



Dysfunction of Smartphone Use on Mental Health of Undergraduates in Lagos State, Nigeria

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Abstract

Smartphone use has significant impacts on the mental health of youth, especially undergraduates, who perceive it as an integral part of their identity and social lives. Previous studies have examined the effects of smartphones globally, with limited attention given to undergraduates in Lagos State. This study investigates the correlation between smartphone use and mental health indicators among undergraduates in Lagos State, identifying the prevalent mental health issues associated with its use. Anchored on the Problematic Internet Use Model, the study employed a survey research method. The population comprised undergraduates from six universities (three public and three private). A total of 630 undergraduates aged 20–40 were selected using disproportionate sampling. Data were collected using two standardized instruments: the Smartphone Addiction Scale (SAS) and the Depression Anxiety Stress Scale. Descriptive statistics and correlation analysis were applied. Results revealed that 76.8% of respondents were female, and 58.4% spent more than six hours daily on their smartphones. The prevalent mental health issues identified were smartphone addiction, stress, anxiety, depression, sleep deprivation, and social alienation. There was a significant association between smartphone usage and mental health issues ($\chi^2 = 164.633 > \text{critical value} = 9.488, df = 4, p < 0.05$). Smartphone usage significantly influenced the well-being of undergraduates ($\chi^2 = 372.438 > \text{critical value} = 9.488, df = 4, p < 0.05$). Excessive

smartphone use was predictive of mental health issues, manifesting as addiction, stress, and anxiety.

Keywords: Addictive behaviours, anxiety, depression, sleep deprivation, miniaturization of technology

Introduction

Smartphones are among the most influential technologies of the 21st century. They are cellular telephones integrated with computer systems and features not originally associated with telephony, such as operating systems, web browsing, and the ability to run software applications (Kirvan, 2023). A smartphone functions as both a telephone and a computer, enabling users to make calls, send and receive text messages and emails, take photographs, record videos, browse the internet, play games, watch videos, navigate maps, and perform various productivity tasks (Harmon, 2024).

The development of smartphones stems from the miniaturisation of technology, which began in 1973 with the reduction of complex components into nanounits. This advancement allowed multiple systems to be integrated into a single device, enhancing functionality and performance (Ellie Gabel, 2025).

Historically, the IBM Simon Personal Communicator, built in 1992 and released in 1994, is considered the first smartphone. It combined the features of a cell phone with a personal digital assistant (PDA), offering touchscreen capability, an address book, calendar, calculator, clock, and scheduler (Harmon, 2024). The integration of PDA functions into smartphones marked a significant milestone. Subsequent innovations, such as the Ericsson R380 (2000), Blackberry devices, Apple's iPhone (2007), and Google's Android operating system (2007), accelerated the evolution of smartphones and their adoption worldwide.

Despite their immense benefits, numerous studies have linked excessive smartphone use to mental health problems, including addiction, anxiety, psychological distress, depression (Ogunmodede et al., 2023), social isolation (Wellington, Ajilore, & Sodeinde, 2023), suicidality (Balogun, Quadri, Ukpere, & Joseph, 2025; Brodersen, Hammami & Katapally, 2022), self-harming behaviours (Khalaf et al., 2023), and sleep deprivation. This study explores the impact of smartphone use on the mental health of undergraduates in Lagos State, Nigeria.

Statement of the Problem

From the medieval period onward, human communication systems have been disrupted by media innovations such as the printing press, radio, television, the internet, and digital media. Today, smartphones have become

integral to everyday life, with over 7.4 billion devices globally, most users aged between 18 and 49 (Kumar, 2025). A 2025 report by Geopoll estimated 6.9 billion smartphone users worldwide, with 5.1 billion actively engaging on social media platforms — representing 62% of the global population. In Africa, approximately 992 million people own smartphones, and internet penetration rose from 5.6% in 2006 to 25.7% in 2016 (Ogunmodede et al., 2023). In Nigeria, 98.2 million people have access to smartphones (Premise, 2022).

While smartphones have transformed social systems and behaviours, excessive use has been linked to negative consequences. Ogunmodede et al. (2023) found increased psychological distress among undergraduates at the University of Ilorin. Similarly, Wellington et al. (2024) reported emotional, psychological, and social distress linked to problematic smartphone use in Ogun State. Balogun et al. (2025) argued that excessive smartphone use aggravates addictive tendencies and predicts suicidal behaviours among undergraduates at the University of Ibadan.

Across Africa, a study spanning Nigeria, Tanzania, Ghana, and South Africa revealed significant positive relationships between problematic smartphone use and depression, withdrawal, overuse, and social disturbances (Nkwo et al., 2025). Internationally, research in Canada found that high smartphone use nearly doubled the risk of anxiety and tripled the risk of suicidal ideation (Kayla, Nour, & Tarun, 2022). Similar findings in Saudi Arabia and Korea linked excessive smartphone use to depressive symptoms, suicidal ideation, and mental distress (Kim et al., 2020).

Despite these global insights, scant attention has been paid to undergraduates in Lagos State, particularly from a communication studies perspective. This study therefore, investigates the correlation between smartphone usage and mental health indicators among undergraduates in Lagos State, with the aim of identifying prevalent mental health issues associated with its use.

Research Questions

1. What are the prevalent mental health issues associated with smartphone use among undergraduates in Lagos State, Nigeria?
2. How does smartphone use affect the mental health of undergraduates in Lagos State, Nigeria?

Research hypothesis

H₀₁: There is no association between mental health issues and smartphone usage patterns among undergraduate students in Lagos State, Nigeria.

H₀₂: Smartphone usage does not significantly influence the well-being of undergraduate students in Lagos State, Nigeria.

Mental Health and Smartphone

Broad knowledge of mental health–related topics in third-world countries like Nigeria is often unpopular among the people. Emphasis is placed more on schizophrenia and other violent tendencies, accompanied by stigma and social unacceptability. Schizophrenia is characterised by distortions in thought systems and perception, with negative impacts on almost all domains. Its outcome rests largely upon early detection and intervention (Jorm, Korten, Jacomb, Christensen, Rodgers & Pollitt, 1997). In Nigeria, deep-rooted cultural and religious beliefs foster common perceptions of the causes of mental health problems. In a study in southwestern Nigeria, 48.9% of the survey population endorsed supernatural causes of mental health disorders compared to 30.4% and 43.9% who endorsed biological and psychosocial causes, respectively (Igberase & Okogbenin, 2017). In some quarters, mental illness is assumed to be caused by moral or personal failings. Perhaps this is why the Nigerian constitution treats suicide as a criminal offense rather than a mental health emergency. Such laws fuel the stereotype that mental health patients are inherently dangerous or violent. These assumptions often circle around schizophrenia, while issues such as addiction, sleep deprivation, anxiety, excessive use, and agitation are less discussed, perhaps because they are not perceived as severe as schizophrenia.

Addiction is a strong craving or mental urge to engage in an activity that persists almost to the point of indispensability. It manifests when an individual struggles to control his or her behavior and spends a lot of time on the activity. Sussman (2011) submits that any functional definition of addiction must include five important elements: “engagement in a behavior to achieve appetitive effects; preoccupation with the behavior; temporary satiation; loss of control; and suffering negative consequences.” Addiction does not develop overnight; it is a process that starts with actions taken for appetitive motives. Moattari, Moattari, Kaka, Kouchesfahani, Sadraie & Naghdi (2017) classify mobile phone addiction as a form of behavioral addiction along with pathological gambling, food addiction, and internet addiction. Lin YH, Chiang CL, Lin PH, Chang LR, Ko CH (2016) argue that cell phone addiction constitutes obsessive phone use, including repetitive checking for messages or updates, withdrawal, or feelings of agitation when without the phone. These patterns are also associated with internet addiction (Block, 2008). Deductively, smartphone addiction begins with active communication, staying on trends, networking, entertainment, productivity, and gratifying other needs. For light users, these needs may be gratified without addictive consequences, reflecting individual differences. However, when the inability to access smartphones over a period of time creates

feelings of uneasiness, loneliness, restlessness, or emptiness, the process of addiction begins to unfold (Jacobs, 1986).

Sleep is central to a healthy life. It boosts overall health. Having sufficient sleep is essential for an individual's total well-being: physical, mental, social, and cognitive. Sleep deprivation in adults refers to sleep shorter than the average basal need of 7 to 8 hours per night (Colten, Attevogt, & Institute of Medicine, 2007). It could therefore be said that sleep deprivation is a condition of not having enough sleep in relation to an individual's physiological and developmental requirements. One of the main symptoms of sleep deprivation is excessive daytime sleepiness, in addition to poor memory, poor concentration, and depressed mood (Colten, Attevogt, & Institute of Medicine, 2007). Scholars have conducted extended studies linking excessive smartphone use and sleep quality, contending that smartphone use can significantly affect cognitive, emotional, or physiological states when used late in the evening, due to bright light emission from device screens and microwave emissions in the bedroom (Cain & Gradisar, 2010; Kumar, Chandrasekaran & Brahadeeswari, 2019; Sohn, Krasnoff, Rees, Kalk & Carter, 2021; Huber R, Treyer V, Borbely AA, Schuderer J, Gottselig JM, 2002). Smartphone use affects physiological factors in brain activity, such as sleep quality and melatonin rhythm.

Anxiety is a coherent cognitive-affective structure within the human defensive system (Barlow, 1988, 2000, 2002). It differs from fear, which typically involves a present physical threat, as it focuses on the possibility of future threats, dangers, or other potentially negative events. It is a state of helplessness (Shannon, Bennett, Goldstein & Barlow, 2009). Internal and external stimuli may induce anxiety, but conscious evaluation is not necessary for it to occur, and individuals may experience it differently without understanding specific triggers. Lovibond and Shanks (2002) reported that while most evidence suggests awareness is necessary, some studies suggested conditioning without awareness is possible. Smartphone use has been identified as a possible trigger of anxiety among heavy, often addicted users. Hwang, Yoo and Cho (2012) studied two groups to understand the relationship between smartphone use and mental health problems. Their findings showed that anxiety and depression were higher in the smartphone overuse group than in the normal use group. Similarly, Boumosleh and Jaalouk (2017) reported a positive relationship between smartphone addiction, anxiety, and depression.

In summary, addiction, sleep deprivation, and anxiety are components of mental health that often creep in through excessive smartphone use.

Theoretical Framework

Problematic Internet Use Model (Caplan, 2010)

The Problematic Internet Use (PIU) model was originally propounded by Robert Davis in 2001. The model involves cognitive processes as well as dysfunctional behaviors, which result in negative consequences for individuals' lives. It shifted the focus from viewing excessive internet use as a primary addiction to understanding it as a behavior stemming from pre-existing psychological issues such as depression, anxiety, or low self-esteem. These conditions push individuals to prefer online interactions, which are often perceived as offering greater control over self-presentation and less risk of negative evaluation compared to face-to-face interactions.

The model asserts that individuals with a preference for online social interaction are more likely to use the internet to regulate their mood (Caplan, 2005; Caplan, 2007; Caplan, 2010). They tend to present deficient self-regulation in terms of internet use (Kim & Davis, 2009). According to Davis (2001), this behavior, over time, leads to excessive use, which worsens individuals' problems in a negative cycle (Caplan, 2002; Caplan, 2005; Caplan, 2010). The PIU model, therefore, represents a distinct pattern of internet-related cognitions and behaviors that result in negative life outcomes.

The model highlights key concepts such as psychosocial predispositions, preference for online social interaction, compulsive use cycles, and negative feedback loops. It is divided into specific PIU and generalized PIU. Specific PIU involves overuse of particular internet functions (e.g., gambling), while generalized PIU refers to multidimensional overuse of the internet itself, resulting in negative consequences for individuals' lives (Davis, 2001). Caplan (2002) expanded the model by constructing the Generalized Problematic Internet Use Scale (GPIUS) to assess generalized PIU, and later improved this measure with the Generalized Problematic Internet Use Scale 2, proposing a two-step approach to theory and measurement (Caplan, 2010).

LaRose, Lin, & Eastin (2003), cited in Assunção & Matos (2017), argued that "individuals who use the internet for mood regulation purposes tend to present deficient self-regulation." The model points to an indirect effect between variables, underscoring the relationship between Preference for Online Social Interaction (POSI) and Deficient Self-Regulation (DSR), mediated by Mood Regulation (MR). Studies have found evidence connecting PIU with many psychological and well-being variables. Other research has also linked PIU to loneliness (Ceyhan & Ceyhan, 2008; Kim & Davis, 2009), low self-esteem (Armstrong, Philips & Saling, 2000; Kim &

Davis, 2009), and social anxiety (Lee & Stapinski, 2012), highlighting the utility and validity of the PIU model.

In this study, we intend to apply the PIU model, with all its proposed behavioral tendencies, to dysfunctional smartphone use among purposively selected undergraduates in Lagos State, Nigeria. The aim is to understand whether the propositions of the model are consistent with their everyday smartphone use and how this leads to mental health issues such as addiction, anxiety, and sleep deprivation.

Methodology

The study employed a survey research method. The population was undergraduates in Lagos State. The universities where the undergraduates were selected were stratified into public and private establishments; thus, three each of public and private universities were enumerated. 630 undergraduates between the ages of 16 and 40 were picked using a disproportionate sampling technique from the six universities. The study adopted a blend of two standardised questionnaire instruments: Smart Phone Addiction Scale (SAS) and Depression Anxiety Stress Scale to elicit quantitative data from the undergraduates. Descriptive statistics and correlation analysis were adopted to analyse the data.

Results, Interpretation and Discussion of Findings

Two hypotheses and two research questions guided the study. Hypotheses were tested using Chi-square analysis at a 0.05 level of significance. Demographic characteristics and responses to research questions were analyzed using frequency counts and percentages.

In all, data were analysed based on three headings: demographic characteristics of the participants, response to research questions and testing of hypotheses.

Demographics of the participants

Table 1: Demographic Characteristics of Participants

Variables	Frequency	Percentage
Gender:		
Female	484	76.8
Male	137	21.7
Prefer not to say	9	1.4
Total	630	100.0
Age		
Below 20 years	204	32.4
20 - 29 years	420	66.7
30-39 years	2	0.3
40 years and above	4	0.6
Total	630	100.0

Possessing a smart phone		
No	5	.8
Yes	625	99.2
Total	630	100.0
Hours spent on smart phone		
1-2 hours	34	5.4
2-4 hours	72	11.4
4-6 hours	148	23.5
Less than 1 hour	8	1.3
More than 6 hours	368	58.4
Total	630	100.0

From Table 1, 76.8% of the surveyed population were female, 21.7% male, and 1.4% preferred not to disclose their sex. This means that female undergraduate students participated mostly in this study.

With respect to age group, 32.4% of the undergraduates were below 20 years of age, 66.7% were within 20 - 29 age; 0.5% of them were within 30 - 39 age, while 0.6% were above 39 years of age. Hence, most of the undergraduates who participated in this research were between 20 and 29 years of age.

On smartphone possession, 99.2% of undergraduate students who participated in the study possessed a smartphone, while 0.8% of the undergraduate students did not possess a smartphone. This means the majority of the undergraduate students who participated in this research possessed a smartphone.

As regards hours spent on phone, 1.3% of the respondents spent less than 1 hour; 5.4% of them spent 1-2 hour; 11.4% spent 2-4 hours; 23.5% spent 4-6 hours; while 58.4% spent more than 6 hours. Hence, most of the undergraduates who participated in this research spent more than 6 hours on their smartphones daily.

Results of Research Questions

Smartphone Use and Mental Health Among Undergraduates in Lagos State, Nigeria

Table 2: Smartphone Usage and Mental Health

	Statements	SA	A	N	D	SD	Total
1	I feel restless when I cannot use my smartphone.	85 (13.5%)	191 (30.3%)	179 (28.4%)	122 (19.4%)	53 (8.4%)	630 (100%)
2	I find it hard to concentrate on my schoolwork because I keep getting distracted by my smartphone.	30 (4.8%)	142 (22.5%)	159 (25.2%)	212 (25%)	87 (52.5%)	630 (100%)
3	I use my smartphone	105	323	115	63	24	630

	longer than I intend to.	(16.7%)	(51.3%)	(18.3%)	(10%)	(3.8%)	(100%)
4	I feel uneasy if I haven't checked my smartphone for a while.	87 (13.8%)	249 (39.5%)	142 (22.2%)	128 (20.3%)	26 (4.1%)	630 (100%)
5	I prefer spending time on my smartphone rather than with classmates, family, or friends in person.	77 (12.2%)	152 (24.1%)	145 (23%)	188 (29.8%)	68 (10.8%)	630 (100%)
6	I check my smartphone as soon as I wake up or before going to bed.	124 (19.7%)	325 (51.6%)	101 (16%)	64 (10.2%)	16 (2.5%)	630 (100%)
7	I feel anxious when my smartphone battery is low or I have no data.	170 (27%)	270 (42.9%)	97 (15.4%)	58 (9.2%)	35 (5.6%)	630 (100%)
8	I sometimes miss planned activities (e.g., studying or meeting friends) because of my smartphone use.	52 (8.3%)	114 (18.1%)	91 (14.4%)	262 (41.6%)	111 (17.6%)	630 (100%)
	Total	730	1766		1097	420	

With respect to smartphone usage and related mental health concerns, data in Table 2 show that 13.5% and 30.3% of participants strongly agreed and agreed, respectively, that they feel restless when they cannot use their smartphone; 28.4% were neutral, 19.4% disagreed, and 8.4% strongly disagreed.

Additionally, 4.8% and 22.5% strongly agreed and agreed, respectively, that they find it hard to concentrate on schoolwork because they are distracted by their smartphone; 25.2% were neutral, 25% disagreed, and 52.5% strongly disagreed.

Similarly, 16.7% and 51.3% strongly agreed and agreed, respectively, that they use their smartphone longer than intended; 18.3% were neutral, 10% disagreed, and 3.8% strongly disagreed.

Furthermore, 13.8% and 39.5% strongly agreed and agreed, respectively, that they feel uneasy if they have not checked their smartphone for a while; 22.2% were neutral, 20.3% disagreed, and 4.1% strongly disagreed.

Meanwhile, 12.2% and 24.1% strongly agreed and agreed, respectively, that they prefer spending time on their smartphone rather than with classmates, family, or friends in person; 23% were neutral, 29.8% disagreed, and 10.8% strongly disagreed.

In addition, 19.7% and 51.6% strongly agreed and agreed, respectively, that they check their smartphone as soon as they wake up or

before going to bed; 16% were neutral, 10.2% disagreed, and 2.5% strongly disagreed.

Moreover, 27% and 42.9% strongly agreed and agreed, respectively, that they feel anxious when their smartphone battery is low or when they have no data; 15.4% were neutral, 9.2% disagreed, and 5.6% strongly disagreed.

Finally, 8.3% and 18.1% strongly agreed and agreed, respectively, that they sometimes miss planned activities (e.g., studying or meeting friends) because of smartphone use; 14.4% were neutral, 41.6% disagreed, and 17.6% strongly disagreed.

As revealed by the table, the most prevalent mental health issues associated with smartphone usage among undergraduate students in Lagos State, Nigeria, are:

- Compulsive or addictive behavior (e.g., checking the smartphone immediately upon waking or before bed);
- Anxiety (e.g., feeling anxious when the battery is low or data is unavailable) and
- Loss of control/compulsive use (e.g., using the smartphone longer than intended).

Effect of Smartphone Use on Mental Health of Undergraduates in Lagos State Nigeria

Table 3: Mental Health and Well-Being

	Statements	SA	A	N	D	SD	Total
1	I have trouble sleeping because I use my smartphone late at night.	22 (3.5%)	69 (11%)	189 (30%)	149 (23.7%)	201 (31.9%)	630 (100%)
2	I feel stressed or anxious when I cannot use my smartphone.	41 (6.5%)	77 (35%)	235 (37.3%)	148 (23.5%)	129 (20.5%)	630 (100%)
3	I feel left out or lonely when I see others' posts on social media.	24 (3.8%)	35 (5.6%)	122 (19.4%)	137 (21.7%)	312 (49.5%)	630 (100%)
4	I found myself feeling agitated when my posts are not liked or attract no reactions	49 (7.8%)	60 (9.5%)	185 (29.4%)	134 (21.3%)	202 (5%)	630 (100%)

With respect to mental health and well-being, data in Table 3 show that 3.5% and 11% of participants strongly agreed and agreed, respectively, that they have trouble sleeping because they use their smartphone late at night; 30% were neutral, 23.5% disagreed, and 31.9% strongly disagreed.

Additionally, 6.5% and 35% strongly agreed and agreed, respectively, that they feel stressed or anxious when they cannot use their

smartphone; 37.3% were neutral, 23.5% disagreed, and 20.5% strongly disagreed.

Similarly, 3.8% and 5.6% strongly agreed and agreed, respectively, that they feel left out or lonely when they see others' posts on social media; 19.4% were neutral, 21.7% disagreed, and 49.5% strongly disagreed.

Furthermore, 7.8% and 9.5% strongly agreed and agreed, respectively, that they feel agitated when their posts are not liked or receive no reactions; 29.4% were neutral, 21.3% disagreed, and 5% strongly disagreed. Since the number of participants who disagreed was greater than those who agreed, and because the items were negatively worded, it can be concluded from these findings that smartphone usage has a positive effect on the mental health of undergraduate students in Lagos State, Nigeria.

Analysis of Hypotheses

Hypothesis One: Prevalent mental health issues are not significantly associated with smartphone usage among undergraduate students in Lagos State, Nigeria. This hypothesis was tested with Chi-Square analysis and the result is presented in Table 4 below:

Table 4: Chi-Square Analysis showing the association between prevalent mental health issues and smartphone usage

Variable	N	Df	Mean	SD	χ^2 -calc	Sig.
Association between prevalent mental health issues and smartphone usage.	630	4	3.18	0.73	164.633	0.000

$P < 0.05$; χ^2 -critical = 9.488

Data in Table 4 showed a significant association between prevalent mental health issues and smartphone usage among undergraduate students, because the calculated value (164.633) is more than the critical value (9.488) given 4 degrees of freedom at a 0.05 level of significance. Hence, prevalent mental health issues are significantly associated with smartphone usage among undergraduate students in Lagos, Nigeria, because the null hypothesis was rejected.

Hypothesis Two: Smartphone usage does not significantly influence the well-being of undergraduates in Lagos State, Nigeria. This hypothesis was tested with Chi-Square analysis and the result is presented in Table 5 below:

Table 5: Chi-Square Analysis showing the influence of smartphone usage on the well-being of undergraduates in Lagos State.

Variable	N	Df	Mean	SD	χ^2 -calc	Sig.
Influence of smartphone usage on the well-being of undergraduates	630	4	3.21	0.67	162.801	0.000

$P < 0.05$; χ^2 -critical = 9.488

Data in Table 5 showed a significant influence of smartphone usage on the well-being of undergraduate students in Lagos State, because the

calculated value (162.801) is more than the critical value (9.488) given 4 degrees of freedom at 0.05 level of significance. Hence, smartphone usage significantly influenced the well-being of undergraduate students in Lagos State, Nigeria, because the null hypothesis was rejected.

Discussion of Findings

This study found a significant association between smartphone use and the mental health of undergraduates in Lagos, Nigeria. The findings align with Boumosleh and Jaalouk (2017), who reported a positive relationship between smartphone addiction, anxiety, and depression. Our study also revealed that the most prevalent mental health issues associated with smartphone use among undergraduate students in Lagos State are addiction or compulsive smartphone use, anxiety, and problematic smartphone use (PSU).

These findings are consistent with Hwang, Yoo, and Cho (2012), who studied two groups of smartphone users to examine the relationship between smartphone use and mental health problems. Their results showed that anxiety and depression were higher in the smartphone overuse group compared to the normal use group. More than 50% of the surveyed population in our study reported spending more than six hours daily on their smartphones, which indicates heavy use. This aligns with Ogunmodede, Dele-Ojo, Ogunmodede, Buhari, Agede, and Bojuwoye (2023), who found that smartphone use increased psychological distress among undergraduates at the University of Ilorin, North Central Nigeria.

Similarly, our findings are congruent with Kayla, Nour, and Tarun (2022), who reported that users with high weekday and weekly total smartphone use were nearly twice as likely to screen positive for anxiety. In line with Wellington, Ngozi, Ajilore, Kolade, Sodeinde, and Seyi (2024), who reported that problematic smartphone use was associated with emotional, psychological, and social distress among users in Ogun State, Nigeria, our findings affirm that prolonged smartphone use has psychological effects on users.

From a theoretical perspective, our findings support Robert Davis's Problematic Internet Use Model, later expanded by Caplan (2002, 2005, 2010). This model posits that individuals with a preference for online social interaction are more likely to use the internet to regulate their mood, which over time leads to excessive use and worsens psychological problems in a negative cycle.

Conclusion

Our study shows that undergraduate students from four universities in Lagos State, Nigeria, are addicted to their smartphones, reporting loss of

control over screen time and compulsively checking their devices as soon as they wake up or before going to bed. This behavior aligns with the criteria for behavioral addictions. However, unlike findings from some similar studies, these undergraduates did not report significant issues with sleep deprivation, depression, or social isolation.

Conflict of Interest: The authors reported no conflict of interest.

Data Availability: All data are included in the content of the paper.

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