

SOCIAL MEDIA USAGE BEHAVIOURAL PATTERN AND ADDICTION AMONG UNDERGRADUATES: IMPLICATIONS FOR GOOD HEALTH AND WELL BEING AND QUALITY EDUCATION

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Abstract

This study examines how undergraduates at Adekunle Ajasin University in Akungba Akoko, Ondo State, Nigeria, use social media and their propensity for addiction. It also looks at how social media addiction affects students' ability to manage their time and participate in class. The research is grounded in Griffith's (2005) theory of addiction, which emphasises and evaluates six essential aspects of social media use. This study used a cross-sectional and descriptive methodology to assess social media use, trends, and addiction. A quantitative survey method was used to collect data from students in several departments in order to assess platform use frequency, online time, engagement objectives, and the effects of excessive social media use on time management and academic engagement. The study revealed that the most popular platforms are Instagram (96.5%), WhatsApp (93.4%), and FB (90.0%). Next in line are TT (89.1%), X formerly Twitter (88.6%), and YT (79.0%). Snapchat was the least popular app (25.3%). The majority of the respondents (62.4%) spend 4–6 hours daily on social media, with 23.6% exceeding 6 hours. Undergraduates primarily use social media for business/marketing (73.8%) and entertainment (72.5%), while academic collaboration (57.2%) and news updates (59.8%) also rank notably. The research demonstrates a significant incidence of social media addiction with a weighted mean score of 3.33. Similarly, a significant 71.2% of the respondents reported negative effects on relationships and academic engagement, as indicated by a high mean score of 4.65. The only demographic factor that was substantially correlated with levels of addiction was age. This study sheds light on how university undergraduates' mental health and academic engagement are impacted by excessive or regular social media use. The study looks at addiction levels and behavioural patterns to provide evidence-based recommendations for organisations, legislators and medical professionals to create targeted interventions that encourage better digital habits. By discussing mental health issues associated with social media use, the study supports SDG 3, and by examining how digital behaviour affects academic engagement, it supports SDG 4. This study offers novel empirical evidence on social media addiction and its behavioural effects in a Nigerian university setting, which is comparatively understudied in international research on digital health and education. Its unique value resides in bridging the gap between the Sustainable Development Goals, especially SDGs 3 and 4 and the digital behaviour of young people. The study not only draws attention to an increasing academic and public health concern, but it also places the findings in the larger context of sustainable development, providing both local and global relevance.

Keywords: Social media, Usage patterns, Social media addiction, Undergraduate students.

1. Introduction

The advent and continual advancements in Information and Communication Technologies (ICTs), particularly the Internet, have significantly reshaped the educational landscape globally and locally (Itasanmi *et al.*, 2024). Education, defined by Chrisantus (2021, as cited in Omokhabi & Omokhabi, 2024), is the process through which society transmits knowledge, skills, and values from one generation to the next. The incorporation of technologically enhanced instructional resources has revolutionised pedagogical methods in schools and other learning environments (Abid *et al.*, 2022, as cited in Omokhabi *et al.*, 2025). These resources include computers, tablets, cellphones, smart boards, Massive Open Online Courses (MOOCs),

interactive visuals, scenarios, and online laboratories. A major factor contributing to the widespread engagement of young people in educational activities, especially within virtual spaces, is the accessibility and appeal of Internet technology. However, this same accessibility also facilitates non-educational and sometimes inappropriate use of online platforms (Jegade, Olowookere & Elegbeleye, 2016, as cited in Omokhabi, Atoyebe & Omokhabi, 2024). Contemporary teenagers and young adults devote considerable time to online activities, including Internet surfing, socialising, and participating in many social media (SM) outlets. Networks such as Facebook (FB), X, WhatsApp (WA), LinkedIn (LI), YouTube (YT), Google+ (G+), and Instagram (IG) are included. As noted by Ojokheta, Oladeji and Omokhabi (2018), youth need innovative mechanisms for building skills and competence, which play a central role in their lives.

According to Obar and Wildman (2015), in Omokhabi, Omokhabi and Oloyede (2025), SM is an online tool that enables users to communicate with one another through an online community by exchanging ideas, information and other forms of expression (Ogedengbe & Quadri, 2020). This is fascinating since SM has become an essential tool for building intellectual connections as the proportion of internet surfers rises globally. Consequently, it works to promote grassroots efforts, raise awareness, share political opinions or preferences, and accomplish other objectives. Excessive use, uncontrollable usage, and reliance on SM platforms to manage stress or emotions are characteristics of social media addiction (SMA) (Balogun *et al.*, 2025). Patterns like interrupted sleep, decreased productivity, and a decrease in in-person interactions have all been connected to this behaviour. Furthermore, exposure to produced content frequently encourages mood swings, feelings of inadequacy and unrealistic comparisons, all of which exacerbate mental health (MH) conditions like loneliness, depression and anxiety (Ezeah & Sopuruchukwu, 2024).

Previous research has linked numerous adverse consequences of SMA to MH difficulties, including loneliness, sadness, nervousness, tension, diminished self-esteem, and insomnia (Demir & Kutlu, 2016; Savci & Aysan, 2017). The most vulnerable age group among the various SM user groups is adolescents (Doan *et al.*, 2022). Young adults, being the predominant internet users, have heightened exposure to the detrimental facets of SM due to their age (Doan *et al.*, 2022; Primi *et al.*, 2021). Adolescents who extensively use SM may encounter diminished memory, disrupted sleep, online harassment, and poor self-worth, many of which may contribute to melancholy (Primi *et al.*, 2021; Quadri, Omopo & Ukpere, 2025). Several studies indicate a favourable association between SMA and depression (Waqas *et al.*, 2018; Kelly *et al.*, 2019; Hou *et al.*, 2019; Haand & Shuwang, 2020). Despite students' frequent usage of various social networking sites (SNSs), this study has highlighted issues over SMA and its effects on students' MH and academic performance (AP).

University students (Uss) may be particularly vulnerable to Social Networking Addiction (SNA) for several reasons. First, the majority of SNS users are USs due to their exceptionally high levels of internet literacy (Griffiths, Bennett, Walker, Goldsmid & Bennett, 2016). Second, teachers and parents do not keep a closer eye on US students' internet behaviour than they do on secondary school pupils. Third, USs usually have more unrestricted access to SNS and flexible schedules. Fourth, youth-related developmental traits might also make SNS more alluring to college students. Young adults who use SNSs have new and easy ways to meet new people, form close bonds with others and grow as individuals (Griffiths, 2013). The high prevalence of SNA among students has actually been well documented. For example, when Tang and Koh (2017)

polled 1100 college students in Singapore using an adapted 6-item Bergen FB Addiction Scale (BFAS) (Andreassen, Torsheim, Brunborg & Pallesen, 2012), they discovered that 29 (5%) of the participants could be classified as having SNA. According to a different study conducted in China using Young's criteria for Internet addiction, 34% of Chinese college students had SNA. More exposure to online social networks was linked to higher rates of alcohol consumption and other addictive behaviour among college students (Rinker, Krieger & Neighbors, 2016). Consequently, it is essential to ascertain how these networking sites contribute to students' academic engagement (AE) and time management (TM).

1.1 Research Questions

The research questions are:

- Which SM sites do UGs use most often?
- What is the average length of time UGs spend on SM each day?
- What are the primary purposes for which UGs use SM (AC, social interaction, entertainment)?
- What is the prevalence of SMA among UGs?
- Which of the demographic factors (age, gender, year of study, marital status and religion) are linked with greater levels of SMA?
- Does SMA have effects on students' TM and AE?

1.2 Research Objectives

This study aims to:

- identify the SM sites that undergraduates (UGs) use most often;
- determine the average length of time UGs spend on SM each day;
- explore the primary purposes for which UGs use SM (academic collaboration (AC), social interaction, entertainment);
- assess the prevalence of SMA among UGs;
- identify demographic factors (age, gender, year of study, marital status and religion) linked with higher levels of SMA; and
- investigate the effects of SMA on students' TM and AE.

2. Literature Review

2.1 SM and UGs Usage

SM is a community of dynamic contact amongst individuals who use dedicated digital mediums for engagement, such as FB, IG, WA, X, and LI (Chris, 2015). UGs use SM more than anyone else, and they particularly prefer WA and FB (Nsizwana, Ige and Tshabalala, 2017). UGs use SM for one to three hours per day, and it has become ingrained in their routine (Lahiry, Choudhury, Chatterjee & Hazra, 2019). It is used for amusement, information about current events, and for social interaction (AlFaris *et al.*, 2018). In addition, SM has been used for educational objectives, such as completing collaborative tasks, studying alone, discussing group projects, exchanging thoughts, and interacting with teachers (Creighton, Foster, Klingsmith & Withey, 2013). The authors believed that SM was the most effective way to complete group projects without in-person meetings and that it helped them connect with their teachers and peers, which in turn contributed to their academic success (Creighton *et al.*, 2013).

Tayo, Adebola and Yahya (2019) discovered that UGs use WA 97%, FB 85%, IG 65%, YT

62%, X 25%, LI 21%, G+ 15%, Snapchat 10%, and Skype 7%. Furthermore, UGs often allocate two to three hours daily on SM for perceived purposes. The reasons include 61% use for entertainment, 68% for business, 73% for academic, 83% for socialisation and 74% use for sourcing information. All UGs (n = 175) have SM profiles (Chandrasena and Ilankoon, 2022). With 96% of users, WA proved the most widely used SM site, then FB with 70%. The primary purposes of these accounts were for communication, entertainment and online education. Similarly, 72% of the UGs were found to spend two to five hours a day on SM. This pattern is followed by 54% of those who used SM one to ten times a day. WA was the most popular platform for academic work. A majority of UGs in institutions sampled regularly use FB, WA, blogs, YT and Flickr every week, indicating that they are aware of SM tools (Ogedengbe and Quadri, 2020).

2.2 SM Usage and Addiction among UGs

SM refers to sites or digital spaces that enable individuals to perform a range of functions, including exchanging information, corresponding, interacting and working together with others (Ferine *et al.*, 2023; Tarigan *et al.*, 2023). About 49% of the global citizens, or 3.8 billion individuals, routinely use SM (Kemp, 2020, cited in Koohang, Floyd, Yerby & Paliszkiewicz, 2021). Using SM can be done for a variety of reasons, such as preserving relationships or finding entertainment and information (Uhls *et al.*, 2017). SM offers insights into behavioural characteristics that are pertinent to a person's thoughts, emotions, communication activities and socialisation (Acar *et al.*, 2022). SNS has helped to achieve these advantages and get favourable results (Uhls *et al.*, 2017). Despite the benefits that SM material provides, excessive usage has raised concerns all around the globe (Baccarella *et al.*, 2018). Strong factors drive individuals to access SM networks unnecessarily and compulsively, which might have negative consequences (Caner *et al.*, 2022). As a result, research has shifted over the last 10 years from investigating the possibilities of SM and the internet to interrogating the drawbacks of excessive use, or SMA (Mohsenpour *et al.*, 2023). Scholars ascribe this change in outlook to the increase of adverse consequences, particularly those linked to mental health disorders, particularly depression (Baccarella *et al.*, 2018).

Excessive worry about SM is a defining feature of SMA, which is a behavioural disorder (Hilliard and Parisi, 2020). It is an insatiable desire to utilise SM and to spend so much time and energy on it that it interferes with other crucial aspects of one's life. SMA is a kind of addiction that impairs a person's ability to function socially, physically, and psychologically (Aslan and Polat, 2024). Eventually, overuse and increasing frequency of SM usage led to issues. It also includes the incapacity to restrict internet usage in spite of the fact that it leads to mental, social, and academic issues (psychological reliance). Internet addiction is regarded as a serious problem in teenagers, indicating an inability to regulate internet use regardless of the drawbacks (Obeid *et al.*, 2019). UG's MH is a prominent consequence of SMA. When SM use becomes addictive, stress is generated, which can have an adverse effect on MH rather than being a constructive coping mechanism. UG use SM excessively and develops SM fatigue, which leads to depression (Haand & Shuwang, 2020). UG also use SM as a stress-reduction strategy (Arikan *et al.*, 2022; Orsolini *et al.*, 2022). However, daily routines, hobbies and close relationships are not given much weight by SM addicts (Xiao *et al.*, 2022). These occurrences lead to issues with relational maintenance, everyday functioning and task execution. UGs are therefore more likely to suffer from poor MH, especially depression, when they are addicted to the use of SM (Vidal *et al.*,

2020; Balogun *et al.*, 2025). After reviewing relevant research, Keles *et al.* (2019) discovered a substantial correlation between SMA and higher levels of depression.

2.3 Theoretical Framework

This study is anchored in Griffith's model as a theoretical framework. Griffiths (2005) postulated six essential elements of addiction. Similar to substance or gambling addiction, behavioural addiction models evaluate six essential aspects of SM use. These can be used to directly understand how UGs might become addicted to SM. The elements are discussed below:

Salience: When an endeavour supersedes other pursuits in an individual's life, dominating their ideas (attachments and mental aberrations), moods (desires), and behaviour (decline in interpersonal conduct), it is described as salient. In a situation of preoccupation or obsessive thinking about SM, UGs may constantly check platforms (even during lectures or studying), think about SM even when they are not using it and prioritise SM over academic assignments or in-person social interactions. SM becomes the most significant activity in UG's life, controlling their thoughts, emotions and behaviour. While in class or preparing for an examination, an UG considers their next post or whether someone liked their photo.

Mood Modification: This is the personal reaction that individuals may have as a result of doing a particular task, which is often a pleasant experience. Such behaviour indicates that they use SM to elevate their mood or avoid uncomfortable feelings, and they experience an energising buzz or a high, or ironically, a calming and/or de-stressing sense of escape or numbness. The phenomenon may come in the form of using platforms to alleviate stress or negative emotions, utilising SM as a coping mechanism for loneliness, boredom, anxiety, or academic stress and getting enjoyment or relaxation from likes and comments or from browsing through feeds. For instance, IG may be used by an UG to cool down, although it will be challenging to lecture or test.

Tolerance: This is the process whereby greater quantities of the specific activity are needed to accomplish the former effect. One has to utilise SM more often or for longer lengths of time to have the same emotional response. In order to feel satisfied, people might gradually increase the amount of time they spend using SM each day. A restricted use may result in feelings of boredom or dissatisfaction.

Withdrawal Symptoms: When a certain activity is abruptly reduced or stopped, unpleasant emotional states and/or physical effects may result. These withdrawal symptoms could be psychological. For example, unpleasant emotions or physical symptoms may set in when unable to use SM. The symptoms may include heightened anxiety and frustration, as well as other clinical manifestations. Their symptoms include nausea, perspiration, cephalalgia, sleeplessness, and other stress-induced responses. Individuals may experience restlessness or discomfort when they are unable to access their devices. It can also lead to feeling nervous, agitated, or like one is missing out when one cannot use one's phone (for instance, during examinations or in places without Wi-Fi), distraction, or physical restlessness. When Wi-Fi is unavailable to use, UGs' phone dies in class; hence, they become anxious or angry.

Conflict: This terminology pertains to conflicts that emerge about a particular activity, either originating from inside the individual (intrapsychic conflict) or occurring between the individual and their social environment (interpersonal conflict). Continuously choosing temporary relief and pleasure causes people to ignore negative effects and long-term harm, which makes the addictive behaviour seem like a more necessary coping mechanism. SM use leads to problems

with self-regulation, AP and interpersonal relationships. Other effects include negative social, academic, or personal effects of using a phone excessively. The situation can also result in disputes with family members or friends about excessive phone use, ignoring assignments or skipping classes because of internet time, feeling conflicted or guilty about their own actions, but they keep using. Despite later regrets, an UG student may stay up late on SM and neglect to turn in an assignment.

Relapse: It refers to the tendency for repeated returns to previous patterns of a particular activity. The phenomenon includes the swift reestablishment of severe behaviour characteristic of peak addiction after prolonged periods of control or abstinence, the resumption of excessive SM usage following intervals of restraint, unsuccessful efforts to curtail usage (such as deleting applications or setting timers), which ultimately result in a relapse into previous habits, and the inability to adhere to strategies for digital detoxification.

Griffiths (2002) states that for a conduct to be analytically categorised as addicting, all of these components must be present. Some individuals display addictive behaviour without really suffering from a serious addiction. Addictions have significant negative health and psychological effects, but healthy enthusiasms have negligible negative health and psychosocial effects. This is how addiction differs from excessive healthy enthusiasm. Griffiths (2010) inquired whether a person is really addicted if they quit their excessive conduct and do not suffer from unpleasant withdrawal symptoms. He also asked: Can the excessive conduct be classified as an addiction if it does not affect other areas of their lives? Griffiths' model offers a strong theoretical framework for analysing SMA among UGs. It draws attention to not just excessive use but also the behavioural and psychological underpinnings that have diagnostic and preventative value.

3. Research Methodology

3.1 Study Design

This study assessed SM use, trends, and addiction using a cross-sectional and descriptive research design.

3.2 Population of the Study

The target population consists of young people who utilise SM platforms and are between 16 and 21 years and attend Adekunle Ajasin University (AAU), Akungba Akoko, Ondo State, Nigeria. Young adults are typically those who are 16 years of age or older and eligible for university admission. Their population is more than 20000 in the institution (<https://copsun.org/university/adekunle-ajasin-university-akungba-akoko>).

3.3 Sample Size and Sampling Procedure

This study used a convenience sample technique due to lack of the resources necessary for random sampling at the Faculty of Education (FoE). The approach uses a non-probability sampling technique to get the required sample size. The faculty setting was thought to be the most practical way for the researchers to recruit enough young adults to participate in the study. Science Education, Guidance and Counselling, Adult Education, Arts Education, Educational Management, Human Kinetics and Health Education, Social Studies Education and Vocational and Technical Education are the eight departments of the FoE that were chosen as the study area. The cluster from which the young adults were selected was represented by each department chosen for the study. In the FoE, eight clusters were chosen and UGs who were interested in taking part could do so by signing and verbally consenting to the survey.

3.4 Research Instruments

In this study, modified and structured questionnaires were employed. The questionnaire consists of four primary research tools. The respondents' age, gender, marital status, religion, and course level are all included in their demographic profile. This part used closed-ended questions, prompting respondents to choose a choice that most accurately reflected their circumstances. The Bergen SM Addiction Scale (BSMAS), Academic Engagement Scale, and Time Management Scale were the sources of the SMA scale, a nominal assessment tool utilised in this section.

SM Addiction Scale: This scale was adapted from BSMAS (Schou Andreassen *et al.*, 2016), which evaluates problematic social media use (PSMU) behaviour reflecting on the fundamentals of addiction in six items. A 5-point Likert scale is used to rate each item, with 1 representing "very rarely" and 5 representing "very often." For example: "I feel compelled to engage with every day (Tolerance); I use it to keep out private problems; I invest an excessive amount of time considering or making plans for its use (Salience)" (Mood modification) I've tried in vain to use SM less often (Relapse); I become upset or disturbed if using SM is prohibited (Withdrawal); and I use SM so much that it interferes with my AP (Conflict). Higher scores correspond to higher SMA, with total possible scores ranging from 6 to 30. A pre-test was also carried out among 30 UGs from FoE, Federal University Oye Ekiti (FUOYE), Ekiti State. The Scales' internal reliability was excellent. 88 Cronbach's $\alpha = 0.88$. This is regarded as reliable and appropriate for evaluating SMA (Kircaburun, 2016).

Academic engagement: AE was evaluated using the Utrecht Work Engagement Scale for Students (UWES-9s) (Schaufeli, Bakker & Salanova, 2006). Three components, including academic vigour, devotion, and assimilation, are assessed by the nine questions that make up the UWES-9S. A seven-point Likert scale is used to score each item on the UWES-9S, with 0 representing never and 6 representing always. A student's level of AE increases with their overall UWES-9S score, which runs from 0 to 54. The UWES-9S has good psychometric qualities (Loscalzo & Giannini, 2019; Tang, Huo, Liu, Liu & Wong, 2020). A pre-test was also carried out among 30 UGs from FoE, FUOYE, Ekiti State. The instrument's suitability for data collection was highlighted in the current study by the UWES-9 S with a Cronbach's alpha of 0.959.

Time Management Scale: The Britton and Tesser (1991) scale served as the model for this variable. Three subscales make up the TMQ: Time Attitudes (6 questions), Long-Range Planning (5 questions) and Short-Range Planning (7 questions). The TMQ employed a five-point Likert Scale, with 1 denoting never and 5 denoting always (Britton & Tesser, 1991). The range of the overall score is 18 to 90. Time management abilities are rated as low, moderate and high, respectively, by total scores ranging from 0 to 54, 55 to 69 and 70 to 90. A pre-test was also carried out among 30 UGs from FoE, FUOYE, Ekiti State. The instrument's suitability for data collection was highlighted by the reliability test results, which showed acceptable Cronbach's alpha values of 0.971.

3.5 Validity of the Instrument

Both face validity and content validity were established to guarantee the validity of the research tools utilised in this research. The questionnaire was thoughtfully created to support the study's objectives, which included determining UG's levels and usage, patterns of SM and any indications of SMA. Experts in the domains of guidance and counselling, information technology, educational psychology and communication evaluated the instrument to guarantee that the content was pertinent. Their input helped confirm that the items sufficiently addressed the constructs of interest, which included behavioural patterns, indicators of addictive use, platform types and frequency of SM use. Similarly, to ascertain whether the questionnaire items were appropriate, comprehensible and clear

for the intended audience, a small group of UGs who were not part of the main sample were given a draft version of the questionnaire. The questions, wording and structure were slightly changed in response to the feedback in order to increase clarity and guarantee that they were understood as intended. Furthermore, the questionnaire items were modified from well-known tools utilised in earlier empirical research on addiction and SM behaviour, which increases the tools' legitimacy and conformity to the body of existing literature. As a result of these assessment processes, the instrument is considered reliable and suitable for evaluating SMA and use trends among UG students at AAU, Akungba Akoko.

3.6 Ethical Consideration

The university's Ethical Committee for Research gave its approval to this study, and all of its guidelines were followed. Before filling out the questionnaire, all respondents gave their written and verbal consent. The participants were previously made aware that participation was entirely voluntary and that no information that would reveal their identities would be recorded. There was no payment associated with taking this survey.

3.7 Data Analysis

The data was analysed quantitatively. Those who responded to the questions about addiction and SM usage were selected for further testing after all of the retrieved questionnaires had been assessed for eligibility. Descriptive statistics were employed to summarise the information in order to ascertain the link between the demographic features of the respondents and SMA. To ascertain the relationship between demographic traits and SMA, the chi-square was used. The effects of SMA on students' TM and AE were examined using Analysis of Variance (ANOVA), with estimates shown at 95% confidence intervals. A 0.05 p-value was thought to be suitable.

4. Results and Discussion

Results

Table 1: Demographic Characteristics of UGs

S/N	Variables	Labels	Frequency	Percentage
1	Age (years)	16-18	50	21.8
		19-21	91	39.7
		22-24	62	27.1
		25 and above	26	11.4
2	Gender	Male	103	45
		Female	126	55
3	Years of study (Level)	100	112	48.9
		200	24	10.5
		300	64	27.9
		400	22	9.6
		Others	7	3.1
4	Marital status	Single	149	65.1
		Married	53	23.1
		Others	27	11.8
5	Religion	Christianity	134	58.5
		Islam	74	32.3

		Others	21	9.2
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The demographic details of the UGs are presented in Table 1. The majority, 91 (39.7%) of the respondents, fall within the age group of 19–21, closely followed by 62 (27.1%) who fall within the age group of 22–24, while only 26 (11.4%) fall within the 25 years and above. There is a moderately balanced gender ratio, with females at 126 (55.0%), slightly outnumbered by males with 103 (45.0%). Regarding years of study, most of the respondents, 112 (48.9%), were in their first year, 22 (9.6%) were in their 400 level, while only 7 (3.1%) were in other years. A large proportion of the respondents, 134 (65.1%), were single, and 53 (23.1%) were married. Moreover, 134 (58.5%) were Christian, while 74 (32.3%) practised the Islamic religion.

Analysis of Research Questions

Research Question One: Which is the most frequently used SM platform among UGs?

Table 2: SM Platform(s) frequently used

s/n	SM frequently used	Yes	No
1	FB	206(90.0%)	23(10.0%)
2	WA	214(93.4%)	15(6.6%)
3	IG	221(96.5%)	8(3.5%)
4	X	203(88.6%)	26(11.4%)
5	YT	181(79.0%)	48(21.0%)
6	TT	204(89.1%)	25(10.9%)
7	Snapchat	58(25.3%)	171(74.7%)

Table 2 demonstrates that the majority of respondents (221, or 96.5%) confirmed that IG is the most popular SM site. 214 (93.4%) and 206 (90.0%), who utilised WA and FB regularly, respectively, come next. The respondents also often utilise TT and X as SM outlets. The IG, WA and FB's dominance suggests that UGs prefer apps that offer visual content along with convenient messaging and community engagement. It is obvious from the table that the respondents are well familiar with the SM platforms and that the platforms were frequently used. This research supports earlier findings by Nagel *et al.* (2018), Idiedo and Eyaufe (2023), Bergaoui, Bouallagui, Hkiri, Zrelli, Moalla, Amri, and Ghachem (2024). For example, Nagel *et al.* (2018) examined how SM was used by college and university students at Royal Roads University (RRU) in Victoria, Canada, and Southern Alberta Institute of Technology (SAIT) in Calgary, Canada. They discovered that X, FB, and WA were the most often used SM platforms. Similarly, Idiedo and Eyaufe (2023) found that among 1239 Library and Information Science students at Nigerian institutions, FB, YT, and IG were the most widely used SM sites. In addition, using a questionnaire distributed online over two weeks, Bergaoui *et al.* (2024) examined 115 students from a variety of disciplines in Tunisia. They discovered that the most widely used and prevalent social networks were FB, IG, WA, TT and X.

Research Question Two: What is the average length of time UGs spend on SM each day?

Table 3: Daily time spent on SM by UGs

Hours of Usage Per Day	Frequency	Percentage
Less than 1	14	6.1
01-Mar	18	7.9
04-Jun	143	62.4
More than 6	54	23.6
Total	229	100

Table 3 shows that most UGs use SM extensively each day, with 143 (62.4%) reporting 4 to 6 hours of use and 54(23.6%) indicating more than 6 hours daily. This implies that more than 85% of those surveyed use SM extensively, which is indicative of how important it is to their everyday lives for communication, entertainment and potentially educational objectives. This aligns with the results of Zhu *et al.* (2021), which found that 74.5% of the USs use SM for two to six hours daily. SM users spend many hours reading new posts and chatting with acquaintances despite the detrimental effects of problematic usage (Dhir *et al.*, 2018). A research conducted by Bergaoui, Bouallagui, Hkiri, Zrelli, Moalla, Amri, and Ghachem (2024) also indicated that the average duration of engagement with SM was 11.77 ± 3.28 years, while the average daily internet usage was $3:08 \pm 1:81$ hours. In addition, Rahman *et al.* (2025) revealed that most participants used SM for 0 to 2 hours a day, but only a small percentage used it for more than 8 hours, which is in line with the study's findings. Similarly, Tambuwal, Haliru and Al-Ameen (2025) found that a significant percentage of students, 67.5%, reported using SM for three or more hours a day, with 32.5% reporting using it for more than four hours. It suggests that students in Sokoto Metropolis are highly engaged with digital content. This finding is in line with previous research by AlFaris *et al.* (2018), who examined the effects of SM on Saudi Arabian medical students and found that most of them (55%) utilised SM for one to four hours a day, with 23% using it for more than four hours.

Research Question Three: What are the primary purposes for which UGs use SM (AC, social interaction, entertainment)?

Table 4: Primary Reasons for using SM among UGs

s/n	Reasons for using SM	No	Yes
1	AC/study groups	98(42.8%)	131(57.2%)
2	Socialising with friends/family	84(36.7%)	145(63.3%)

3	Entertainment (videos, music, memes)	63(27.5%)	166(72.5%)
4	News and current events	92(40.2%)	137(59.8%)
5	Business/Marketing	60(26.2%)	169(73.8%)

Although there are many reasons why UGs use SM, Table 4 shows that the most common ones are for business/marketing (169, or 73.8%) and amusement (166, or 72.5%). Other reasons are for AC/study groups, socialising with friends/family and news and current events. This indicates that the UGs used the platforms for various reasons. The findings are in agreement with the previous findings, since UGs primarily use SM for communication, entertainment and socialisation. For example, Fasae and Adegbilero-Iwari (2016), cited in Wickramanayake and Jika (2018) and Wickramanayake and Jika (2018), found that students have a variety of reasons for using SM. However, there were fewer reports of academic-related activities like participating in online forums and accessing instructional materials. Though adolescents utilise SM for educational objectives, this trend suggests that recreational pursuits predominate in their use habits. According to a study by Oni, Osu and Babatunde (2025), UGs actively participate in a range of SM activities and use SM for educational and professional purposes. This is also consistent with the present study.

Similarly, Taha, Abu-Surrah, Abu-Awadh, Mahmoud, Al-Qadi, Al Hamdan, Hijazi, Al Ani and Berggren (2025) found that the most popular content on SM was entertainment with 83.0%. Next in line are sports (20.1%), politics (17.9%), and educational apps (72.5%). Likewise, a study by Al-Adwan *et al.* (2020) in Jordan found that learning was one of the primary motivations for students' use of SM, primarily because study materials are posted on various SM platforms.

Research Question Four: What is the prevalence of SMA among UGs?

Table 5: Prevalence of SMA among UGs

s/n	SMA	Never	Rarely	Sometimes	Often	Very often	$\bar{x}$	S.D.
	I dedicate considerable effort to contemplating SM or strategising its utilisation.	28	40	69	70	22	3.08	1.163
		12.20%	17.50%	30.10%	30.60%	9.60%		
	I'm feeling pressured to utilise SM more often	36	26	60	85	22	3.14	1.219
		15.70%	11.40%	26.20%	37.10%	9.60%		
	I use SM to keep private matters out of my mind.	33	35	52	74	35	3.19	1.279
		14.40%	15.30%	22.70%	32.30%	15.30%		
	I have made	27	58	84	53	7	2.8	1.022

	unsuccessful attempts to use SM less.	11.80%	25.30%	36.70%	23.10%	3.10%		
	If SM use is forbidden, I get agitated or disturbed.	37	34	50	83	25	3.11	1.261
		16.20%	14.80%	21.80%	36.20%	10.90%		
	I use SM so much that it has affected my academics	2	-	9	55	163	4.65	0.643
		0.90%		3.90%	24.00%	71.20%		

With a weighted mean of 3.33, Table 5 shows a high prevalence of SMA among UGs, suggesting that many students regularly displayed behaviour linked to excessive use. However, the most alarming result is that 163 (71.2%) of respondents agreed that SM negatively affects their AP, resulting in an exceptionally high mean score of 4.65. Additional indicators also showed addictive tendencies: 85 (37.1%) frequently feel pressured to use SM more and more. According to this study, many UGs are either addicted to SM or at risk of becoming so. The present study findings concurred with those of earlier research, such as Salari *et al.* (2023), who reported that 18% of participants suffer from SMA. The prevalence was 36.9% in an urban Bangalore area by Ramesh, Masthi, Pruthvi and Phaneendra (2018), but it was much higher among Saudi Arabian medical students at 55% (Alfaya *et al.* 2023). Further research by Cheng, Lau, Chan, and Luk (2021) revealed that SM consumption was more prevalent in 32 nations. This implies that these previous findings are all consistent with the present study.

Research Question Five: Which of the demographic variables (age, gender, year of study, marital status and religion) are linked with greater levels of SMA?

Table 6: Association between the Demographic Variable and SMA

Demographic characteristics	Chi-square value	Contingency co-efficient	Correlation	P-value	Remarks
Age	10.472*	0.209	0.114	0.015	Sig.
Gender	2.393	0.102	0.102	0.122	Not Sig.
Year of study	7.232	0.175	0.123	0.124	Not Sig.
Marital status	2.098	0.095	-0.074	0.35	Not Sig.
Religion	0.47	0.045	0.006	0.791	Not Sig.

* Sig. at 0.05 level

Table 6, which examines the association between SMA among UGs and demographic variables, shows that age is the only variable that is significantly associated with greater levels of addiction. Age indicates a statistically significant correlation with SMA, with a chi-square value of 10.472 and a p-value of 0.015 (below the 0.05 criterion). The modestly positive correlation value of 0.114 and the contingency coefficient of 0.209 show that students' degree of SMA varies with their age. This finding suggests that younger UGs are more prone than other age groups to use

SM disproportionately, either due to peer pressure, increasing computer fluency, or a reliance on online social connections. The results of the current study were corroborated by related research such as Hawi and Samaha (2017), Gündüz *et al.* (2019), Ahmed, Nayeem, Siddiqua, Alam, and Griffiths (2021), and Lerma, Marquez, Sandoval, and Cooper (2021). However, the current investigation found no connection between gender and SMA.

Research Question Six: Does SMA have effects on students' TM and AE?

Table 7a: Effect of SMA on Student's TM

Source	Squares	DF	Mean	F	P-value
SMA	113.61	18	6.312	3.481	<.001
Error	380.74	210	1.813		
Total	494.35	228			

Table 7a demonstrates that SMA had a statistically significant impact on students' TM in the study ($F = 3.481$, $p = 0.001 < .05$). This result shows how excessive SM usage disrupts regular activities and educational performance, with UGs' ability to effectively manage their time decreasing as their addiction to SM increases. The findings are supported by a research by Ezeonwumelu *et al.* (2021), which revealed that FB and X addiction had a major effect on students' TM skills. The findings of the research are also consistent with a study by Ali, Mousa, Atta, and Morsy (2024), which found a statistically significant inverse relationship between students' overall TM and their online addiction ($r = -0.387$, $p < 0.051$).

Table 7b: Effect of SMA on Students' AE

Source	Squares	DF	Mean	F	P-value
SMA	159.15	18	8.841	2.719	<.001
Error	682.8	210	3.251		
Total	841.95	228			

SMA has a statistically significant effect on students' AE in the research, as shown in Table 7b ($F = 2.719$, $p = 0.001 < .05$). This finding thus suggests that students' AE is linked to higher levels of SMA, underscoring the possible academic hazards of UGs' excessive use of SM. The amount of time UGs spend pursuing academic goals and the quality of their learning activities are measured by AE (Kuh 2001). Research indicates that SMA negatively affects students' AE (Mark Carrier, Rosen, & Cheever, 2013). Internet addicts, according to the theory, progressively lose their ability to regulate themselves over time (Young, 2004). Furthermore, pertinent empirical research has shown that using SM might seriously impair learning (Boer *et al.*, 2020). According to the findings of a research by Zhuang *et al.* (2023), college students' SMA was directly correlated with their AE (Effect = -0.051 , 95% CI: -0.087 to -0.015). Addiction to SM often entails spending more time on entertainment-related tasks than on academic activities (Balogun *et al.* 2025).

5. Conclusion and Recommendations

This study's conclusions demonstrate how SM permeates AAU UG's daily lives. Even though these platforms provide beneficial chances for communication, entrepreneurship and information access, their excessive use presents serious problems. Primarily, this study indicates that SMA is quite common and has a significant detrimental effect on students' TM skills and AE. Students' routines are deeply ingrained with SM as evidenced by the widespread use of SNS like FB, IG, X and WA. UGs collaborate academically online as well, but the drawbacks of excessive and prolonged use outweigh any potential advantages. Age-sensitive interventions are necessary, as evidenced by the strong correlation between addiction levels and age that exists in the present study. In light of the results, the following recommendations are proposed:

1. SM awareness should be included in the curriculum. To increase awareness, the following subjects — SM, SMA and MH — should be included in the curriculum by departments to curb the excessive use and addictions of SM.
2. Workshops on digital literacy and TM should be organised for UGs. To assist UGs in juggling their academic and online obligations, the university should regularly host information literacy campaigns about SM responsibility, digital wellbeing and efficient TM techniques.
3. Counselling and support services should be created. To assist UGs who are engaging in addictive behaviour, the university should create or enhance specialised counselling services for MH and digital wellness.
4. Students should be encouraged to use SM productively. The UGs should be directed and inspired to use SM ethically for entrepreneurship skill development and AC and to avoid excessive use and to be addicted.

References

- Abid H, Mohd J, Mohd A Q, & Rajiv S. (2022). Understanding the role of digital technologies in education: A review, *Sustainable Operations and Computers*, 3,; 275-285
- Acar, I. H., Avcılar, G., Yazıcı, G., & Bostancı, S. (2022). The roles of adolescents' emotional problems and social media addiction on their self-esteem. *Current Psychology*, 41(10), 6838–16. <https://doi.org/10.1007/s12144-020-01174-5>
- Ahmed, O, Nayeem Siddiqua S.J, Alam N, & Griffiths M.D.(2021) The mediating role of problematic social media use in the relationship between social avoidance/distress and self esteem. *Technol Soc.* ;64:101485. doi: 10.1016/j. techsoc.2020.101485.
- Al-Adwan, A.S, Albelbisi, N.A, Aladwan, S.H, Horani, O, Al-Madadha, A, & Al Khasawneh, M.H. (2020) Investigating the impact of social media use on student's perception of academic performance in higher education: evidence from Jordan. *Journal of Information Technology Education: Research* 19:953–975. doi: 10.28945/4661
- AlFaris E, Irfan F., Ponnampuruma G., Jamal A., Van der Vleuten C., Al Maflehi N., Al-Qeas S., Alenezi A., Alrowaished M., Alsalman R., & Ahmed A.M.A. (2018) The pattern of social media use and its association with academic performance among medical students. *Medical Teacher* ;40(sup1): S77-S82. doi: 10.1080/0142159X.2018.1465536.
- Alfaya M.A, Abdullah N.S, Alshahrani N.Z, Alqahtani A.A.A, Algethami MR, Al Qahtani A.S.Y, Aljunaid MA, & Alharbi FTG. (2023). Prevalence and Determinants of Social Media Addiction among Medical Students in a Selected University in Saudi Arabia: A Cross-Sectional Study. *Healthcare (Basel)*. ;11(10):1370. doi: 10.3390/healthcare11101370. PMID: 37239655; PMCID: PMC10217812.

- Ali, H.F.M, Mousa, M.A, Atta, M.H.R, & Morsy S.R. (2024) Exploring the association between internet addiction and time management among undergraduate nursing students. *BMC Nursing*. ;23(1):632. doi: 10.1186/s12912-024-02273-5. PMID: 39256720; PMCID: PMC11389558.
- Andreassen, C.S, Torsheim T, Brunborg G.S, & Pallesen S. (2012). Development of a Facebook addiction scale. *Psychological Reports* 110:501–17. doi: 10.2466/02.09.18.PR0.110.2.501-517
- Arikan, G, Acar I.H, & Ustundag-Budak AM. (2022) A two-generation study: The transmission of attachment and young adults' depression, anxiety, and social media addiction. *Addictive Behaviours*:124:107109. doi: 10.1016/j.addbeh.2021.107109. Epub 2021 Sep 3. PMID: 34547644.
- Aslan I, & Polat H. (2024) Investigating social media addiction and impact of social media addiction, loneliness, depression, life satisfaction and problem-solving skills on academic self-efficacy and academic success among university students. *Frontiers in Public Health*. 8;12:1359691. doi: 10.3389/fpubh.2024.1359691. PMID: 39040868; PMCID: PMC11261762.
- Baccarella, C. V., Wagner, T. F., Kietzmann, J. H., & McCarthy, I. P. (2018). Social media? it's serious! Understanding the dark side of social media. *European Management Journal*, 36(4), 431–438. <https://doi.org/10.1016/j.emj.2018.07.002>
- Balogun, O. J., Quadri, G. O., Ukpere, W. I., & Joseph, C. (2025). Smartphone addiction as predictors of suicidal behaviour among undergraduates. *Annals of Spiru Haret University. Economic Series*, 25(1): 509-528.
- Bergaoui, E ,Bouallagui, A , Hkiri, A Zrelli, M ., Moalla, M., Amri, G & Ghachem,R (2024) Social medical addiction among college students in Tunisia *L'Encéphale, Science Direct* <https://doi.org/10.1016/j.encep.2024.09.005>.<https://www.sciencedirect.com/science/article/pii/S0013700624002070>
- Boer, M, Stevens, G, Finkenauer C, van den & Eijnden R. (2020) Attention Deficit Hyperactivity Disorder-Symptoms, Social Media Use Intensity, and Social Media Use Problems in Adolescents: Investigating Directionality. *Child Development*. ;91(4):e853-e865. doi: 10.1111/cdev.13334.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405–410. <https://doi.org/10.1037/0022-0663.83.3.405>
- Caner, N., Sezer Efe, Y., & Başdaş, Ö. (2022, December). The contribution of social media addiction to adolescent LIFE: Social appearance anxiety. *Current Psychology*, 41(12), 8424–8433. <https://doi.org/10.1007/s12144-022-03280-y>
- Chandrasena P.P.C.M & Ilankoon I.M.P.S.(2022) The impact of social media on academic performance and interpersonal relations among health sciences undergraduates. *Journal of Education and Health Promotion*. ;11:117. doi: 10.4103/jehp.jehp_603_21. .
- Cheng C, Lau Y.C, Chan L, & Luk J.W. (2021)Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values. *Addictive Behaviours*. ;117:106845. doi: 10.1016/j.addbeh.2021.106845.
- Chris, L.A. (2015) Influence of social media on study habits of undergraduate students in kenyan universities. *International Journal of Novel Research in Humanity and Social Sciences* 2(4) (42-55), www.noveltyjournals.com

- Chrisantus, O. (2021). Problems of Teaching in Nigerian Secondary School. <https://www.projecttopics.org/problemsteaching-second-language-nigerian-secondary-school.html>
- Creighton, J.L, Foster, J.W, Klingsmith, L., & Withey D.K. (2013) I just look it up: Undergraduate student perception of social media use in their academic success. *Journal of Social Media in Society*, 2:26–46. <https://core.ac.uk/download/pdf/267884142.pdf>
- Demir, Y. & Kutlu, M. (2016) The Relationship between Loneliness and Depression & 58; Mediation Role of Internet Addiction. *Educational Process: International Journal*, 5, 97-105. <https://doi.org/10.12973/edupij.2016.52.1>
- Dhir, A., Yossatorn, Y., Kaur, P. & Chen, S. (2018). Online social media fatigue and psychological wellbeing—a study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, (2),141-152
- Doan, L.P., Le, L.K., Nguyen, T.T., Nguyen, T.T.P., Le, M.N.V., Vu, G.T., Latkin, C. A., Ho, C. S. H., Ho, R.C.M., & Zhang, M.W.B. (2022). Social Media Addiction among Vietnam Youths: Patterns and Correlated Factors. *International Journal of Environmental Research and Public Health*, 19(21), 14416. <https://doi.org/10.3390/ijerph192114416>
- Ezeah, G. & Sopuruchukwu, O.B (2024) Social media addiction: a study of usage patterns and mental health implications. *Sapientia Foundation Journal of Education, Sciences and Gender Studies* 6 (4) 191 – 200 ISSN: 2734-2522
- Ezeonwumelu, V.U; Nwiko, M.N, Okoro, C.C. & Ekanem, E.I. (2021). Social Media Addiction and Time Management Skills of University Students in Akwa Ibom State, Nigeria. *Global Journal of Social Sciences Studies*, 7(1): 24-34.
- Fasae, J.K. & Adegbihero-Iwari, I. (2016). Use of social media by science students in public universities in Southwest Nigeria. *The Electronic Library*, 34 (2). 213-222.
- Ferine, K. F., Gadzali, S. S., Ausat, A. M. A., Marleni, M., & Sari, D. M. (2023). The impact of social media on consumer behavior. *Communnity Development Journal: Jurnal Pendidikan Masyarakat*, 4(1), 843–847. <https://doi.org/10.31004/cdj.v4i1.12567>
- Griffiths, K.M, Bennett, K., Walker, J., Goldsmid S, & Bennett A. (2016) Effectiveness of MH-Guru, a brief online mental health program for the workplace: a randomised controlled trial. *Internet Interventions*. 6:29–39. doi: 10.1016/j.invent.2016.09.004
- Griffiths, M.D. (2005). A ‘components’ model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10, 191-197
- Griffiths, M. D. (2010). The role of context in online gaming excess and addiction: Some case study evidence. *International Journal of Mental Health and Addiction*, 8, 119-125
- Griffiths, M. D. (2013). Social Networking Addiction: Emerging Themes and Issues. *Journal of Addiction Research & Therapy*, 4, e118. <http://dx.doi.org/10.4172/2155-6105.1000e118>
- Griffiths, M.D., Parke, J. & Wood, R.T.A. (2002). Excessive gambling and substance abuse: Is there a relationship? *Journal of Substance Use*, 7, 187-190
- Gündüz, N., Gökçen, O., Eren, F., Erzincan, E., Timur, Ö., Turan, H., & Polat, A. (2019). The relationship between internet addiction and eating attitudes and obesity related problems among university students (eng). *Turkish Journal of Clinical Psychology*, 22(3), 266-275. <https://doi.org/10.5505/kpd.2019.14622>.
- Haand, R., & Shuwang, Z. (2020). The relationship between social media addiction and depression: A quantitative study among university students in Khost, Afghanistan. *International Journal of Adolescence and Youth*, 25(1), 780–786.

- <https://doi.org/10.1080/02673843.2020.1741407>
- Hawi, N.S., & Samaha, M. (2017). The Relations among Social Media Addiction, Self-Esteem, and Life Satisfaction in University Students. *Social Science Computer Review*, 35, 576-586. <https://doi.org/10.1177/0894439316660340>.
- Hilliard, J., & Parisi, T. (2020). Social media addiction. Addiction Center. [https://www.addictioncenter.com/drugs/social-media-addiction\(open in a new window\)](https://www.addictioncenter.com/drugs/social-media-addiction(open in a new window))
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(1). <https://doi.org/10.5817/CP2019-1-4>
- Idiedo, V & Eyaufe O.O. (2023) Social media addiction and effect on academic performance among library and information science students in universities in Nigeria. *Journal of Library Services and Technologies*, 5(2), 53– 71, 2023 credencepressltd.com DOI: 10.47524/jlst.v5i2.54
- Itasanmi, S.A., Ajani, O.A., Andong, H.A., & Omokhabi, A.A. (2024). Antecedents of graduate students' preferences for online, blended, and face-to-face learning in Nigeria. *Nurture* 18. (4).: 795–806.<https://doi.org/10.55951/nurture.v18i4.859>
- Jegade, A.E., Olowoakeere, E.I., & Elegbele, A.O. (2016). Youth identity, peer influence and internet crime participation in Nigeria: A reflection. *Ife Centre for Psychological Studies/Services, Ile-Ife, Nigeria* 1, 24(1), 37-47.
- Keles, B., McCrae, N., & Grealish, A. (2019). A systematic review: The influence of social media on depression, anxiety and psychological distress in adolescents. *International Journal of Adolescence and Youth*, 25(1), 79–93. <https://doi.org/10.1080/02673843.2019.1590851>
- Kelly, Y., Zilanawala, A., Booker, C., & Sacker, A. (2019). Social media use and adolescent mental health: Findings from the UK millennium cohort study. *EClinical Medicine*, 6: 59–68. <https://doi.org/10.1016/j.eclinm.2018.12.005>
- Kemp, S. (2020). Digital 2020 report. <https://wearesocial.com/blog/2020/01/digital-2020-3-8-billion-people-use-social-media>
- Koohang A, Floyd, K.,Yerby, J. & Paliszkiwicz, J. (2021). Social media privacy concerns, security concerns, trust, and awareness: Empirical validation of an instrument *Issues in Information Systems* 22, (2) 133-145, https://doi.org/10.48009/2_iis_2021_136-149
- Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change*, 33, 10-13. <http://dx.doi.org/10.1080/00091380109601795>
- Lahiry, S., Choudhury, S., Chatterjee, S. & Hazra, A. (2019) Impact of social media on academic performance and interpersonal relation: A cross-sectional study among students at a tertiary medical center in East India. *Journal of Education and Health Promotion*: 8:73. doi:10.4103/jehp.jehp_365_18. PMID: 31143790; PMCID: PMC6512220.
- Lerma, M., Marquez, C., Sandoval, K., & Cooper, T.V. (2021). Psychosocial correlates of excessive social media use in a Hispanic college sample. *Cyberpsychology Behaviour and Social Networking*: 24(11):722-8. doi: 10.1089/cyber.2020.0498.
- Loscalzo, Y., & Giannini, M. (2019). Study Engagement in Italian University students: a confirmatory factor analysis of the Utrecht Work Engagement Scale Student Version. *Social Indicators Research*: 142, 845–54 <https://doi.org/10.1007/s11205-018-1943-y>
- Mohsenpour, M.A., Karamizadeh, M., Barati-Boldaji R, Ferns GA, & Akbarzadeh M. (2023) Structural equation modeling of direct and indirect associations of social media addiction

- with eating behavior in adolescents and young adults. *Scientific Reports*, 21;13(1):3044. doi: 10.1038/s41598-023-29961-7.
- Nagel, T. W. S., Remillard, C., Aucoin, R & Takenishi, A. (2018) Findings on student use of social media at the collegiate, undergraduate, and graduate levels: implications for post-secondary educators, *Journal of University Teaching & Learning Practice*, 15(1), :<http://ro.uow.edu.au/jutlp/vol15/iss1/8>
- Nsizwana, S.C, Ige, K.D, & Tshabalala, N.G. (2017). Social media use and academic performance of undergraduate students in south African higher institutions: The case of the University of Zululand. *Journal of Social Science*, 50(1-3):141–152.
- Obar, J. A., & Wildman, S. (2015). Social media definition and the governance challenge: An introduction to the special issue. *Telecommunications Policy*, 39(9), 745–750. <https://doi.org/10.2139/ssrn.2647377>
- Obeid, S., Saade, S., Haddad, C., Sacre, H., Khansa, W., Al Hajj, R., Kheir, N., Hallit, S. (2019). Internet addiction among Lebanese adolescents: The role of self-esteem, anger, depression, anxiety, social anxiety, and fear, impulsivity, and aggression—a cross-sectional study. *The Journal of Nervous and Mental Disease*, 207(10), 838–846. <https://doi.org/10.1097/NMD.0000000000001034>
- Ogedengbe, O .E & Quadri, G. O, (2020). The use of social media by undergraduates in south-west nigeria: a comparative study. *Library Philosophy and Practice (ejournal)*. 3860.
- Ojokheta, K. O., Oladeji, S. O. & Omokhabi, A. A. (2018). Innovative Mechanism for Building Leadership Skills and Competence among Youths in Educational Setting: The Outcome of a Three–Phased Experiment. *American Journal of Strategic Leadership*. 4. (1): 152-166.
- Omokhabi, A.A., Atoyebi, V.O., & Omokhabi, U.S. (2024). An analysis of young adults'engagement in cyber-criminal activities in Nigeria. *FUOYE Journal of Criminology and Security Studies*, 3(1), 213-233 <https://fjcss.fuoye.edu.ng/index.php/fjcss/article/view/90>
- Omokhabi, A.A., Omokhabi, U. S., & Oloyede, T. O. (2025). Social media impact on marital conflict among married couples in three Southwestern Nigerian states. *Simulacra*, 8(1), 1–16. <https://doi.org/10.21107/sml.v8i1.27215>
- Omokhabi, U. S., & Omokhabi, A. A. (2024). Facilitators' gender and soft skills as correlate of adult learners' attitude towards learning in the Federal University Oye-Ekiti Sandwich Programme, Ekiti State, Nigeria. *Gender & Behaviour*, 22(2): 22653-22662.
- Omokhabi, U.S., Omilani, M.A., Adegbite, O.O & Omokhabi, A. A. (2025). The dark side of online learning: examining the rise of cyberbullying on learning interest and engagement of students in the age of virtual classrooms *Unizik Journal of Educational Research and Policy Studies* 19 (2): 388-404
- Orsolini, L., Volpe, U., Albert, U., Carmassi, C., Carrà, G., Cirulli, F., Dell'Osso, B., Del Vecchio, V., Di Nicola, M., Giallonardo, V., Luciano, M., Menculini, G., Nanni, M. G., Pompili, M., Sani, G., Sampogna, G., Tortorella, A., & Fiorillo, A. (2022). Use of social network as a coping strategy for depression among young people during the COVID-19 lockdown: Findings from the COMET collaborative study. *Annals of General Psychiatry*, 21(1): 44. <https://doi.org/10.1186/s12991-022-00419-w>
- Oni, M. T., Osu, U. C., & Babatunde, T. (2025). Balancing the Grind: Social Media entrepreneurship and academic success among Nigerian undergraduates. *International Journal of Education and Development using Information and Communication*

- Technology, 21(1), 200-208.
- Primi, C., Fioravanti, G., Casale, S., & AnnaDonati, M. (2021)). Measuring problematic Facebook use among adolescents and young adults with the Bergen Facebook addiction scale: A psychometric analysis by applying item response theory. *International Journal of Environmental Research and Public Health*, 18(6), 2979. <https://doi.org/10.3390/ijerph18062979>
- Quadri, G. O., Omopo, O. E., & Ukpere, W. I. (2025). Childhood trauma, peer pressure, parenting styles and gender on adolescent substance abuse in Ibadan: a structural equation modelling approach. *EUREKA: Social and Humanities*, (3), 29-45.
- Rahman, M, Rabby, M.F, Kabir M.R, Anjum, R, Saha O, Bhuiyan, M.A.A, Emon, H.H & Hossain, M.M. (2025). Associations between social media addiction, social media fatigue, fear of missing out, and sleep quality among university students in Bangladesh: a cross-sectional study. *Journal of Health, Population and Nutrition*, 44(1):152. doi: 10.1186/s41043-025-00896-1.
- Ramesh Masthi, N.R, Pruthvi S, & Phaneendra M.S. (2018). A Comparative Study on Social Media Usage and Health Status among Students Studying in Pre-University Colleges of Urban Bengaluru. *Indian Journal of Community Medicine*. 43(3):180-184. doi: 10.4103/ijcm.IJCM_285_17. PMID: 30294084; PMCID: PMC6166494.
- Rinker, D.V, Krieger H, & Neighbors C. (2016). Social network factors and addictive behaviors among college students. *Current Addiction Reports*, 3(4):356-367 doi: 10.1007/s40429-016-0126
- Rosen, L.D., Mark, C.L., & Cheever, N.A. (2013). Facebook and texting made me do it: media-induced task-switching while studying. *Computers in Human Behaviour*, 29(3):948–958. <https://doi.org/10.1016/j.chb.2012.12.001>.
- Salari, N., Zarei, H., Hosseinian Far, A., Rasoulpoor, S., Shohaimi, S., & Mohammadi, M. (2023). The global prevalence of social media addiction among university students: a systematic review and meta-analysis. *Journal of Public Health*. <https://doi.org/10.1007/s10389-023-02012-1>
- Savci, M. & Aysan, F. (2017). Social-emotional model of internet addiction, *Psychiatry and Clinical Psychopharmacology*, 27:4, 349-358, DOI: 10.1080/24750573.2017.1367552
- Schaufeli, W.B, Bakker, A.B, & Salanova, M. (2006). The measurement of work engagement with a short questionnaire - A cross-national study. *Educational and Psychological Measurement*, 66(4):701–716. 10.1177/0013164405282471 <http://epm.sagepub.com>
- Schou, A.C., Billieux, J., Griffiths, M.D., Kuss, D.J., Demetrovics, Z., Mazzoni, E. & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. *Psychology of Addictive Behaviour*. ;30(2):252-62. doi: 10.1037/adb0000160. PMID: 26999354.
- Taha, H., Abu-Surrah D., Abu-Awadh L., Mahmoud, A., Al-Qadi T., Al Hamdan L., Hijazi M., Al Ani, A., & Berggren, V. (2025). Assessment of the effect of social media use on medical students' academic performance: cross-sectional study from Jordan. *Frontiers in Public Health*. ;13:1551905. doi: 10.3389/fpubh.2025.1551905.
- Tambuwal, A.A, Haliru, S. & Al-Ameen, S. (2025). Assessing social media usage patterns among undergraduate students in Sokoto Metropolis *International Journal of Innovative Information Systems & Technology Research* 13(2):42-46, doi:10.5281/zenodo.15342305
- Tang, H., Huo, Z., Liu, C., Liu, Z. & Wong, Y.J. (2020). Psychometric properties of the academic

- encouragement scale in Chinese University students. *Journal of Psychoeducational Assessment*, 39(2):258–263. doi: 10.1177/0734282920966821
- Tang, C.S., & Koh, Y.Y.W. (2017). Online social networking addiction among college students in Singapore: comorbidity with behavioral addiction and affective disorder. *Asian Journal of Psychiatry*, 25:175-8. doi: 10.1016/j.ajp.2016.10.027
- Tarigan, I.M., Harahap, M.A.K., Sari, D.M., Sakinah, R.D., & Ausat, A.M.A. (2023). Understanding social media: Benefits of Social Media for Individuals. *Jurnal Pendidikan Tambusai*, 7(1), 2317–2322. <https://jptam.org/index.php/jptam/article/view/5559>
- Tayo, S.S., Adebola, S.T. & Yahya, D.O. (2019). Social media: usage and influence on undergraduate studies in Nigerian universities *International Journal of Education and Development using Information and Communication Technology*, 15,(3):53-62 <https://files.eric.ed.gov/fulltext/EJ1227664.pdf>
- Uhls, Y. T., Ellison, N. B., & Subrahmanyam, K. (2017). Benefits and costs of social media in adolescence. *Pediatrics*, 140(Supplement_2), S67–S70. <https://doi.org/10.1542/peds.2016-1758E>
- Vidal, C., Tenzin, L., Leslie, M., & Rheanna, P. (2020). Social media use and depression in adolescents: A scoping review'. *International Review of Psychiatry*, 32(3), 235–253. (2 April 2020) <https://doi.org/10.1080/09540261.2020.1720623>
- Waqas, A., Khurshid, Z., Ali, M., & Khaliq, H. (2018). Association between usage of social media and depression among young adults. *Journal of Management Information*, 5(4), 26–30. <https://doi.org/10.31580/jmi.v5i4.115>
- Wickramanayake, L. & Jika, S.M. (2018). Social media use by undergraduate students of education in Nigeria: a survey", *The Electronic Library*, 36(1): 21-37, <https://doi.org/10.1108/EL-01-2017-0023>
- Xiao, W., Peng, J., & Liao, S. (2022)). Exploring the associations between social media addiction and depression: Attentional bias as a mediator and socio-emotional competence as a moderator. *International Journal of Environmental Research and Public Health*, 19(20), 1-14. <https://doi.org/10.3390/ijerph192013496>
- Young, K.S. (2004) Internet Addiction: A New Clinical Phenomenon and Its Consequences. *American Behavioural Scientist*, 48, 402-415. <http://dx.doi.org/10.1177/0002764204270278>
- Zhu, X., Hu, H., Xiong, Z., Zheng, T., Li, L., Zhang L, & Yang F. (2021) Utilization and professionalism toward social media among undergraduate nursing students. *Nursing Ethics*. 28(2):297-310. doi: 10.1177/0969733020952105.
- Zhuang, J., Mou, Q., Zheng, T., Gao, F., Zhong, Y., Lu Q., Gao Y, & Zhao M. (2023). A serial mediation model of social media addiction and college students' academic engagement: the role of sleep quality and fatigue. *BMC Psychiatry*, 23(1):333. doi: 10.1186/s12888-023-04799-5.