



NEGATIVE EFFECTS OF INTERNET AND MOBILE PHONE MISUSE AND MITIGATIONS IN THE GLOBALIZATION ERA: THE NIGERIAN PERSPECTIVE

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ABSTRACT

As mobile computing grows more pervasive, their use in information communication, research, entertainment and socialization becomes even more widespread and phenomenal. Though the benefits we have gained from internet and mobile technology advancements is glaring, the soaring incidences of abuse and misuse over the years is causing more chaos in an already disturbed world. The purpose of this study was to present a preliminary survey of the consequences of internet and mobile phone misuse on Nigerian adolescents and guidance on how the risks might be moderated. Social media and social networking are very unlikely to disappear any time soon. So, self-awareness is created here as a pre-requisite to solving these harmful aspects of their overuse. The study only serves as a reference guide to Information Technology professionals, entrepreneur, or the general audience.

Keywords: *Internet Misuse, Mobile Phone Misuse, Mental Health, Addictive Internet Use, Social Media.*

INTRODUCTION

Mobile computing has in recent times expanded to encompass the social sciences, human-computer interaction, industrial design and user experience. This convergence opens up great potentials for synergy among social networking sites (SNS) and mobile social software (MOSOSO) for interpersonal or group communication anytime and anywhere. Social media, on its own, has grown into worldwide networking system and people use it to create, share or exchange information, ideas, videos, pictures and links in virtual communities and networks. Mobile computing devices (tablets, iphones, pocket computers, laptops, ipads and mobile phones) that support internet has facilitated access to social media network sites any time anywhere. We can now communicate with our loved ones and friends at all times irrespective of geographical

location, colour, race, creed, linguistic or cultural divides. Social media is now the most popular online activity. Its rapid adoption is exemplified by now familiar sites: FaceBook, Twitter and Linkeldin. Social media is a term used to define any form of online interaction that allows for the highly scalable publication of user-generated content of any kind (text, audio, video, images) that is meant for general public consumption and uses interactive dialogue with others (BITS, 2011). The use of internet and mobile technology has shrunk the world to palm size and has led to the creation of 'Always-on' '24/7/365' society. Applications like FaceBook, WhatsApp, Twitter, Instagram and Google allow people to talk to each other by joining chat groups and sharing pictures, texts, videos and other things based on common interests. As its use continues to rise, social critics have worried about our apparent inability to disconnect.

But in spite of the popularity of Internet use as a social media interaction tool worldwide, problematic or addictive use cases especially among children and teenagers (16 to 23 years age group who are the heavy users/adopters of the technology) has become an issue of concern for a growing number of researchers and institutions over the past years (Naomi S. Baron, 2011). It is established that "excessive internet use may instigate potential adverse effects upon the psychosocial development of adolescents" (Jason Clement, 2020). Are all active internet and mobile phone users around the world aware of the harmful aspects of their uncontrollable use of mobile technology and the strategies to moderate the risks? Is your organization equipped with adequate knowledge on the use of technology in this digital era? In the preceding sections of this study, we shall identify the excesses of internet and mobile phone use and methods of curbing them in order to prevent the spread of these social problems.

Menace of Internet and Mobile Phone Misuse

The excessive internet and mobile phone use have been associated with a plethora of adverse psychological and mental health conditions which affect both the users and the entire public. These are characterized by the following risk factors:

1. Isolation from normal daily living/social isolation

This is characterized by a lack of contact with other people in the workplace, with friends/colleagues and in social activities. We isolate ourselves by walking around in our little (virtual) world, listening to our

ipods or staring at the screen of the latest mobile device even when we are around other people. In that way, face-to-face meetings and real one-to-one daily interaction is replaced with impersonal communication. Studies have shown that people who are socially isolated tend to be lonelier, will live shorter lives and have impaired communication skills. "From babies to the elderly, psychosocial embedding in interpersonal relationships is critical for survival", says Danilo Bzdok (Georgious Kormas *et al*, 2008).

2. Addiction

Many people cannot stay without being connected on social media sites. People, especially teenagers and students, now FaceBook or WhatsApp in lecture halls, church, mosque, on the road and practically any where they find themselves without control. Internet addiction is conceptualized as an individual's inability to control his/her use of the internet, thus causing marked distress and/or functional impairment (Georgious Kormas *et al*, 2008). As adolescents allocate ever-increasing time periods for internet and mobile phone use, the risk of developing addictive internet and mobile phone use is inherent (Georgious Kormas *et al*, 2008). This may compound pre-existing behavioural and social maladjustments present among adolescents (Mehment Sahin, 2014).

Not only does addictive tendencies stimulate symptoms of depression, it has also made some people to Facbeook, WhatsApp or talk on the phone while driving; resulting to an increased risk of road accidents sometimes. The American College of Emergency Physicians Foundation (n.d.) had expressed concern over rising number of emergency room cases involving mobile phone users who walked into lampposts, tripped on sidewalks, or entered the street into oncoming traffic (Websense TRITON, 2013). This was the reason why GSM was nicknamed "General State of Madness" in Nigeria.

Addiction leads to distraction, time wastage and having difficulty completing task at work or home. Sometimes we stay online more than we intended to stay. A few minutes will turn to a few hours. Laundry piles up and little food in the house for dinner because you have been busy online and you forget to do those things!

3. Cyber crimes

Numerous cyber crimes are on the increase daily through the use of social networking sites. Some of the most horrific crimes against humanity which criminals perpetrate through the internet and mobile phone are:

- (a) **Identity theft** – Private information, such as bank details, company document, etc., can be compromised through profiling and studying people or company's information. Notwithstanding the tight security settings, downloading and copying your personal information, pictures, videos and status can be easily done with a few clicks. In this way, disgruntled elements can steal corporate assets, company logos and trademarked material; and leak commercially sensitive information of employers to unauthorized parties.
- (b) **Fake profiles** – Cyber fraudsters create a social media profile using the identity details like name, address, mail id, photograph, etc. of victims, without their knowledge. By claiming to be someone they are not, unsuspecting people fall victims to online scamming, trolling, mockery/shaming, physical threats, bullying, harassment and even genocide. They also use the public medium, e.g. twitter, for sedition against public officers.
- (c) **Data hacking** – Users of FaceBook hack the id of different people and exploit them.
- (d) **Uploading false and misleading information** – Pictures and videos on social media web sites have been photo shopped and used to abuse and tarnish images by creating illusive and false impressions about company products and services or even personal lives.
- (e) **Launching spam and virus attacks** – Viruses and malicious code have been launched through the web. Just by clicking a web link and downloading a little file, some piece of malware can find its way onto an individual's machine; and from there it gets into all the machines on a network. According to Websense 2013 security report, 85 percent of malicious sites were found on legitimate web hosts (Websense TRITON, 2013).

4. Exposure to illegal, immoral and offensive content

Many people post and share photos and videos that contain violence and pornographic images on social media. Children and teenagers are peer

pressured into viewership of these offensive images which can damage their behaviour and expose them to even greater risks. Quite a good number of frequent users utilize internet for accessing sexual information. This is a significant predictor of increased (continued) decay of moral values (moral decadence) in the globalization era (Mehment Sahin, 2014).

When looking at young people's use of internet and mobile phones, it is important to consider the social development teenagers and young adults are experiencing. Friendship are being initiated, developed and broken; membership in a social clique may become significant; romantic ties may emerge; and relationship with family members may shift. Calls may be screened (e.g. using caller ID to ignore calls from mum, and downloading applications that automatically tell certain people "The number you have called is not available – when, in fact, it is!), etc. Young people do not see mobile phone as simply an instrument for conveying information, but as a lifeline for managing social interaction.

5. Lack of Privacy

The internet has stripped the world of privacy. The days of having an unlisted telephone number and staying offline to keep your information safe from prying eyes have long gone. With a few flicks on a keyboard, the average person can find anyone's address and contact information. For people with more sinister intentions, the use of phishing, viruses and hacking helps to find any information they wish to obtain. When people feel relaxed and are "always connected", they tend to lower their guard. They do not think twice about 'tweeting' every move they make; freely giving out their location and their entire life story on FaceBook.

6. Poor school performance and aiding examination irregularities

Uncontrolled use of internet and mobile phones is the reason why students are very dull nowadays. Students waste precious time chatting, making new friends on social media, etc. instead of reading their books. Many students appear to be "cyber loafing" or "cyber-slacking" (maladaptive) at higher levels in the classroom (Pamela S. Galluch and Jason Thatcher, 2011). Their language usage and creative writing skills are also impaired because they become over-familiar with slangs, lexical shortcuts, acronyms or shortened form of words used for texting messages on social networking sites, e.g., 'u' for "you", 'ur' for "your", 'lol' for "Laughing out loud", 'y' for "why", 'k' for "ok", etc.

Students also use their mobile phones to browse for and copy answers, and chat with their friends and colleagues to send them answers during examinations.

7. Loss of Productivity in Work Place

Conducting personal business online at work over a long period of time can incur considerable cost for the employer. The cost of providing bandwidth can also be quite expensive particularly for small and medium businesses. Going on YouTube (GOOG) and watching videos, or downloading something from iTunes slows down your network.

8. Potential Health Hazards

Internet and mobile phone misuse have been associated with a plethora of adverse psychological and mental health conditions. Examples of marked mental, emotional, social and psychological impairments among adolescents are:

- (a) **Aggression** – Destructive behaviour intended to harm another person.
- (b) **Depression** – A period of unhappiness and low moral which lowers the victim's enjoyment of life and ability to visualize a happy future. It may lead to suicide.
- (c) **Stress** – Being constantly "plugged-in" and "always connected" to social network sites causes weakness of the body and extra layer of the body system is put into emotional pressure too.
- (d) **Poor sleep habits** – Sleep deprivation, attention deficit/hyperactivity deficit are common effects of having the eyes glued to online activities that keep us up too late. The ambient glow from mobile phone screens can also affect the release of melatonin; the sleep chemical.
- (e) **Back, neck and head pain** – Constantly looking down at the mobile device can cause strain injury and back ache. Eye strain can also cause headaches, blurred vision and migraines.

Curbing Effects of Internet and Mobile Phone Misuse Cases

The impact of technology on our social, mental, physical and environmental health can be devastating if we do not keep ourselves in check. In this section, we shall look into self-help tips which high-frequency users of this technology might take to keep problematic use in

check; and thus leave more productive (or fun) time available for real-life activities. While you can initiate many of these by yourself, it is important that you seek for outside support as well. Some of these methods of mitigation are:

1. **Social isolation and impaired communication** – Moderation is the key. Reduce the way you access internet and associate more with people around us. Make new friends and avoid lonely life so that you can live long on earth.
2. **Social media addiction** – There is a saying that “too much of everything is a disease”. Users should not be addicted to the internet to avoid mental disorders. You need to learn to filter out noise to find something specific.

Set goals for when you can use the internet. For example, you might resolve to spend certain amount of time on social media sites - visit them, share your updates, quickly go through your notifications and messages and either sign off or shut down your computer, tablet or smart phone. Do not be dependent on social networking sites; find yourself some offline hobbies, friends and healthy activities to recreate, so that you do not become addicted to the internet.

In many countries of the world (including Nigeria), there is a law which says: “While driving the use of mobile phones or computing device is prohibited”. People flout this law every now and then; but the laws against talking and texting on mobile phones or any other gadget while driving should be fully implemented and enforced to avoid road (traffic) accidents.

If after trying the above you still find it difficult to reduce your internet use habits, try setting a timer of some sort with an alarm. You can use your smart phone or an alarm clock with an alarm sound as annoying as possible and out of the reach of your arm. This leaves you with the option of having to get out of your chair to turn off the annoyance! This is worth trying, even though it might not help everyone. Some software applications can help you block the internet for some time, or even to monitor the time you spend online e.g. stayFocused, RescueTime and Pomodora Time apps (StayFocused, 2022; RescueTime, 2022; PomodoraTime app, 2022).

3. **Cyber threats**

Cyber crimes constitute a major threat of uncontrolled use of internet and mobile phones. Below are important measures to safeguard your use of internet and mobile phone technology:

- (a) **Identity theft, fake profiles and data hacking** – Control the size of your network. If you really do not know someone well or at all, do not feel obliged to friend or follow them. Persons seeking friend request ought to have some connection to you – either friends or interests in common; and has to display a real profile picture, not an avatar, photo of an inanimate object or some random starlet.

When you encounter people who upset you for any reason, unfollow, block or mute them. People think that blocking is rude or that anyone blocked must meet some specific troll criteria! Forget all that. You can and should block anyone you like for any reason you like; and the best reason is when people make you stressed out and mad. There are many apps from trusted sources developed by third party software developers to run on mobile phones (Android and iPhones) and block distracting sites, e.g. Anti-social which blocks the most distracting sites for a specific amount of time (Anti-Social, 2022). Do not over-trust people and the sites you visit and do not disclose sensitive information about yourself or your business carelessly on social networking sites.

The battle against cyber threats won't end anytime soon. But if you stay focused, apply best practices, judiciously use security technology, and get the right help, you can keep yourself and your organization safe (Sophos Ltd, 2014). Eternal vigilance is the price of digital security (Fidelis I. Onah, 2016).

- (b) **False and misleading information** – It is not everything you hear and see on Facebook or internet that you should believe or expect to be true. Verify information obtained on social media since they may be false or inaccurate.
- (c) **Spam and virus attacks** – Malicious software (malware) infects mobile devices connected to the internet either through a browser vulnerability or through bad apps that allow unwanted pop-up advertisements. From malicious adware (software that supports advertisement) to spying apps

and even mobile ransomware (which affects mobile devices), malware security threats are widespread. The following are measures to keep you safe from spam and virus attacks.

- (i) Install antivirus software – Antivirus software is the best line of defense against mobile malware, phishing and other threats. Run the software regularly and remove any threat detected.
- (ii) Always update your phone's operating system and social network apps with the latest versions. Operating system updates often patch bugs found in its previous versions.
- (iii) Always use unique passwords on your phone to protect your website credentials. Be absolutely sure you have changed any default admin passwords.
- (iv) Download apps from trusted sources. Google and Apple both vet apps they sell for security before allowing them into their stores. Doing so minimizes the risk of installing dangerous apps posing as legitimate software.
- (v) Check app permission: Read the terms and conditions before downloading an unfamiliar app. Notice any phrase that implies that the app may be able to use personal information or change the terms without notice.
- (vi) Do not click suspicious links in emails, text messages, or on social media. They may be a gateway to phishing sites.
- (vii) Do not do any sensitive thing on public Wi-Fi. Unsecured public Wi-Fi networks make it easy for hackers to intercept your traffic (NortonLife, 2018; Panda Security Mediacenter, 2019; Nica Lattof and Caroline Corrigan, 2021; AVG Signal Blog, 2022).

4. **Exposure to offensive content** - Parents and guardians should be mindful of online contents that entice their children. It is not too difficult to insure that your child is not misusing or over using the internet. You can set parental controls which blocks pornographic images from displaying on the social media for teenagers under the age of 18. The secret passwords set by parents should be guarded such that children cannot intercept them. Using policies to access the social media sites and such offensive images can also be prevented. Parents and the society at large should also educate young people on the risks involved in the use of mobile phones or other gadgets to browse social networking sites.

5. **Individuals' and organizations' Privacy concerns** - Reduce the usage of internet. While using it, do not disclose important issues about yourself on social media to help you secure your privacy.

Before adopting any kind of social media to communicate with stakeholders, companies must create social media policies, including those relevant to privacy issues. A company should continually raise employee and customer awareness about the risk of disclosing sensitive information to unauthorized parties (BITS, 2011).

It is important to know that harassment and violence against persons through the internet, email, instant messaging and text messaging are prohibited under several discrimination and social media laws in Nigeria. In fact, there are privacy frameworks established to address individuals' privacy concerns worldwide; so harassers can be prosecuted.

6. **School failure and aid to examination malpractice:** Candidates sitting for an examination should not be allowed access to mobile devices, as they could be used for malpractice. Students and young people should be careful not to use acronyms and abbreviations when writing examinations, tests, etc.

Students trying not to look at the phone while they study can use Promodora Timer app for iPhone to customize their task and track how many they can complete each day.

7. **Reduced employee productivity:** Organizations cannot afford to ignore the unprecedented reach for social media because of its positive and negative effects on business. There is need, therefore, to put well-defined policies and technologies in place to manage or guide social networking outside of company time. They should monitor immoral, illegal and offensive internet use habits and be able to stop it if it occurs. Employers have the right to ban all computer activity that is not work-related or posting of company's vital information on social networking sites without consent.
8. **Injuries to health:** Replace your social media use with healthy activities. Avoid too much stress on yourself and the system to

enable both yourself and the system have a long life span. Give your body rest to maintain good health.

Avoid keeping yourself awake too late to enable your brain retain what it has gathered. Give yourself some break after working for some hours in order to relax your brain, neck and eyes.

CONCLUDING REMARKS

The impact of internet and mobile phones on our social, mental, physical and environmental health as mass media interaction tools is widespread and phenomenal. There is no denying the benefits we have gained from advancements in these technologies. However, the effects of their uncontrolled use can be devastating. This paper has identified the negative effects of inappropriate use of internet and mobile phones to include, but not limited to, social withdrawal and impaired communication; social media addiction; cyber threats; exposure to illegal, immoral and offensive contents; lack of privacy; school failure and aid to examination irregularities; reduced employee productivity in the organization; and psychosocial and mental ill-health. The ways of reducing the harmful effects of this technology are presented. However, more and more occurrences of neurological complications, psychological disturbances and social problems are bound to continue as long as technology advances, and corruption and crimes are not eradicated in the society (Fidelis I. Onah, 2016).

More research combining qualitative and quantitative analysis is needed to ascertain the correlation between prevalent internet and mobile phone misuse with the unrecognized symptoms of psychological distress and mental disorder among adolescents in Nigeria. Evaluation of internet use habits among young adults in your locality is another important area for future research. These studies should raise awareness in nurses and other health care providers concerned with suicide research, disorders of personality development, child and adolescent psychiatry and other psychosocial mental health among kids, teens and young adults. As the field of internet addiction continues to grow, such outcome data will be useful in treatment planning.

Our research provides the enablement for future studies in this area, and we hope the findings will be beneficial.

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