

# Cybercrime among University Undergraduates: Implications on their Academic Achievement

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## Abstract

Cybercrime or computer-related crime is a crime that involves the computer and the network. University Undergraduates are lured into cybercrime as a result of economic melt-down or recession. Those who go into cybercrime do so as a socio phenomenal which act as a tool for personal development, fun, knowledge and the quest for money making. The study is a survey research. The purpose of this study is to examine cybercrime among university undergraduates: implications on their academic achievement. A cross-sectional survey was conducted with students in the Faculty of Education, using an online questionnaire. The sample size for the study was 207 undergraduates in the faculty of Education. The results show among others that undergraduates perceive cybercrime as a tool for personal development. It was observed that much needed to be done to ensure, safe, secure, and trustworthy network environment. This implies that undergraduates should be made to imbibe value re-orientation in order to be more useful in life. The result should be an eye opener to both students and lecturers on the more positive ways of benefiting from the globalised world through internet services without necessarily abusing it.

**Keywords:** Cyber, Crime, Academic Achievement, University Undergraduates, Internet

## INTRODUCTION

Crime appears to be a permanent feature of modern society. Despite efforts of social workers, law enforcement agency, personal and criminal justice professionals to minimise it, the world is becoming a more terrible place. Where crimes such as homicide, kidnapping, robbery, assault, sex offences, child molestation, burglary, environmental crime, arson are crimes without a victim, economic crime, political crime and cybercrime are the order of the day. Cybercrime is defined as (i) computer-aided crime originating in the Nigeria internet domain space (ii) computer-aided crime perpetrated by Nigerians located outside the Nigerian internet domain space. In collaboration with Nigerians within the Nigerian internet domain space and crimes aimed at information and telecommunication technology (ICT), infrastructure in Nigeria, from any location [1].

The recent decision that the Federal Government of Nigeria to set up a working group, the Nigeria cybercrime working group (NCWG), is an indication that cybercrime, especially internet scam or crime is of concern and embarrassment [2].

## RELATED LITERATURE

According to a media report, a bill is prepared to deal specifically with the menace of cybercrime [2]. Technology provides us with the most significant benefits often exposes us to substantial risks [2]. With a little click of a button, one can share information with people and organisations all over the world. Unfortunately, as with more things, the more technologies are, the more damaging they can be when misused, or with malicious intent as in the case of the internet, the risk is to your privacy, your files, your identity and your precious bandwidth. Some of these cybercrimes include cyber terrorism, theft and fraudulent use of personal information-the cybercrime of the moment, desktop counterfeiting, chat rooms, credit card crimes, automated teller machine (ATM), and spoofing, open relay server. Pornography has contrary and hacking to mention but a few, all these impacts on university undergraduates. Greed is another devastating wind in Nigeria that leads people to criminal activities because many people want to get rich quickly by all means. Poor parenting has contributed to crime because some parents have nothing to offer regarding good morals. A child from such home learns whatever he/she likes outside the home from peer groups and such learning can be dangerous. 71% of Nigerian households are poor with the halving of this classified as core poor or very poor. About 77% of the urban and 68% of the rural family is considered poor. The Greater majority of the undergraduates are poor. The poverty level of the rural people affects the undergraduates negatively, and it leads to cybercrime [3]. The internet can influence education and national development, and this has motivated individuals, institutions and organisation to establish cyber café where people can readily access information from the internet [4]. Opportunities of this nature are bound in universities and other high institutions in Nigeria in consonance with the goals of tertiary education which among others include: to acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society. Greater percentages of the internet users are the youths [4] and there is a conflicting report of ICT competencies and usage by gender with the majority in favour of boys. However, some people use these skills negatively and abuse this application of knowledge and information diversity, leading to criminality or cybercrime. Cybercrime is any criminal activity that uses a computer either as an instrumentality, target or a means for perpetuating further crimes [5]. Expatriating further, an unlawful act whereby the computer is used either as a tool or target or both constitute

cybercrime as a target [6]. Criminals can physically damage or steal the computer system, internet time and even information contain in the electronic form, gain unauthorised access to computer system and computer networks among others. Specific computer crimes include financial fraud, theft of proprietary information, system penetration from the outside and unauthorised control/access over a computer system, possession of unofficial information, online gambling and transmission of viruses among others. Spam, absence or offensive content/pornography (primarily child pornography) and harassment through email equally constitute cybercrime [7]. These crimes listed might be committed against the individual, people's property, organisation and the society [8] and [6]. Report show that email scams emanating from Nigeria constituted 1.1% of the 2007 complaints received in internet crime complaint centre (IC3) in the united state alone [9]. Besides the amount of loss by an individual reporting fraud type monetary loss in 2007, puts Nigerian letter fraud at 6.4% amounting to \$1922.999 million. Regarding financial crimes, a report from the Central Bank of Nigeria (CBN) indicates that the bank sector lost 7.3billion to cyber financial crime in 2007. In February 2008, Spanish police arrested 10 Nigerian internet fraudsters for allegedly fleecing internet users of over \$28000 by making them believe they had won a lottery game. Some of these cyber criminals may have Emotionally Behaviourally Disordered (EBD). People with EBD are those undergraduates whose behaviour do not conform to the accepted standard and rules. The characteristics may manifest within the family group with early symptoms of lying, stealing, disobedient, verbal or physical aggression toward other family members [10].

The issue of cybercrime is a worrisome issue that is why many concerned authors have buttressed much on the situation, cybercrime as a pervasive occurrence that hides in the face of the development of every nation [11]. In a similar vein, in Nigeria today, cyber-crime has got its rootstock in the country. Identical to a cankerworm, it has eaten deep in the society [12]. Cyber-crime has come as a surprise and a strange phenomenon that for now lives with us in Nigeria [13]. With each passing day, the society is more and more alarming cases of cyber-crimes in Nigeria, amidst each new case more shocking than the one before. In defining cybercrime, there is the need to understand the split meaning of Cyber and Crime. The term "cyber" is a prefix used to express an idea as a component of the computer and Information age and Crime can be defined as any activity that contravenes legal procedure mostly completed by individuals with a criminal motive [14]. By synthesis of cyber and crime, cybercrime as a crime that is perpetrated toward individuals or groups of individuals with a criminal motive to deliberately harm the reputation of the victim or cause substantial or mental harm to the victim directly or obliquely [14]. Using modern telecommunication networks, such as the Internet for instance: (Chat rooms, emails, notice boards groups) and mobile phones. Also, cybercrime as crimes carried out with the aid of a computer system [15]. In the same vein, cyber-crime as criminal ventures, involving information technology infrastructure, includes unauthorized access to computer data from or within a computer [16]. With the above descriptions of cybercrime, in this study, cybercrime could be defined as crimes

committed with the aid of ICT enabled tools and channels.

Although the association of ICT to cybercrime does not necessarily mean that ICT is accustomed to cybercrime, it is a description of the conscious will of cybercriminal; i.e., how cybercriminals perceive the importance of ICT. It based on this note that ICT as a tool could facilitate academic development and improve the standard of living among Nigerian undergraduates and in particular, undergraduates in Faculty of Education, Ebonyi State University [17]. Also, opined that the services of cybercafé to undergraduate present's useful educational materials for research and economic knowledge are brought closer to users through reducing unnecessary tension and making work easy to accomplish at a very much reduced time and cost [18]. Also, the internet provides an interface to remote data and serves as a common meeting place for people [19]. In the context of education, it brings the world of education closer to educators and researchers and serves a melting pot of ideas. Outside of education, the internet becomes a marketplace for users as the business are transacted in the net, contracts are being sorted for, and even employment opportunities are found. In the present day, admissions and scholarship into colleges and universities are quickly facilitated in the net. Correspondences are changing hands as the interaction between/among people who have never met before interacting on the net [20]. More interesting is the fact that it opens up a social contact for people of the corresponding and different ages, sexes and presents solutions to nagging predicaments that could have taken so many years to resolve if the net services were not accessible [18]. Thus to be cut off from internet facilities is a bad signal of being cut off from progress and development.

Surprisingly, in the present time, the importance of ICT has taken a different perception among undergraduate in particular Department of Arts And Social Science Education at Ebonyi state university. This opinion has been put into practice through the use of the internet to defraud people. This is known as internet cyber-crime. The internet currently serves as a hiding place for undergraduate fraudsters who have solely moved from the streets to an electronic platform [16]. Cyber-crime; popularly called "YAHOO" is an off-shoot of advance fee fraud which became popular in the early 90s. That is why today, it has produced "YAHOO" as its first offspring with mostly undergraduates particularly the University Undergraduates of Ebonyi State University) as its practitioners [18]. "YAHOOISM" is an act of cyber-crime that defrauds unsuspecting victims in foreign countries of their hard-earned money. In some instance, this group of cyber-crime perpetrators sends a fake cheque or postal money orders to their victims [21]. He further notes that when the cheque or money orders are cashed, the victim is told to give the money through Western Union or Money transfer in Nigeria, while in other cases, the victim is said to send the money to another country where the yahooist has built networks over time. Among different ways of perpetuating cybercrime include but not limited to the following: Hacking, Software Piracy, Cyber Terrorism, Drug, Trafficking Deals, Malware, Cyber Stalking, Spam, Logic Bombs, and Password Sniffing.

However, it is undeniable that specific factors are responsible

for University undergraduate at Ebonyi state university to indulge in cybercrime. Such factors have been buttressed to include: Greed, Peer pressure, and poverty. Also, the fear of unemployment has triggered in the practice of cybercrime among the Nigerian undergraduates [22]. Nigeria undergraduate seems to have developed the spirit of the fear of the future in that make them think of a fast way of breaking through financial bounds when they have graduated. To this effect, they negatively indulge in sharp practices of cybercrime to be able to meet up with their life expectancies [23]. The implication of such practice is not far-fetched. As predicted that shortly, the nation whose youth as the leaders of tomorrow have in them a flow of cybercrime, it is no reasonable doubt that such a country is bound to fail. Further, the implication of cybercrime indulgence leads to school dropout, hooliganism, armed robbery, toggeries among others [23]. To this situation, the paramount classification of yahooism as a branch of cyber-crime and transitional crime is not only expedient in understanding its mystery but propounding a lasting solution when considering reducing the menace of cybercrime among University undergraduate in Ebonyi state university [21]. For Nigeria, a nation in the process of saving her face regarding cyber-crimes, efforts should be directed at the sources and channels through which cyber-crimes are being perpetrated the most. This effort should be demonstrated in the formulation of Cybercrime Act with the objective to provide an efficient and unified legal, regulatory and institutional framework. For the prohibition, prevention, detection, prosecution and punishment of cybercrimes in Nigeria; ensure the protection of critical national information infrastructure, and promote cybersecurity and the security of computer systems and networks [24]. Electronic communications, data and computer programs, intellectual property and privacy rights enhance the need for this study of cybercrime among undergraduates.

### **Reasons for getting involved in cybercrime by undergraduates**

When the internet was developed, the founding fathers of internet hardly had any inclination that internet could be misused for criminal activities. Today, there are many disturbing things happening in the cyberspace [25]. However, scholars have attributed the causes of cybercrime in the world to the following: that the causes of cybercrime include unemployment, negative role model, lack of adequate policing facilities and social gratification [26]. According to him, all these reasons serve to facilitate cybercrime in most of the world. The widespread of corruption, harsh economic climate, high underemployment, disregard for the rule of law, lack of transparency and accountability in governance are the main causes of cybercrime in most countries of the world [26]. Cybercrime could be associated with two causes which are the primary and secondary. The primary causes include the prevalence of poverty and weak educational system [27]. The secondary cause can be trace to greed, corruption and get rich quick syndrome. The high level of corruption and the spread of poverty is seen as the main cause of cybercrime in Nigeria among university undergraduates [28]. Most Nigeria undergraduate is said to be living below the poverty line

(below \$1 (#360.50) per day). Over 5 million Nigerian university undergraduate have no hope of what to do when they graduate from the university. Hence they resort to cybercrime as a means of paving ways for tomorrow [29].

### **Problems associated with cybercrime**

Life is a mix of good and bad. So is the internet despite its advantages, the internet has its dark side. Cybercrime is not without cost and these cost increase daily. Cybercrime manifest in various ways such as loss of life, loss of dignity and loss of employment. The impact of cybercrime is not only limited to the victim; it spreads its impact on the society. The consequences of cybercrime on the economy to include loss of revenue, wasted time, damaged the reputation and reduced productivity among others [30].

### **Loss of Revenue**

One of the main effects of cybercrime on an economy is the loss of revenue. For example in financial institutions or multinational co-operations, loss of revenue can be caused by an outside party who obtain sensitive financial information and uses it to withdraw funds from the account of such an institution. Cybercrime can occur when a business' e-commerce site become compromise while inoperable, valuable income is lost when consumers are unable to use the site.

### **Damaged Reputation**

In cases where customers records are compromised by a security breach associated with cybercrime, a company's reputation can take a major hit. Customers whose credit card or other financial data become intercepted by hackers or other infiltrators lose confidence in such an organisation and often begin taking their business elsewhere. Due to these problems, foreign investors often consider Nigeria as an unattractive market, and it has a detrimental impact on Nigeria citizenry when they travel outside to do business.

### **Reduce productivity**

Due to the measures that many companies must implement to counteract cybercrime, there is often a negative effect on employee productivity. This is because, due to security measures, employees must enter more passwords and perform other time-consuming acts in other to do their jobs. Every second wasted performing this task is a second not spent working productively. The impact of cybercrime already has a detrimental influence on Nigerian Citizenry/Economy. Global anti-corruption body, such as Transparency International has listed Nigeria as one of the most corrupt countries in the world [31]. Private companies around the world are beginning to take steps geared to blocking email traffic originating from Nigeria. Nigerian financial instruments are now accepted with extreme due to diligence around the world and some international banks have completely denied access to their

website if the traffic originates from Nigeria.

### Cybercrime Prevention Strategies

Precautious preventive attitude towards the cybercrimes or cyber threats cannot be overemphasised. If the students are aware of these cybercrimes without the corresponding precaution, then something is wrong. In fact, it is necessary to raise awareness of cybercrime and to minimise its effects by ensuring that all computing students have a wide and current knowledge [32]. It is then hoped that these would ensure that not only the student but also their friends, associates and future employers would also gain from this knowledge as this will help them to protect their computer system from future cyber attacks. Also some measures towards cybercrime such as public key infrastructure, intrusion detectors, and prevention through firewalls, anti-virus, anti-spam and anti-spyware [33]. Measures against e-fraud are a horrendous task. The public can contribute in reducing cybercrime by reporting any person seen engaging in cybercrime to the law enforcement agent and the law enforcement agent should also help by allowing the law to take control in respect of the person's position in the society. Empowering the youths is another strategy that will help in reducing cybercrime in the society.

Furthermore, the Federal government should regularise engagement with industrial Training companies to develop strategies that can prevent and reduce cybercrime by making laws through the federal lawmakers (Senate) to terminate an undergraduate admission that is caught engaging in any form of cybercrime. The implementation of this law will put fears to all students in Nigeria and also make parents give reasonable advice to their children not to engage in any form of cybercrime.

### Theoretical underpinning of cybercrime

Cybercrime and criminological theory on the role of computers and internet as an interestingly pivoted function in daily life, making it virtually essential to understand the dynamics of cybercrime and those victimised by it [34]. The anthology cybercrime and criminology theory: first readings on hacking, piracy, theft, and harassment explore the predators for participation in various forms of cybercrime and deviance, from common problems like media piracy to more distinct offences such as computer hacking. Most criminological theories were developed to account for street crimes, so it is unclear how these methods may apply to virtual offending. This approach provides critical insight into the utility of multiple theories to account for cybercrime. Cybercrime and criminological theory give direct insights into the rates and prevalence of cybercrime offences using sets of data from population across the globe. It offers readers a basic understanding of, and appreciation for various forms of cybercrime and outlines prospective predator of both offending and victimisation. This theory is relevant to this study because it has revealed that computers and internet are used to commit fraud, which they use to hack to do piracy, theft, and harassment to individual and banks. It is also

necessary to note that student use handsets to commit examination malpractices. This theory can be applied because it will help to address the issue of crimes at various levels ranging from community and socialisation influence theories. Theoretical explanations of a crime are essential for several reasons. Not only do they help society to know how and why crime occurs but they can also be useful in helping to prognosticate future criminal behaviour. Theories of crime are also of help in attempting to prepare successful rehabilitative interventions for offenders as well as developing crime blocking strategies that have the best chance of success in a giving society

Differential association theory was propounded by [35]. He coined the phrase (differential association) to address the issue of how people learn deviance. This theory explains deviance regarding the individual social relationships. The theory sees the environment as playing a major role in deciding which norms people learn to violate. Specifically, people within a particular reference group provide norms of conformity and deviance. This theory is significant because it puts an individual social environment into context as a means to explain why some individual engage in criminal behaviour. The theory has the following assumptions, which is related to this study;

1. Criminal behaviour is learned: this means that criminal behaviour is not inherited as such the person who is not already trained in crime does not invent criminal behaviour. This assumption proposes that individuals are inherently good and only turn towards deviant behaviour as a result of learning the behaviour.
2. Criminal behaviour is learned in interaction with other persons in the process of communication. An individual is influenced to participate in criminal behaviour through watching and interacting with other individuals who are engaging in the criminal behaviour [35].
3. The principal part of the learning of criminal behaviour occurs within intimate personal groups this would be any group that has a significant influence over them such as their family or close friends this factor makes a great deal of sense. Since the process of socialisation and growing up is heavily influenced by the groups of people that an individual is a part of. Most families try to institute a positive influence on a member of their own, however, if a juvenile comes from a family that is broken and develop strong emotional ties with friends engaged in deviant behaviour then this is likely also to drive them into the same deviant behaviour.
4. When criminal behaviour is learnt, the learning includes techniques of committing the crime, which is sometimes very complicated, sometimes simple and they learn the specific direction of motives, drives, rationalisations and attitudes for committing a crime. This means that an individual will be influenced into believing that the behaviour which they may have previously believed was wrong, into believing that it is right through rationalisation of the actions. For example, an individual from a disadvantaged background may rationalise cybercrime as taking from those who have wealth to make things fair, among others.

This theory was propounded to help explain white-collar crime, fits in with those who violate or commit cybercrime.

### **Statement of the Problem**

The contribution of the internet to the academic development of among Nigerian undergraduate has been marred by the conscious evolution of new waves of crime. The internet has also become an environment where the most productive and safest offence thrives. Cyber-crime has come as a surprise and a strange appearance that for now lives with us in Nigeria. With each passing day, we observe more and more alarming cases of cyber-crimes is perpetrated by Nigerian undergraduate, with each new case more shocking than the one before [36]. It has become a stubborn mouth sore which causes us a lot of pain and shame because criminally minded undergraduates in Ebonyi state university are stealing and committing all sorts of academic and economic atrocities through the aid of the internet online contact and transactions. In most cases, various forms of crimes are being witnessed ranging from exam negligence's, falsification of admission, rape, robbery and stealing, sexual molestation, onslaught, cultism amongst others [36]. With this ugly happening, the face of the department and the institution at large has suffered a lot of setbacks in their academics pursuit.

The above circumstance and statement show that it is only necessary to research the cyber-crime among undergraduate of University.

### **Purpose of the Study**

The primary purpose of the study was to investigate cyber-crime among University undergraduate at Ebonyi State University. Specifically, the study sought to:

1. Determine factors responsible for University Undergraduates indulgence in cybercrime.
2. Find out the consequences of cyber-crime on university undergraduates academic achievement.
3. Identify strategies for reducing cyber-crime among University Undergraduates

### **Research Questions**

The following questions guided the study:

1. What are the factors responsible for cyber-crime among University Undergraduates?
2. What are the consequences of cyber-crime on University Undergraduates academic achievement?
3. What are the possible solutions for reducing cyber-crime among University undergraduates?

## **RESEARCH METHOD**

### **Research Design**

Descriptive survey research design was used for this study. [37] Describe survey research as research that involves the

collection of data from a sample that has been chosen to represent a population to which the findings of the data analysis can be generalised. That is why survey design was considered appropriate for the study.

### **Area of the study**

The study was carried out in Faculty of Education[ FEDU], Ebonyi State University ,Abakaliki. Faculty of Education was established in 1999.The Faculty have 7 Departments as:Arts And Social Science Education, Business Education, Educational Foundations, Home Economics, Human Kinetics, Science Education and Technology And Vocational Education. FEDU as a Faculty is divided into seven Departments for administrative conveniences.

### **Population of the study**

The population for the survey constituted of all the 891 undergraduates in FEDU, Ebonyi State universities, Abakaliki.

### **Sample and sampling techniques**

The sample of the study comprised of 350 respondents. Purposeful sampling technique was used to select 50 undergraduates from each of the 7 departments chosen for the study for equal representation.

### **Instrument for the Data Collection**

The instrument used for data collection is a researcher structured questionnaire. The instrument is composed of three sections response patterns. Section A \_ 10,B 9 and C 5 questionnaire items to address the research questions. They were presented in a modified four-point rating scale thus: Strongly Agree (SA) = 4 points, Agree (A) = 3 points, Disagree (D) = 2 points and Strongly Disagree (SD) = 1 point.

### **Validation of the Instrument**

The instrument was vetted for face and content validity by three experts, Arts and Social Science Education, one from educational administration and planning and one from Home Economics all from Faculty of Education, Ebonyi State University, Abakaliki.

### **Reliability of the Instrument**

In determining the reliability of the instrument, 40 copies were administered to 40 undergraduates from another university that was not used for the study. Split-half test method was used, and scores were computed using Cronbach alpha. The result gave a reliability coefficient of 0.88 which was high enough to consider the instrument suitable for the study.

**Method of Data Collection**

The questionnaire was administered to the respondents by the researcher through the assistance of the course representatives who were properly educated on the instrument.

**Method of Data Analysis**

The data collected were analysed using the mean ( $\bar{x}$ ) scores of each questionnaire item. Decision rule regarding disagreeing,

agreeing an item was based on a mean range of 0 – 2.49 as disagree and mean range of 2.5 – 4.0 as agree.

**RESULTS**

Research question 1: What are the factors responsible for cyber-crime among University Undergraduates?

**Table 1:** mean responses on factors responsible for cybercrime among University undergraduates in Ebonyi state

Item No.	Factors responsible for cybercrime	X	SD	Decision
1	Level of internet literacy and greed	3.04	1.32	Accepted
2	The fear of unemployment has been identified as a push factor for undergraduates involvement in cybercrime	2.92	1.03	Accepted
3	University undergraduates see internet fraud as creative thinking	3.01	1.2	Accepted
4	Most students now concentrate on how to make money than focusing on their academics	3.01	1.24	Accepted
5	University undergraduates see internet fraud as a place to deploy their knowledge	2.95	1.6	Accepted
6	Respect for attachment to wealth	3.04	1.32	Accepted
7	Cybercrime is viewed as social exposure	2.95	1.6	Accepted
8	Shameful acts are celebrated while success is defamed	3.01	1.2	Accepted
9	Instant wealth is equated with smartness	3.01	1.2	Accepted
10	Attitude of leaders towards wealth	2.92	1.6	Accepted

**Grand mean  $\bar{x}$  = 2.98**

Table 1 indicates that items 1-10 are with the mean scores of 3.04, 2.92, 3.01, 3.01, 2.95, 3.04, 2.95, 3.01, 3.01 and 2.92 respectively. The results show that the items 1-10 are the factors responsible for cybercrime among University undergraduates in Ebonyi state university.

**Research Question 2:** What are the consequences of cyber-crime on University Undergraduates academic achievement?

**Table 2:** mean responses on the consequences of cybercrime on the individuals and the society

Item no	The consequences of cybercrime to the society	X	SD	Decision
11	Exploitation of children and trafficking in human beings (cyber bullying)	2.93	0.9	Accepted
12	crime has emerged as a significant contributor to the economic meltdown	3.14	1.5	Accepted
13	Cybercrime victims are often traumatised and deeply suspicious of the modern life and other trappings of modern life	2.09	1.8	Rejected
14	Cybercriminals often take advantage of technologically unsophisticated individuals	2.9	1.00	Accepted
15	The economic impact of cybercrime is beyond dispute	3.0	1.23	Accepted
16	Reduces the competitive edge of organization	3.01	0.4	Accepted
17	Time wastage and slow financial growth	2.8	1.00	Accepted
18	Defamation of image of nations	3.10	1.24	Accepted
19	Slow productivity, time and add to overhead cost	3.51	1.15	Accepted

**Grand mean  $\bar{x}$  = 2.94**

Table 2 indicates that; items 11, 12, 14, 15, 16, 17, 18 and 19 have the mean scores 2.93, 3.14, 2.9, 3.0, 3.01, 2.8, 3.10 and 3.51 respectively. The result shows that items 11, 12 and 14-19 have mean scores above 2.5 which is regarded as the accepted mean, while item 13 was rejected because it scored less than 2.5. The implication is that; items 11, 12, and 14-19

are the consequences of cybercrime on undergraduate academic achievement.

**Research Question 3:** What are the possible solutions for reducing cyber-crime among University undergraduates?

**Table 3:** mean responses on the possible strategies that could be employed to reduce cybercrime.

Item no	Possible strategies for reducing cybercrime	X	SD	Decision
20	Fighting cybercrime among University undergraduates requires a holistic approach	2.85	0.79	Accepted
21	There is need to involve raising penalties and increasing the seriousness of re-offences	3.01	1.25	Accepted
22	The cases of crime should be attacked by closing down cybercrime	1.83	2.04	Rejected
23	University undergraduates should be educated on the proper use of cyber and internet	3.45	2.09	Accepted
24	Recreation activities should be created among University undergraduates to occupy their time.	3.5	2.1	Accepted

**Grand mean  $\bar{x}$  = 2.93**

Table 3 indicates that; items 20, 21, 22, 23 and 24 have the mean scores 2.85, 3.01, 1.83, 3.45 and 3.5 respectively. The results show that items 20, 21, 23 and 24 were accepted for scoring the average mean above 2.5 which is the accepted mean score, while item 22 was rejected because it scored less than 2.5. This implies that; items 20, 21 and 23-24 are the possible strategies that could be used to reduce cybercrime among University undergraduates in Ebonyi state university.

**SUMMARY OF MAJOR FINDINGS**

From the analysed data, the review is as follows:

1. The respondents accepted that the fear of unemployment had been the identity as a push factor for University undergraduates' involvement in cybercrime.
2. The accepted that Exploitation of children and human beings and also the economic impact of cybercrime is beyond dispute.
3. The respondents also accepted that the possible strategies that could be employed to reduce the menace of cybercrime among University undergraduates involve the need to raise penalties and to increase the seriousness of offenders.

**DISCUSSION**

Research Question 1: What are the factors responsible for cyber-crime among University Undergraduates?

Table 1 shows that items 1,2,3,4,5,6,7,8,9 and 10 are the level of internet literacy and greed, the fear of unemployment, the spirit of creative thinking, the quest for money making and a place to deploy their knowledge. Since the government cannot employ them, are the factors responsible for the perpetuation of cybercrime among University undergraduates at Ebonyi state university? The acceptance of these items was based on their mean responses which were; 3.04, 2.92, 3.01, 3.01, 2.95, 3.04, 2.95, 3.01, 3.01 and 2.92. All these findings were in line with the statement that cybercrime will be a significant source of employment and survival, especially among the youth who are drawn by technological advancement with the increased rate of unemployment in the country. He further noted that Nigeria society is ill-equipped to tackle online criminals [39].

Research Question 2: What are the consequences of cyber-crime on University Undergraduates academic achievement?

The analysis of data in table 2 showed that the respondents in items 11, 12, and 14-19 were accepted as the consequences of cybercrime. Exploitation of children and human trafficking, economic meltdown, traumatising of victims, taking advantage of inexperienced individuals and dispute are the implications of cybercrime to the individuals and the society. This was confirmed by the mean scores of 2.93, 3.14, 2.09, 2.9, 3.0, 3.01, 2.8, 3.10 and 3.51 respectively. Since each of the men scores is up to 2.5 and above, it was therefore accepted the above mentioned are the critical implications of cybercrime to the individuals and the society. The findings are in line with the view that, many of the online fraudsters

get access to the internet without leaving home; the deviant sub-culture is capable of derailing the economy of the nation [40]. The implication of cybercrime to the economy thus: Reduction of the Competitive Edge of Organizations, Time wastage and slows financial growth, Slows production time and add to the overhead cost, and defamation of the image. In table 3, it was revealed that the respondent in item 13 rejected that cybercrime victims are not often traumatised and deeply suspicious of the internet and other trappings of modern life [40]. This rejection is evident in the mean score of 2.09.

Research Question 3 What is the possible solutions for reducing cyber-crime among University undergraduates?

The data collected and its analysis as shown in table 3 of the previous chapter shows that items 20, 21, 23, and 24 were accepted as the possible strategies that could be applied to reduce the menace of cybercrime among University undergraduates in Ebonyi state university. The acceptance of these items is based on their responses which were 2.85, 3.01, 3.45 and 3.5 respectively. The mean scores of the items were above 2.5 which is the accepted mean. The result of the study indicated that the possible strategies that could be employed to reduce the menace of cybercrime among University undergraduates could be seen in items 16, 17, 19 and 20. The conclusions of the study were in line with the suggestions that, Telecommunication Regulatory Agencies should improve security on internet service providers' server in other to detect and trace cybercrime and creating of job opportunities for the teeming unemployed youths will go a long way in minimising the menace [41].

## CONCLUSION

Taking cognisance of the nature and effects of cybercrime among undergraduates in Ebonyi State University, there will always be new and unexpected challenges to stay ahead of cyber criminals and cyber terrorists, but we can only do this successfully by partnership and collaboration of both individuals and government. There is much we can do to ensure a safe, secure and trust worth computing environment. It is crucial not only to our general sense of wellbeing but also, to our national security and economy. The remarkable development in human history through computer technology has no doubt brought transformation in all aspects of life, especially in communication and information technology. Nevertheless, the embracement of the internet has come with a lot of mixed feelings despite its numerous advantages to the undergraduate in Ebonyi State University, and people are valued regarding what they possess and command economically. Conversely, those without economic success are undervalued, and the pressure to achieve success is intensified despite the harsh financial condition such as unemployment amongst others. This necessitated the ability of individuals to devise survival strategies and attain economic success by indulging in cybercrime. The perpetrators of cybercrime are not far-fetched; they are our brothers, friends, colleague, distant relatives and neighbours who can be tamed under appropriate circumstances with the right and positive communication, orientation, education, and empowerment.

## Recommendations

Based on the conclusions, the following recommendations were made:

1. Individuals should observe simple rules, individuals on their part should ensure proper anti-malware protection on their computer system, and individual should be encouraged to avoid pirate software, never to share their Identification Number (PIN), bank account, email access code to unknown persons.
2. University undergraduates should be educated on the proper use of cyber and internet.
3. University undergraduates should see cybercrime as a severe offence that destroys individual and the society at large and not as fun.
4. University undergraduates should stop making use of technology to the committee or facilitate the commission of traditional crimes.

## Educational Implications

Cybercrime among undergraduates will play a negative role in Education if not be controlled in the following ways:

1. Low Integrity to Education: following the work on the need to appraise the net balance of functional consequences of the phenomenon instead of the postulate universal functionalism, permit me to say that cybercrime is dysfunctional in it's entirely, and will bring low integrity to the Educational sector if not been controlled [21].
2. Absenteeism of Check and balances: the educational institution must be adequately monitored while appraising the character of the lectures and teachers and the content of the curriculum being taught.
3. All schools should return to the teaching of morals to empower all students with the spirit of steward while the lecturers live an exemplary life, reflecting truth, kindness, dignity of labour and integrity.
4. With all hands on deck, the negative impact of cybercrime in the Educational sector will be changed for good in line with the following statements:
  - Its trial Translates into Gladness
  - Its grief Transforms into Gladness
  - Its shame Transcends into Fame and
  - Its test travails into Testimony [42].

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