

# Influence of Smartphone on Social Media among Senior Secondary School Students in Oyo State

Moshood Kehinde Alli, Gbolagade Ramon Olosunde, Ph.D., and Blessing Oghenedue Alli,

Department of Educational Foundations, Ajayi Crowther University, Oyo, Oyo  
Department of Science Education, Faculty of Education, Ajayi Crowther University, Oyo

\*Corresponding author: e-mail: mk.alli@acu.edu.ng

---

## Abstract

This research study examined the influence of smartphone on social media among senior secondary school students in Oyo state. Descriptive survey research design was adopted. One hundred secondary students were selected using simple random and convenient sampling techniques. Questionnaire was used for the data collection adapted from Pittsburg sleep Quality Index (PSQI) by David J. Buys with reliability Index using Cronbach alpha ( $r = 0.83$ ) and Mobile Phone usage (MPu). Three hypotheses were raised and tested. Findings of the first hypothesis study revealed that there was no statistically significant relationship between participants' gender ( $\chi^2 = 2.14$ ,  $p > 0.05$ ), and smartphone addiction levels on social media. Also, hypothesis two showed that there was statistically significant relationship between participants' school class ( $\chi^2 = 12.02$ ,  $p < 0.05$ ) and smartphone addiction levels on social media. Meanwhile, there was no statistically significant relationship between participants' age ( $\chi^2 = 5.57$ ,  $p > 0.05$ ) and smartphone addiction levels on social media. The study also revealed that fourteen (14) students enjoy using smartphones for academic purpose while twenty-one (21) stated they used it for Facebook and other social activities; 65 showed no response. The researchers recommended that parents should have time for a sound rapport and close monitoring of their children to the kind of things they are exposed to and time spent on social media.

**Keywords:** Social media use, Smartphone addiction, Nomophobia, Fomo, Student

---

## Introduction

The introduction of the internet led to the emergence of smartphones which take place irrespective of the geographical location or period of time. It is vociferous that, the efficacy of smartphone is not only meant for placing and receiving of calls. Usually, there are amazing qualities such as for browsing, checking health status, sending and receiving emails, watching videos, listening to music, chatting, sharing photos, videos and other documents, to mention but a few. No wonder there is an exponential rise in the use of social media as a result of the emergence of the smartphone. According to Masiu & Chukwuere (2018), in the 21st century, smartphones have vastly increased due to its exciting features such as accessing emails, biometric, accessing social media platform and many more. According to technopedia (2019) "A smartphone is a mobile phone with highly advanced features. A typical smartphone has a high-resolution touch screen display, WiFi connectivity, Web browsing capabilities, and the ability to accept sophisticated applications." Ebiye

(2015) regards a smartphone as a smart device used for fast access to knowledge, geared towards students achieving their teaching and learning and academic research objectives over the past 20 years, worldwide internet use has increased and the use of social media use has grown substantially in recent years. (Kemp, 2020). Mobile phones were used only for talking and messaging. But now this concept is changed by creating user-friendly mobile device applications in chatting, social networking, business communications, teaching, emails, browsing surfing, etc. The smartphone became a natural extension of an individual's life. Smartphones are for art beauty global interconnectivity and designed to make lives easier. Life has become much easier after the arrival of smartphones. Smartphones have made lives substantially more helpful. With the rapid spread of smartphones, social media has become an indispensable tool for maintaining social connections, browsing news, and entertainment, especially among students. The dramatic growth of smartphone users has also increased the growth of social media users. Also, in a report from the International

Telecommunication Union, it was indicated that about 60% of the world's population has access to mobile phones (ITU, 2008 as cited in Sarfoah, 2017. In the same report, it is interesting to note that there are more mobile phone users in the developing nations (e.g., Nigeria) as compared to the advanced ones (Henry & Quansah, 2013), which means, developing countries utilize smartphones the more.

In March 2020, the China Internet Network Information Centre reported that the total number of Chinese internet users was 904 million, with 897 million accessing the internet through smartphones (99.3%). Smartphone addiction has therefore been found to be prevalent among adolescents and emerging adults in China and elsewhere in the world. The prevalence of problematic smartphone addiction was estimated in one study to be 21.3% among Chinese undergraduates. As a form of technological addiction or one of generalized internet addictions, smartphone addiction is also described as “an inability by individuals to regulate their use of smartphones and which eventually leads to negative consequences and clinical impairment in daily life”. GlobalWebindex, (2017) released that adolescents spend almost one-third of their internet time on social media. Social media refers to “the websites and online tools that facilitate interactions between users by providing them opportunities to share information, interest, and opinions” (Swar and hameed, 2017). Individuals use social media for many reasons, such as entertainment, searching for information, and communication. Notably, adolescents and emerging adults are spending an increasing amount of time on online networking sites, e-games, texting, and other social media (Twenge and Campbell, 2019). Smartphone use may be pleasurable and exciting in the early stage when individuals communicate with others or engage in other activities (i.e., individuals experience positive affect). However, for a small minority of individuals, excessive smartphone use can trigger greater negative affect, such as irritable, anxiety, and depression, which may lead to smartphone addiction, and disturb individuals' sleep quality.

Some authors have suggested that social media has altered the forms of group interaction and its users' individual and collective behaviour around the world.

Smartphones sometimes distract their users from relationships and social interaction (Li et al., 2020) and several authors have stressed that excessive use of social media may lead to smartphone addiction (Swar and Hameed, 2017) primary because of the fear of missing out (Roberts and David, 2020). According to a recent study, 58% of adolescents have tried to reduce their daily time spent on social media compared to previous year due to being overwhelmed with the content of social media. (GlobalWebindex, 2019) because those contents could have negative effects on their self-development and well-being. It could cause negative emotions. As of 2018, more than half of the world's population has access to the internet. This number is reported to be approximately four billion (Kemp 2018). According to the current data, 39% of the world's population is an active mobile social media user (Kemp 2018). Instagram are reported as the most popular social media applications respectively (Kemp 2018). As the use of social media applications has increased, social media abuse has also increased.

At the same vein, it was reported that excessive use of these gadgets can result in developing psychological dependency which can affect the activities of daily living of the students, which also led them not having sound sleep due to addiction and this is what prompted the researcher to dig through this study. Activities of texting with friends and lovers both in the day and at night are now parts of their lifestyles. All over the world, many scientific kinds of research and studies clearly state that over usage of mobile phones and social media platforms like Facebook, Twitter, Instagram, etc. are creating a very serious impact like stress, depression, distraction, eating disorder, insomnia and anxiety on individual's health. In the literature, a number of alleged disorders arising from social media have been conceptualized including social media addiction (Andreassen and Griffiths 2017), social media disorder (Savci and Aysan 2018), excessive social media use, problematic social media use, compulsive social media use and pathological social media use (Holmgren and Coyne 2017). Social Media Engagement can be defined as when someone interacts with social media. Nowadays a greater number of people are interacting with others with the help of many platforms like whatsapps, SMS, Facebook, Twitter and so on. Hou et al, (2019) in their

studies shows that engagement with social media and smartphones releases a chemical called dopamine (neurohormone of pleasure) in the brain. The problem with the dopamine is that excessive stimulation of your brain that is caused by dopamine creates addiction. Exactly the same way, how drugs work. The companies that produced mobile phones did research on what kind of content a teenager likes, a middle-age person likes, and Old man likes. They have analyzed the dopamine levels of people in different situations. These companies always think of one question “how to get people hooked to their app” They showed you how with negative emotions like being lonely, or bored or dissatisfied. They use them as internal triggers and get people to try their app and stay there for as long as possible. An end-user said “Apps are free to install use” Here is the Truth! A wise man once told on the internet “If you are not paying for the product, then you are the product” Apple Company sold 340,000 iPhones per day in 2012.

In Japan, 90 percentage of mobile phones are waterproof because adolescents use them even in the shower. Mobile phone radiation can cause insomnia, headaches, and confusion (Hou et al., 2019). Indeed, scholars such as Griffiths (2014) identify social media addiction with these six criteria. In addition, Eijnden et al., (2016) identifies social media disorder/addiction using nine criteria (preoccupation, tolerance, withdrawal, persistence, displacement, problems, deception, escape, and conflict). Although social media addiction is not formally classified in the latest (fifth) edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association [APA], 2013). Social media addiction has been defined as the problematic excessive use of social media comprising (i) an increase over time in the desire to use social media, (ii) important educational activities being neglected, (iii) harming personal relationships, (iv) using social media to escape from daily life stress and negative emotions, (v) experiencing problems in reducing or stopping social media use, (vi) becoming tense and irritable when social media cannot be used, and (vii) lying about the duration of social media use (Savci and Aysan 2018). Research has shown that social media addiction is related to psychopathology, reward and punishment systems (Savci and Aysan 2018), sleep disorders,

academic performance, loneliness, narcissistic personality (Andreassen et al., 2017), behavioral addiction, impulsivity, relationship dissatisfaction, social connectedness, and disorders related to the use of digital technology such as internet addiction, fear of missing out, internet gaming disorder, internet-communication disorder (ICD and phubbing). In this context, it can be said that social media addiction has a broad etiological spectrum.

A recent study report suggests that FOMO is one of the main reasons for social media addiction. FOMO refers to the feelings of anxiety that arise from the realization that you may be missing out on rewarding experiences that others are enjoying. There must be a reason for everything. According to a survey why people visit social media applications. From the respondents’ responses, they claimed that they use social media websites to read the latest news updates with the highest percentage of 70.8 percentage, which shows how people are excited about things happening in the current world. Participants of a total of 72 claimed that they visit to check out what’s going with their friends with the highest percentage of 67.9 percentage. Here FOMO comes into place because some participants are going through nervous feelings about what their friends are doing and how they are missing out. The remaining statistics state that 51.9 percentage of people visit to follow their favorite stars and 32.1 percentage of people visit to play games and update their posts on social media and 48 percentage of people claimed they visit for other purposes. FOMO has a positive predictor of both how frequently students or teenagers use several social media platforms and how many platforms they actively use. Persons who have a greater FOMO are assumed to have a greater desire to stay continually up to date of what others are doing through the use of social media. It originates from psychological deficits in people’s competence and relatedness needs (Swar and Hameed, 2016). Several researches were carried out on how smartphones affected students’ general performance. Hour of sleep and consistency is considered a crucial factor for physical and mental health in humans. Excessive use of smartphones can impact students sleep efficiency and complications which include vascular permeability, neck pain, and musculoskeletal disorders and mouse brain damages.

This study by (Lee et al., 2017) was based on the relationship between smartphone usage habits, bedtime and wake-up. 23 first year high school kids were collected and evaluated for 8 weeks. The findings show the smartphone's key use period, called 'centroid period' can have major effects on sleep time shortages, sleep lateness and sleep quality. A Study looks at the connection between the use of social media and academic success (Jamal & Al-Menayes, 2014). To a selection of university students in Kuwait, self-administered questionnaires. Results indicate that the heavy use of mobile social media has a favourable connection to a student's poor academic performance. The strong linear trend indicates the lower the grades the more students use social media. Studies (Jamal & Al-Menayes, 2014) also indicate that participants are conscious of the fact that the use of social media decreases their scores, but they tend to use them extensively regardless. (Turel et al., 2011) described the term technology addiction as a kind of psychological state which will cause many symptoms like salience, withdrawal, conflict, relapse, and reinstatement.

Another dimension to smartphone addiction is what is called Nomophobia. Nomophobia is an irrational fear of being without a phone or being unable to use your phone for some reason. It is a particular disorder caused by the use of smartphones that adverse health effects such as sleep disturbance, impaired short-term memory, dizziness and high blood pressure is associated. In past years

Nowadays we have a lot of Smartphones Monitoring Software Applications and it is very important to ensure the safety of ourselves towards the Smartphones. Few things like Smart Phones, Social Media Applications, and the Internet ruins the life of the people into dangerous and into illegal activities. Few tools work on Smart Phones that help us to spy on social media activities, messages, browsing history and the locations that are related to real-time scenarios. Such software applications are mSpy: It monitors text messages, WhatsApp, calls, location, etc. always. Spyzie: It monitors other's call history, browsing history, Social Apps, media files and GPS Location. Highster Mobile: It is used to track messages and other activities on iPhone/Android devices. It Secretly Monitors Smart Phones remotely and virtually.

FlexiSPY: It usually provides the solutions to track and monitor Smart Phones activities both audio and video easily. PhoneSheriff: It was specially designed for text messages monitoring and helps in location tracking. Mobile Spy Agent: This Software monitors the activities and movements of the children. Spyera: It is mostly used by parents to spy on their children. It can even intercept calls and snoop on kids. Screen Time Parental Control: It is used to analyze the screen time spent by the kids and can also set time limits for kids to use their devices. Norton Family Premier: This App helps the family to explore the web safely and also helps the kids to manage the time wisely between the studies and net browsing.

In African, smartphone addiction and social media use is on the increase among secondary students and research has shown that addiction to smartphone is similar to substance abuse (Balogun & Olatunde 2020). According to Temidayo & Aderemi (2021) in their studies opined that most students experience lack of concentration on their academic and work performance because of the addiction. These negative consequences affected the students academically, creating an easier way to cheat on examination in recent years, (Mantey, 2017). Most of the students in Secondary Schools have so much addicted themselves to social media and mobile phones, to the extent that it has a negative impact on their productive lives. It has been revealed since 2001 when mobile phones were introduced in Nigeria that the mobile/smartphones usage has become very important part of adolescents especially the students. However, there is barely any literature that focused on the effect of smartphone and social media use among the adolescents in Nigeria.

Rationale for the study was to create a better atmosphere for students devoid of addiction to smartphone on social media but using smartphones for productive activities. Appreciating better physical interaction between and among people. The study is therefore aimed at finding lasting solutions to the problem of adolescents' smartphone addiction and making alternatives where necessary.

Most researchers have worked previously on smartphones and social media with undergraduates and in a way of neglecting secondary school students. That is why the researchers deem it fit to check the

level of influence or addiction to smartphones on social media.

### **Statement of the Problem**

It is disastrous to see many secondary school students being addicted to smartphones which has been a major public health problem all over the world. Adolescents engaging in social network sites at the expense of their studies have been a major problem parents and stakeholders are battling with recently. A number of alleged disorders arising from social media include social media addiction, social media disorder, excessive social media use, problematic social media use, compulsive social media use and pathological social media use. The 'Fear of Missing out' (FOMO) is one of the main reasons why students experience smartphone addiction which was an over-engagement on social media which made them to have problem such as distraction, eating disorder, insomnia etc. Certain measures have been taken in the past in order to check this menace and proffer a lasting solution but to no avail. As the use of social media applications increases, social media abuse increases also. The introduction of Smartphones Monitoring Software Applications will help to ensure the safety towards minimizing frequency of Smartphones uses and some counselling techniques. The involvement of parents in monitoring and creating a better rapport in communication skills with their wards. The paper will help parents and students reduce their engagement, unnecessary phone usage and ability to control their addiction.

### **Purpose of the Study**

The objective of this study is to examine the effect of smartphone on social media among adolescents in Oyo State. The specific objectives are to:

1. examine the significant relationship between male and female students' smartphones addiction on social media in Oyo State
2. examine the significant relationship among SSS I – SSS III students' smartphones addiction on social media usage in Oyo State
3. examine the significant relationship between age 10-14years and 15-19years smartphones addiction on social media usage in Oyo State.

### **Hypotheses**

The following null hypotheses were tested at 0.05 level of significance.

1. There is no significant relationship between male and female smartphones addiction on social media use.
2. There is no significant relationship among students in SSS classes 'smartphones addiction and social media usage.
3. There is no significant relationship between ages of students with smartphones addiction on social media usage

### **Scope of the Study**

This study investigated the influence of smartphone on social media use on three secondary school students': Durbar Grammar School, Anglican Methodist I and Anglican Methodist II, in Oyo East and Atiba Local Government, Oyo town, Oyo State.

### **Significance of the Study**

This study will be of great benefit to students because it will help them to understand the need to make productive decisions. Also, parents, teachers, administrators, and governments would also be provided with adequate information on how students would use smartphone with social media sites for the benefit of their academic life. The study would also add to the existing literature on behaviour modification therapy. The findings would be useful to educational counsellors who will use the techniques.

### **Methodology**

#### **Research Design**

The study adopted descriptive survey research design of the correlational type and utilize convenient sampling technique. The rationale behind the choice of this sampling technique is the fact that the only few students are having access to smartphones in this locality. It may be very difficult for students without smartphones to answer the questionnaires therefore

simple random sampling technique which is known to have very critical objectivity in terms of data collection was not ideal for this study. Despite all the advantages of simple random sampling, it was ideal for the researcher to adopt convenient sampling where those students who have possession and access at the point of data collection were included in the study to select 100 students which were selected as respondents (53 Female & 47 Male). The questionnaire was divided into four sections. Section A focused on the demographic attributes of the respondents such as gender, age, class and school. Section B contains the standardized instruments which were used for the study. They include smartphones addiction, social media use, and sleep index respectively. They were rated in four Likert response format ranging from 4= Strongly Agree (SA), 3= Agree (A), 2= Disagree, 1= Strongly Disagree (SD). Section C was rated 2= Yes or 1= No and Section D was an open-ended question: "Why do you visit social media application". Population comprises of all students in Atiba and Oyo East Local Government of Oyo State. Three schools were used for the study: Durbar Grammar School with 30 students: Anglican Methodist I and Anglican Methodist II, Oyo East with 70 students. Scales were adopted and administered to the respondents. Data collected were analyzed using simple percentages and Pearson Product Moment Correlation (PPMC) statistical tool at 0.05, alpha level of significance.

**Instrumentation**

The study adapted Pittsburgh Sleep Quality Index (PSQI) questionnaires developed by David J. Buysse

**Table 1:**

Levels of Smartphone Addictions							
Variable	Low	Moderate	High	Total	df	$\chi^2$	P
Gender							
Male	5 (10.2%)	39(79.6%)	5 (10.2%)	49 (100%)	2	2.14	0.34
Female	9(17.6%)	34(66.7%)	8(5.7%)	51(100%)			
Total	14(14.0%)	73(73.0%)	13(13.0%)	100(100%)			

\*Significant at P< 0.05

and collaborators to measure quality of sleep and to help discriminate between individuals who experience poor sleep versus individual who sleep well. The reliability of the scale was considered good with Cronbach's alpha of 0.83 for the total score. Test-retest reliability was also considered good. The validity of PSQI has been described by the author as good with a sensitivity of 89.67% and a specificity of 86.5% of patients versus control subject and Mobile Phone usage (MPAI) which quantitatively assess the participants' mobile phone usage levels. The scale assesses four dimensions: inability to control cravings, feeling anxious and lost, withdrawal or escape, and loss of productivity.

**Procedure**

The consent of the vice principal administration was sought to administer the questionnaires and the reason for conducting the study was explained to them in various schools. The students were informed that their responses would be treated with utmost confidentiality. Then the instruments were administered to them and collected back after filling. Data was analyzed using Percentages and Chi Square statistical tools at 0.05, alpha level of significance.

**Hypotheses:**

**Hypothesis 1**

There is no significant relationship between male and female smartphones addiction on social media use.

The hypotheses one was grouped into three levels (i.e., low, moderate, high), with male and female smartphones addiction on social media. It was found in (Table 1) that 5 (10.2%) and 9(17.6%) were male and female secondary school students who demonstrated low level of smartphone addiction. 39(79.6%), and 34 (66.7%) were male and female with moderate levels of smartphone addiction, whereas 5 (10.2%) and 8 (5.7%) were male and female who established a high level towards smartphone addiction on social media use.

Therefore, table 1 showed that there was statistically significant relationship between participants' gender

( $\chi^2 = 2.14, p 0.34 > 0.05$ ), and smartphone addiction levels on social media. The null hypothesis was therefore, rejected at  $P > 0.05$ . This implies that male and female smartphones addiction on social media is not same.

**Hypothesis 2**

There is no significant relationship among students in SSS classes with smartphones addiction on social media usage.

**Table 2:**

Levels of Smartphone Addictions							
Variable	Low	Moderate	High	Total	df	$\chi^2$	P
Class							
SS1	0 (0%)	18(85.7%)	3 (14.3%)	21 (100%)	4	12.02	0.02
SS2	1(10.0%)	5(50.0%)	4(40.0%)	10(100%)			
SS3	13(18.8%)	50(72.5%)	6(8.7%)	69(100%)			
Total	14(14.9%)	73(72.3%)	13(12.9%)	100(100%)			

\*Significant at  $P < 0.05$

The hypotheses two was grouped also into three levels also (i.e., low, moderate, high), with participants in SSS 1, SSS 2, and SSS 3 classes' smartphones addiction on social media usage.

Similarly, in table 2 students in SSS 1, SSS 2, and SSS 3 obtained 0 (0%), 1 (10.0%), and 13 (18.8%) respectively showed low smartphone addiction while those that displayed moderate addiction of 18 (85.7%), 5 (50.0%), and 50 (72.5%) were students in the SSS 1, SSS 2 and SSS 3, respectively. It was shown that 3 (14.3%), 4 (40.0%), and 6 (8.7%) were students in the SSS 1, SSS 2, and SSS 3, respectively, with a high level of addiction.

Therefore, there was no statistically significant relationship among participants' class ( $\chi^2 = 12.02, p 0.02 < 0.05$ ) and smartphone addiction levels on social media. The null hypothesis was therefore accepted at  $P < 0.05$ , this implies that SSS 1, SSS 2, and SSS 3 operated smartphones on social media at the same level and their addiction to smartphones also are same. This may be due to environmental factor and peer influence.

**Hypothesis 3**

There is no significant relationship between ages of students with smartphones addiction on social media use.

**Table 3:**

Levels of Smartphone Addictions							
Variable	Low	Moderate	High	Total	df	$\chi^2$	P
Age							
10-14years	0 (0%)	9(69.2%)	4 (30.8%)	13 (100%)	2	5.75	0.06
15-19years	14(16.1%)	64(73.6%)	9(10.3%)	87(100%)			
Total	14(14.0%)	73(73.0%)	13(13.0%)	100(100%)			

\*Significant at  $P < 0.05$

Hypothesis 3 was grouped into three levels likewise (i.e., low, moderate, high), with participants age 10-14 years and 15 -19 years with smartphones addiction on social media use. It further showed that 0 (0%) and 14 (16.1%), were participants below 14 years, 10-14 years, and above 14 years. 15 -19 years who revealed low smartphone addiction on social media. Also, participants who demonstrated moderate addiction were secondary school students below 14 years was 9 (69.2%), 10-14 year, and above 14 years was 64 (73.6%). Likewise, 4 (30.8%), was participants within the age group of below 14years, 10-14 years, and 9 (10.3%) above 14 years, 15 -19 years respectively, who exhibited a high-level addiction towards smartphone addictions.

Therefore, there was a slight statistically significant relationship between participants' age ( $\chi^2 = 5.57$ ,  $p > 0.05$ ) and smartphone addiction levels on social media. The null hypothesis was therefore rejected at  $P = 0.06 > 0.05$ , this implies that age of the participants has something to do with smartphones addiction on social media. This may also be the levels of maturity playing a vital role.

#### **Discussion of Findings**

The study determined how senior secondary school students were addicted to smartphone with social media use in Oyo town, Oyo State. It was revealed that negative outcomes triggered by the excessive use of

social media may have a detrimental effect on the personal, social, and/ or professional lives of the users. In line with Lee, Cheung, and Thadani (2012) argued that obsessive Facebook users had troubles in work, academic performance, and interpersonal relationships.

The result of the first hypothesis revealed that there was significant relationship between senior secondary schools 'gender smartphone addiction levels on social media. With this result, the  $H_0$ : is thus rejected. This implies that there were gender differences when it comes to gender smartphone addiction with social media. Therefore, there was significant relationship between male and female smartphones addiction on social media. The value  $\chi^2 = 2.14$ ,  $df = 2$ , and  $P = 0.34$ . Since  $P = 0.34 > 0.05$ . The null hypothesis therefore was rejected, in line with recent research which demonstrated that problematic social media use has higher prevalence among female users than males. Unfortunately, in studies that have assessed different aspects of problematic social media use, the gender distribution was usually frequently imbalanced in that female typically overrepresented. Girls were more nomophobic than their male counterparts. This finding is consistent with Gezgin and Cakir (2016) findings but inconsistent with the results of Daei et al. (2019) study in which the prevalence of nomophobia was higher among male university students than among



female university students. In this study, there was no significant gender difference in smartphone addiction; nevertheless, girls scored slightly higher than boys on the SAS-SV. In terms of gender, psychotherapists treating technology-use related addictions suggest SNS addiction may be more common in female rather than male patients, and describe this difference based on usage motivations: girls don't play role-playing games primarily, but use social forums excessively, in order to experience social interaction with other girls and above all to feel understood in their very individual problem constellations, very different from boys, who want to experience narcissistic gratification via games. This means the girls want direct interaction. They want to feel understood. They want to be able to express themselves. This study was unlike other studies, no relationship between gender and addiction was found which do not support this study. For instance, using a version of Young's Internet Addiction Test modified for SNS addiction in 277 young Chinese smartphone users, gender did not predict SNS addiction. Similarly, another study assessing SNS dependence in 194 SNS users did not find a relationship between gender and SNS dependence. In a study of 447 university students in Turkey, Facebook addiction was assessed using the Facebook Addiction Scale, but did not find a predictive relationship between gender and Facebook addiction (Yildiz Durak,2019).

Second hypothesis stated that there is no significant relationship among students in SS classes with social media use which was accepted because  $P=0.02$  is less than the null hypothesis. This implies that value  $\chi^2 = 12.02$ ,  $df = 4$ , and  $P = 0.02$ . Since  $P = 0.02 < 0.05$  there is no significant relationship among SS students' addiction to smartphone and on social media. Olowu and Seri (2012) reported in line with this study a prevalence rate of 2.8% of addicted social media use among secondary students. Also, Jafarkarimi and Sim (2022) gave a prevalence rate of 47% being addicted to social media use among secondary students. ( You need to state whether you study agrees or disagrees with this study).

The third hypothesis therefore stated there is no significant relationship between ages of students with smartphones addiction and social media usage was therefore accepted because  $P=0.06$  is more than the

null hypothesis, ages between 10-14 years and 15-19 years of students in SSS classes. This implies that value  $\chi^2 = 5.75$ ,  $df = 2$ , and  $P = 0.06 > 0.05$ . Therefore, the null hypothesis is rejected. It also implies that as they (students) grow into maturity their priorities' their needs. Facebook is one of the popular social media among 13-17 years old adolescents in the USA (Andreassen et al, 2017). In terms of age, studies indicate that younger individuals may be more likely to develop problems as a consequence of their excessive engagement with online social networking sites. The study by Bányai and colleagues reported that 4.5% of 5961 adolescents (mean age 16 years old) were categorized as 'at-risk' of social networking addiction using the Bergen Social Media Addiction Scale.

The study also revealed that 14% of students enjoy using smartphones for academic purpose while 21% stated they used it for Facebook and other social activities and 65% of students shown no response. It is evident from section D of the questionnaire that 14(0.14%) of the respondents find it easy to use a smartphone for academic purposes, a couple of them on Facebook and other social activities 21(0.21%) while 65(0.65%) were neutral. This response is an indication that the students find it easy using a smartphone for social media and not for productive activities. This finding does not agree with the study of Ifeanyi and Chukwuere (2018) where it was revealed that college students of South Africa indicated that the use of smartphone is very useful in the academic work, for instance sharing and communicating with colleagues digitally, also incongruent with the study of Tuncay, N. (2016); Corbeil and Al Nimako-Kodu (2019). However, it did support the works of Kang & Jung (2014) in which it was brought to light that the use of smartphones among students may have collateral damages on the physical, psychological, social, and the educational well-being of students hence not useful.

## Recommendation

The following recommendations were made:

- Parents should be awake to their responsibilities by making the children to go to bed early and monitored the use of the smartphone before bedtime.

- Counselling communication skills need to be used by every parent. Parents should be able to have effective communication with their children i.e. a sound rapport.
- Parents should have close monitoring of their children to kind of things exposed to and time spent on social media.
- Educational activities should not be neglected in the place of social media by students.
- Students should avoid getting hooked to the social media app and to keep away from negative emotions like being lonely, or bored or dissatisfied.

### Conclusion

It has been established from this paper that smartphones addiction is like drug abuse which might lead students to Nomophobia which is an irrational fear of being without a phone likewise it was revealed that heavy social media usage leads to the fear of missing out (FoMO) which affect the mental health of secondary school students. Also, due to specific characteristics of smartphones (e.g., the many different types of applications), smartphones can be considered as tools that provide self-comfort and satisfy basic need of communication with others in a timely way but, which also can seriously influence their academic performance and daily lives among their colleagues. Interventions to promote responsible use of smartphone and social media is required to counter this addiction.

### References

- Andreassen, C. S., Griffiths, M. D. (2017). The relationship between Addictive use of Social Media, Narcissism, and Self-Esteem findings from a Large National survey. <https://doi.org/10.1016/j.addbeh.2016.03.006>
- APA (2013). Diagnostic and Statistical Manual of Mental Disorders (DSM-V). Arlington, VA American Psychiatric Association.
- Balogun, T.M., Olatunde, O. E. (2020). Prevalence and predictors of problematic smart phone use among pre-varsity young people in Ibadan. PAMJ/Volume 36, Article 285, 17 Aug 2020
- Ebiye E. V. (2015). Impact of Smartphones Tablets on the Information Seeking Behaviour of Medical Students and Staff of Niger Delta.
- Eduardo Guedes (2016). Social networking, a new online addiction: a review of Facebook and other addiction disorders
- Dark-Adjei N. (2019). The use and effect of smartphones in Students' Learning activities: Evidence from the University of Ghana, Legon. Project: Students use and Perception of Sakai Learning Management System: A case at the University of Ghana Legon
- A. Daei, H., Ashrafi-Rizi, M.R. Soleymani (2019) Nomophobia and health

- hazards: Smartphone use and addiction among university students *International Journal of Preventive Medicine*, 10 (202) (2019), [10.4103/ijpvm.IJPVM\\_184\\_19](https://doi.org/10.4103/ijpvm.IJPVM_184_19)
- D.M. Gezgin, Ö. Çakir (2016) Analysis of nomophobic behaviours of adolescents regarding various factors *Journal of Human Sciences*, 13 (2) (2016), pp. 2504-2519
- Durak, H. Y. (2019). Investigation of Nomophobia and Smartphone Addiction Predictors among Adolescents in Turkey: Demographic Variables and Academic Performance *GlobalWabindex* (2017). <https://www.globalwebindex.net/GWISocialSummary>: GlobalWabindex's quarterly report on the latest trends in social networking sites.
- Griffiths, M.D., Kuss, D.J., Demetrovics, Z. (2014). Social networking addiction: An overview of preliminary findings. In K.P. Rosenberg L. Curtiss Feder (Eds.) *Behavioural addictions: Criteria, evidence, & treatment* (pp.119-141). Elsevier academic Press. <https://doi.org/10.1016/B978-0-12-407724-9.00006-9>
- Hou Y., Dan X. (2019). Social media addiction: its impact, mediation, and intervention. *Cyberpsychology* 13(10) <https://doi.org/10.5817/CP2019.1.4>
- Ifeanyi, I. P., Chukwuere, J. E. (2018). The impact of using smartphones on the academic performance of undergraduate students. *Knowledge Management & E-Learning*, 10(3), 290–308
- Jafarkarimi, H., Sim A.T.H., Saafatdoost R., Hee J. M. (2022). Facebook Addiction among Malaysian Students. *International Journal of Information and Education Technology*. 2016;6 (6):465-9. [Google Scholar]
- Jamal, J., Al-Manayes (2015). Dimensions of Social Media Addiction among University Students in Kuwait. *Psychology and Behavioural Sciences* 4(1). <https://doi.org/10.11648/j.pbs.20150401.14>
- Jung, H. J. (2014). Ubiquitous learning: Determinants impacting learners' satisfaction and performance with smartphones. *Language Learning & Technology*, 18(3), 97– 119
- Kemp, W. M. (2018). The relationship between Smartphone Addiction Risk, Anxiety, Self-Control, and GPA in College Student. Publisher- Capella University
- Kemp, W. M. (2020). Global Digital Snapshots. Reviewing You Tube as a Compelling Tools for the promotion of Tourism
- Lee, Z. W., Cheung, C. M., Thadani, D. R., editors. (2012). An Investigation into the problematic Use of Facebook, *System Science (HICSS)*, 45<sup>th</sup> Hawaii International Conference; 2012 4-7 January, Maui, HI:IEEE
- Lee, Ahn, Nguyen, Choi, Kim. (2017). Smartphone use and study behaviour. <https://www.cell.com>
- Li, Niu Z., Griffiths, M., D, Mei, S. (2020). A Network Analysis Approach to the relationship between Fear of Missing Out (FoMO), Smartphone Addiction, and Social Networking Sites use among a sample of Chinese University Students. *Computers in Human Behaviour* 128 (2): 107086
- Masiu, M.T., Chukwuere, J. E. (2018). The Effect of Smartphones on Students' Academic Life: A Perceptive from a with disabilities in mainstream schools in Southern Ghana: Challenges and perspectives from stakeholders. *International Journal of Educational Development* 54: 14-25. <https://doi.org/10.1016/j.ijedudev.2017.02.00>
- Olowu, Seri 2012. A study of social network addiction among youths in Nigeria. *Journal of Social Science and Policy Review*. 2012;4:62-71. [Google Scholar]
- Osborne C, Liss M, Blackwell D, Learman C, M., Tramposch R. (2017). Extraversion,

- neuroticism, attachment style and fear of missing out as predictors of social media use and addiction. *Personality and Individual Differences*. 116: 69-72. <https://doi:10.1016/j.paid.2017.04.039>
- Pontes, H.M, (2017). Investigating the differential effects of social networking site addiction and internet gaming disorder on psychological health.
- Roberts, J. A., David, M.E. (2020). The social media party: Fear of Missing Out (FoMO), social media intensity, Connection, and well-being, *Int. J. Hum. Comput. Interact.* 36, 386-392. <https://doi:10.1080/10447318.2019.1646517>
- Savci M., Aysan F. (2016). Relationship between Impulsivity, Social Media Usage and Loneliness *Psychology.Educational Process: International Journal.* <https://doi:12973/EDUPIJ.2016.52.2> Corpus ID: 55207705
- Swar, B., Hameed, T. (2017). "Fear of Missing Out, social media engagement, smartphone addiction and distraction: moderating role of self-help mobile apps-based Interventions in the youth," Paper presented at the 10<sup>th</sup> International Conference on Health Informatics (Porto).
- Temidayo, Aderemi. (2021). Texting: Benefits, Disorders and Prevention among Teenagers. *Counselling and Behavioural Studies Journal*. Vol. 11, 2021, pp.187-2021
- Technorati (2019). What does Smartphone mean? <https://www.techopedia.com/definition/2977/smartphoneICBM-2018>.
- Tuncay, N. (2016). Smartphones as tools for distance education. *Journal of Educational and Instructional Studies in the World.* 6(2), 2146-7463
- Turel, O., Serenko, A., Giles, P. (2011). Integrating Technology Addiction and Use: An Empirical Investigation of online Auction Users. *MIS Quarterly* 35 (4): 1043-1061 <https://doi:10.17705/1atrr.00002>
- Twenge J. M., Campbell, W. K. (2019). Media use is linked to lower Psychological well-being: evidence from three datasets. *Psychiatry. Q.* 90, 311-331. <https://doi:10.1007/s11126-019-09630-7>
- South African University. International Conference on Business and Management Dynamics