	Strongly Agree	224	56	56	100
	Total	400	100	100	

The Table 9 shows the result that from the 400 respondents, 131 which represent 32.85 % strongly disagreed that greed/Avarice leads to undergraduate students becoming involve in cybercrime, 45 respondents agreed and 224 respondents representing 56 % strongly agree that leads to undergraduate students becoming involve in cybercrime.

Table 10: Due to Frustration

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	110	27.5	27.5	27.5
	Strongly Agree	290	72.5	72.5	100
	Total	400	100	100	

The Table 10 shows the result that from the 400 respondents, 110 which represent 27.5 % strongly disagreed that frustration leads to undergraduate students becoming involved in cybercrime and 286 respondents representing 71.5 % strongly agree that frustration leads to undergraduate students becoming involve in cybercrime.



Table 11: Poverty

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	168	42	42	42
	Strongly Agree	232	58	58	100
	Total	400	100	100	

The Table 11 shows the result that from the 400 respondents, 168 which represent 42 % strongly disagreed that poverty leads to undergraduate students becoming involve in cybercrime and 232

respondents representing 58 % strongly agree that poverty leads to undergraduate students becoming involve in cybercrime.

Table 12: Absence of Parental Oversight

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	159	39.8	39.8	39.8
	Strongly Agree	241	60.3	60.3	100
	Total	400	100	100	

The Table 12 shows the result that from the 400 respondents, 159 which represent 39.8 % strongly disagreed that absence of parental oversight may leads to undergraduate students becoming involve in

cybercrime and 241 respondents representing 60.3 % strongly agree that parent low socioeconomic standing encourage cybercrime.

Table 13: Financial Situation of the Parents

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	165	41.3	41.3	41.3
	Strongly Agree	235	58.8	58.8	100
	Total	400	100	100	

The Table 13 shows the result that from the 400 respondents, 165 which represent 41.3 % strongly disagreed that financial situation of the parents may

leads to undergraduate students becoming involve in cybercrime and 235 respondents representing 58.8 % strongly agree that financial situation of the parent

may leads to undergraduate students becoming involve in cybercrime.

Table 14: Peer Pressure Influence

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	193	48.3	48.3	48.3
	Strongly Agree	207	51.8	51.8	100
	Total	400	100	100	

The Table 14 shows the result that from the 400 respondents, 193 which represent 48.3 % strongly disagreed that peer pressure influence may leads to undergraduate students becoming involve in

cybercrime and 207 respondents representing 51.8 % strongly agree that peer pressure influence may leads to undergraduate students becoming involve in cybercrime.

Table 15: Exposure to the Internet

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	149	37.3	37.3	37.3
	Strongly Agree	251	62.8	62.8	100
	Total	400	100	100	

The Table 15 shows the result that from the 400 respondents, 149 which represent 37.3 % strongly disagreed that exposure to the internet may leads to undergraduate students becoming involve in

cybercrime and 251 respondents representing 62.8 % strongly agree that exposure to the internet may leads to undergraduate students becoming involve in cybercrime.

Table 16: Inadequate Educational Framework

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	104	26	26	26
	Strongly Agree	296	74	74	100
	Total	400	100	100	

The Table 16 shows the result that from the 400 respondents, 104 which represent 26 % strongly disagreed that inadequate educational framework may leads to undergraduate students becoming

involve in cybercrime and 296 respondents representing 74 % strongly agree that inadequate educational framework may leads to undergraduate students becoming involve in cybercrime.

Table 17: Inability to Forecast how much Time is Spent Online

		Frequency	Percentage	Valid Percentage	Cumulative Percentage
Valid	Strongly Disagree	110	27.5	27.5	27.5
	Strongly Agree	290	72.5	72.5	100
	Total	400	100	100	

The Table 17 shows the result that from the 400 respondents, 110 which represent 27.5 % strongly disagreed that inability to forecast how much time is spent online may leads to undergraduate students becoming involve in cybercrime and 290 respondents

representing 72.5 % strongly agree that inability to forecast how much time is spent online may leads to undergraduate students becoming involve in cybercrime.

Table 18: Analysis of Variance

There is a great degree to which undergraduate students using social media are exposed to cybercrime

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	313.762	15	20.917	19.132	.000
Within Groups	419.828	384	1.093		
Total	733.590	399			

The Table 18 illustrates the result of the ANOVA and it indicates that there is a great degree to which undergraduate students using social media are expose to cybercrime with the f-statistics results of

19.132and the probability value shows that this relationship is significant at the P .000 level of significance.

Table 19: There is Significant Factors that Typically Lead to Undergraduate Students Becoming involved in Cybercrime

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	385.598	23	16.765	17.569	.000



Within Groups	358.792	376	.954
Total	744.390	399	

The Table 19 demonstrates the outcome of the ANOVA, revealing significant factors that contribute to undergraduate students engaging in cybercrime. This is supported by the F-statistics result of 17.569, indicating a meaningful relationship at 00.

Conclusion

The influence of social media on cybercrime among undergraduates in tertiary institutions is complex and multifaceted. Although social media platforms provide several advantages for communication and networking, they also pose substantial threats in terms of cyber security and online safety. To tackle these difficulties, a comprehensive strategy is needed that combines technology solutions, educational initiatives, and legislative measures. This will help reduce the dangers of cybercrime and encourage responsible online behaviour among undergraduate students. Further research is warranted to explore emerging trends, evolving threat landscapes, and effective strategies for combating cybercrimes facilitated by social media platforms in tertiary educational settings.

Recommendation

The below recommendations were proposed for future interventions regarding the influence of social media on cybercrime among undergraduate students at tertiary institutions.

- ❖ Institutions should implement comprehensive education and publicity initiatives aimed at enlightening students about the perils linked to social media and cybercrime. These campaigns should cover topics such as phishing scams, identity theft, online fraud, and the importance of maintaining privacy settings.
- ❖ School Management should integrate cyber security principles and practices into the academic curriculum across various

disciplines. This can facilitate the cultivation of a more profound comprehension among students. of cyber security issues and empower them become proactive in protecting themselves and others from cyber threats.

- ❖ School authority should foster a culture of research and innovation in cyber security within the institution by supporting student-led initiatives, research projects, and collaborations with industry partners. Encourage students to explore innovative solutions to cyber security challenges and develop practical tools and technologies to enhance digital security.
- ❖ There should be continuous evaluation on the effectiveness of cyber security measures and educational initiatives implemented within the institution. Solicit feedback from students, faculty, and staff members to identify areas for improvement and adapt strategies accordingly to stay ahead of evolving cyber threats.
- ❖ School authority should establish interdisciplinary task forces comprised of cyber security experts, educators, administrators, and students to develop and implement strategies for addressing cybercrime within the university community. These task forces can conduct regular risk assessments, monitor emerging threats, and recommend proactive measures to enhance cyber security posture

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