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# Industrial Strike's Impact on Student's Social Media Addiction Level

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#### **Abstract**

The study investigates students' levels of social media addiction (SMA) during the Academic Staff Union of Universities (ASUU) industrial strike action in Nigeria. It found that excessive social media use affects academic performance (AP), with WhatsApp being the most used application followed by Facebook and Instagram. However, students self-report through surveys was used to measure poor AP attributed to SMA. A combination of purposive and random sampling methods was employed. The survey link was sent to over 200 students via their various WhatsApp groups of students, resulting in 113 responses. R and Smart PLS-SEM 4 was used for the analysis of the data collected. The findings suggest that educators, parents, and policymakers should adopt technology tools such as Parental control Applications, Digital well-being Application and Digital minimization methods to control SMA and focus on implementing features that encourage students to use social media responsibly. The study offers evidence that controlling SMA would improve AP. Hence, the study suggests that addressing SMA in higher education institutions can help improve students' academic performance among the undergraduate students.

**Keywords:** Social Media, Students, ASUU Industrial Action, Social Media Addiction and Higher Education Institution.

#### Introduction

Social media addiction among students during industrial strike action can contribute to poor academic performance. Studies have shown that social media use can be addictive and may cause significant impairment in various aspects of an individual's life (Emmanuella, 2022). The

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use of social media for recreation or relaxation purposes, especially for extended periods of time such as strike period, has been associated with negative effects on academic outcomes (Cylkowski, 2020). Additionally, social media addiction has been found to be negatively associated with academic adjustment and grit personality, both of which are important factors for academic success (Siah et al., 2020). Furthermore, social media addiction has been identified as an independent predictor of academic performance, with students who use social media applications during the night experiencing lower academic performance (Alhusban et al., 2022). The detrimental effects of social media addiction on academic engagement can be mediated by factors such as sleep quality and fatigue, further exacerbating the negative impact on academic performance (Zhuang et al., 2023). Historically, for more than a century, strike activities have exhibited cyclical patterns, with peak occurrences observed in the UK during the early 1890s, 1910s-1920s, 1940s, and late 1960s to late 1970s (Kelly, 2015). These strikes have either been followed by periods of relative stability, as in the 1950s or a decrease in strike activity since the 1920s and the early 1980s. However, strike actions have persisted in various forms across Europe and the UK, with the National Union of Rail, Maritime, and Travel Workers (RMT) initiating a strike that disrupted travel in November 2022.

In Nigeria, industrial strike action has a long history, with the first labour strike occurring in 1897 in Lagos (Adavbiele, 2015). Since then, strike actions have become a common phenomenon in Nigeria, with various types of strikes being observed, including recognition strikes, economic strikes, jurisdictional strikes, sympathy strikes, warning strike, health workers strike and wildcat strikes (Suleiman et al., 2019). (Tijani, 2015) opined that, the causes of strike actions in Nigeria include unfair treatment of employees, violation of legislation, and poor application of collective bargaining provisions of labour unions.

Some of these labour unions that are presently affiliates of the Nigerian Labour Congress (NLC) include the Academic Staff Union of Polytechnics (ASUP), the Non-Academic Staff of Universities (NASU), and the Academic Staff Union of Universities (ASUU), have organized both short- and long-term strikes, with ASUU issuing a call to strike on February 14, 2022. These strikes have revolved around demands such as the release of funds for university revitalization, renegotiation of the ASUU-FGN 2009 agreement, and the implementation of the University Transparency Accountability System for lecturers' salaries and allowances, as reported by the Punch newspaper.

As a result of these protracted strikes, a substantial number of undergraduate and graduate students have left their educational institutions, and it is postulated that this exodus has led to increased social media usage among students. Recent times have seen a surge in social media use, facilitated by factors like the accessibility of mobile phones and affordable, improved data networks (Stănculescu, 2021). While adolescents benefit from the customization features of social media platforms, research indicates that a minority struggle with responsible usage (Throuvala et al., 2019). The ubiquity and ease of use of social network sites, including WhatsApp, Facebook, Instagram, Twitter, and YouTube, have further contributed to the phenomenon (Ho et al., 2017). However, this excessive use has raised concerns regarding behavioural addiction, impacting the academic performance of students in higher education institutions (HEIs) (Atteh et al., 2020; Fatokun, 2019). The Compensatory Internet Use Theory (CIUT) suggests that individuals may resort to excessive internet use, including social media, as a means to alleviate negative emotions, such as boredom (Liu et al., 2023). Which is one of the reasons why students use social media more than necessary during industrial strike actions.

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Hence, factors contributing to social media addiction encompass the fear of missing out (FoMO) (Tandon et al., 2021), personality traits (Dalvi-Esfahani et al., 2021), self-esteem (Ergün & Alkan, 2020), influence from family and friends, narcissism (Casale & Banchi, 2020), negative emotions (Liu et al., 2023), and gratification. Social media's role in connecting individuals across vast distances has become particularly pronounced during challenges like pandemics, global lockdowns, job losses, and strike actions, bridging physical gaps and facilitating diverse interactions (Stănculescu, 2021). The studies on Nigeria's industrial strikes and their impact on social media usage among students provide new insights into the relationship between these two factors. Hence, the research by Nwanyanwu et al (2023) reveals that Academic Staff Union of Universities (ASUU) strikes have a high negative impact on students' behavior, leading to increased drug abuse, involvement in criminal activities, and reduced academic performance. Obiekwe et al (2023) highlights students' perceptions of teacher strikes, attributing the causes to delayed salary payments and perceiving teachers as benefiting from the strikes. These findings shed light on the consequences of strikes on students' behavior and their perceptions of the education system. Additionally, the studies on social media usage in Nigeria by Augustine (2022) emphasized the role of social media in the EndSARS demonstrations, challenging government claims of misuse and highlighting the influence of users' social experiences during crisis period which also caused the closure of schools and disrupted economic activities all over Nigeria.

In addition, the primary reason for conducting this research is to shed light on the prevalence and impact of SMA among students in Nigeria and other African countries during industrial strike? The study also proposed technological solution to the SMA problem such as the application of parental control applications, Digital well-being Applications and the Digital minimization methods. To achieve this objective, the researchers employed a quantitative research methodology, distributing a questionnaire via a Google Form link. The distribution of the questionnaire was facilitated by sharing the Google link questionnaire through various students WhatsApp platforms, including email, WhatsApp, and Facebook groups, spanning across Nigeria's six geopolitical regions during the strike.

# **Research Questions**

- 1. What is the prevalence and impact of Social Media Addiction (SMA) among students in Nigeria and other African countries during industrial strike?
- 2. What control interventions can African students employ to deal with SMA during industrial strikes, and how effective are these strategies in mitigating its adverse effects?

# Significance of the Study

Firstly, there is an insufficient reports of research activities on social media addiction during crisis period such as Covid-19 and industrial strike action in Nigeria and other Africa countries, therefore there is need for such research activities in SMA as it affects students in crisis periods. This is one of the solutions that this research will provide. As it provides more literature and technological solutions to the SMA among African students during crisis such as strike action by academic staff union of Nigeria universities ASUU. Additionally, To the best of the knowledge of the authors, this is among the first study in the last few years on SMA during such industrial strike action from a Nigeria context.

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#### **Literature Review**

A study by Nwanyanwu et al (2023) investigates the detrimental impact of Academic Staff Union of Universities (ASUU) strikes on students' behavior in Nigeria, focusing on the Choba community affiliated with the University of Port Harcourt and utilizing a survey research design with 370 retrieved questionnaires, the findings reveal a significantly negative effect of ASUU strikes on students, manifesting in prolonged campus stays, increased drug abuse, heightened involvement in criminal activities, and diminished academic performance. The study's outcomes underscore the multifaceted challenges faced by students during ASUU strikes, providing crucial insights for scholars and policymakers. Similarly, another study conducted in Delta State, Nigeria, aimed to investigate the perceived impact of industrial actions on the academic performance of tertiary institution students. The study recommended regular dialogues between the government and tertiary institution unions to mitigate frequent industrial actions and emphasized the need for unions to consider alternative conflict resolution methods to minimize their impact on students' academic performance (Abanobi, 2022).

However, the prolonged stay at home can also lead to SMA among the affected students due to internet use which has expanded quickly throughout Africa. Over 570 million people in the continent used the internet in 2022, more than twice as many as in 2015. Hence, Nigeria, the nation with the largest population in Africa, has the continent's greatest concentration of users. In 2022, there were over 200 million residents, followed by 76 million Egyptians and 41 million South Africans. In addition, because of improved telecommunications infrastructure and a growth in the adoption of mobile devices, access to the internet in Africa has recently increased. Digital activities and services, such as social media, online shopping, and mobile payments, have become more and more popular as a result. Though, the digital potential of the continent has not yet been completely realized. Incidentally, the use of social media had increased in Nigeria, most especially among the adolescent students. Hence, the adolescents' usage of social media features (such as the ability to customize information on major platforms) benefits them in their contribution to the field of SMA, but empirical evidence indicates that a minority also found it hard to utilize these tools responsibly which leads to SMA among this age group (Throuvala et al., 2019).

Similarly, Social network sites (SNSs) are popular as they provide users with excessively easy ways of sharing information among individuals like never before (Ho et al., 2017). The most frequently used social media application of network sites in Nigeria are WhatsApp, Facebook, Instagram, Twitter, and YouTube, and most recently the Tik Tok platform which allows users to record and share short video content on their network and the same can be redistributed on WhatsApp status, Facebook page, and YouTube to gain more views.

This ease of use has been agreed upon by various researchers to have been the cause of this behavioral addiction among the youth especially the students of higher education institutions. Further research has also revealed that it has also been of both negative and positive impacts on the academic performance of students of HEIs (Atteh et al., 2020; Fatokun, 2019). Due to these facts, the researchers deemed it fit to investigate the SMA addiction level of students during industrial strike action, the type of social media used and to validate their excessive social media usage while the school is in session and also if it will impact their academic performance. According to the compensatory Internet usage theory (CIUT), an unhappy situation may lead to people using the Internet unnecessarily to get rid of their bad feelings, of which boredom is one type of manifestation (Liu et al., 2023).

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To mention a few are just what we have stated above due to space. Many factors make it easy for students to be prone to addiction as revealed by many scholars such as FoMO Tandon et al (2021), Personality Traits Dalvi-Esfahani et al (2021), self-esteem Ergün & Alkan (2020), Family and Friends, Narcissism(Casale & Banchi, 2020), negative feelings of which boredom is one kind of manifestation Liu et al (2023), and Gratification. It is a fact that social media connects students that are thousands of kilometers apart from each other. in a tough situation like a pandemic when most people all over the world are made to stay home, and strike action, during the loss of jobs. Social media will bridge this gap. It makes you tour the world without leaving your house. You can start a small-scale business and market with your mobile phone on social media and your product can be known in places you cannot imagine. It helps to showcase your talent, and emotion, express your happiness and your joy to the world. On the other side, it connected us digitally but separated us physically from our family & friends. The current study is focused on the use of social media during situations such as this long ASUU strike.

## Research on SMA

Social media addiction has various effects on students in Nigeria. Firstly, it has been found that a large percentage of students are addicted to social media, with no significant differences in usage between boys and girls (Asanga, 2023). This addiction has been linked to a student's academic performance, with students who are addicted to social media falling behind academically. Additionally, social media exposure has been found to have notable effects on the sexual behaviors of young persons, including increased engagement in sexual activities and having multiple sexual partners. Furthermore, social media addiction has been found to be significantly related to substance abuse among adolescent secondary school students in Nigeria. Lastly, spending excessive time on social media negatively affects students' academic activities, time management abilities, and mood (Bebenimibo, 2023). Social media applications such as WhatsApp, Facebook, Twitter and, some Weibo users have typical symptoms of addictive behaviors which include, withdrawal symptoms, salience, conflicts, relapse, loss of usage control, and general living problems in their view of the topic, they opined that social media has deeply penetrated university students' daily lives, inducing excessive usage and addictive usage that subsequently result in social media overload. Niemz et al (2005) contends that all addictions consist of six fundamental elements: salience, mood modification, tolerance, withdrawal, conflict, and relapse. Furthermore, he claims that people who become addicted to the Internet exhibit preoccupation and cognitive distortions, deterioration of socialized behaviors, as well as feelings of dissatisfaction or physical discomfort.

Similarly, many studies have explored the adverse consequences of social media use from different perspectives such as social media policies by (Chen et al., 2016), impact of social media on academic performance Sankar (2020), Technostress and technology addiction Brooks et al (2020), Addiction to social media and attachment style D'Arienzo et al (2019), the impact of heavy and disordered use of games and social media on adolescents' psychological, social, and school functioning Van Den Eijnden et al (2018), Correlation between psychological factors, academic performance and social media addiction: model-based testing Malak et al (2021) and The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study (Bányai et al., 2017). These authors describe social media addiction using various styles and psychological terms and variables. In his contribution Hwang (2017) opined that, SNS are used

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mostly for maintenance of social connection. Such desire for staying connected is assumed to function as potential predictor, which might explain why some individuals use SNS excessively Moreover, the impact of addiction to internet-related activities on the well-being of an individual by recognizing can be affected by internet gaming disorder (IGD) as a tentative disorder by the American Psychiatric Association in 2013 (Lin et al., 2017).

# Trending social media and Addiction studies During Crisis such As Covid-19

While the COVID-19 lockdown period and industrial strike actions present distinct challenges to students' academic experiences, certain similarities emerge. Both scenarios disrupt the regular flow of educational activities, leading to uncertainties about academic calendars and the completion of coursework. In both cases, access to traditional learning resources may be compromised, requiring adaptations to alternative methods. Technological challenges can also be a commonality, with the need for remote learning platforms and potential inequities in access. Additionally, both the COVID-19 lockdown and industrial strikes may elicit concerns among students about the continuity and quality of their education. While the origins and nature of these disruptions differ, the shared experience of academic uncertainty and adaptation highlights the need for comprehensive strategies to mitigate their impact on student learning. Several authors also conducted similar research on SMA during Covid-19 pandemic period to establish similar fact about the increase in addictive behaviors such SMA during crisis. (Li et al., 2021)was of the opinion that internet addiction increases in general population during Covid-19 with their evidence from China. Table 1 shows other research efforts by scholars in SMA.

Table 1
SMA studies During Covid-19 Pandemic

Author and Date	Title	Method	Objective
Li et al., 2021	Internet Addiction Increases in the General Population During COVID-19: Evidence from China	Cross – sectional Survey	The study aimed to determine the impact of the COVID-19 pandemic on Internet use and related risk factors among the general public in China
Nascimento et al., 2021	Internet Addiction During the Pandemic COVID-19: A New Paradigm?	Survey	The study aimed to determine the impact of the COVID-19 pandemic on SMA
Tahir et al., 2021	Internet addiction and sleep quality among medical students during the COVID-19 pandemic: A multinational cross-sectional survey.	Cross-sectional survey	To investigate Internet addiction and sleep quality among medical students during the COVID-19 pandemic

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Oka et al., 2021	Prevalence and risk factors of internet gaming disorder and problematic internet use before and during the COVID-19 pandemic: A large online survey of	Survey	To investigate the prevalence and the consequential risk factors of both gaming disorder and internet addiction before and during the global Covid - 19 pandemic
	Japanese adults.		
Gavurova et al., 2022	Internet Addiction in Socio-Demographic, Academic, and Psychological Profile of College Students During the COVID-19 Pandemic in the Czech Republic and Slovakia.	Survey	To investigate the Internet Addiction with in Socio-Demographic, Academic, and Psychological Profile of College Students During the COVID-19 Pandemic in the Czech Republic and Slovakia.

#### **Technological Interventions**

Information Systems (IS) technological interventions, such as digital well-being apps, parental control apps, and digital minimization apps, can be used to address undergraduate students' challenges during industrial strike actions

- 1. Digital Well-being Apps: As smartphone use increases dramatically, so do studies about technology overuse. Many different mobile apps for breaking "smartphone addiction" and achieving "digital wellbeing" are available. Hence, contemporary digital wellbeing apps can be used to reduce some addictive behaviors, e.g., using social networks applications (Roffarello & De Russis, 2019).
  - Digital well-being apps can help students manage the stress and anxiety associated with strike actions. They offer features like meditation exercises, mood tracking, and stress management techniques to promote emotional well-being.
  - These apps can also provide tools for students to maintain productivity, set study goals, and track their progress, helping them stay on top of their academic responsibilities despite the strike-related disruptions.
- 2. Parental Control Apps: The surge in remote learning during crisis period such as industrial strike action by ASUU and the global COVID-19 pandemic has made mobile phones a primary tool for Students, exposing them to potential online risks. Recognizing the need for safeguarding against issues like online exploitation and addiction, the authors advocate for a parental control system tailored for the Sri Lankan context, aiming to improve parental digital literacy and protect students from various harms such as addiction, cyberbullying and unauthorized adult materials (Jayasekara et al., 2022).
  - Undergraduate students may need to balance their academic commitments with family responsibilities during a strike. Parental control apps can be valuable in this context, allowing parents to monitor and manage their children's screen time and online activities.

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- These apps help guarantee that student maintain a focus on their studies or engage in age-appropriate activities, which can be challenging for students juggling multiple roles during a strike.
- 3. Digital Minimalism methods: Digital minimalism is elucidated as the promotion of digital etiquette, specific behavioral practices in the media realm, and the introduction of new digital terminology, collectively shaping the framework for regulating media consumption and fostering the evolution of digital culture. Given the pervasive influence of digitalization across various facets of human activity, individuals are increasingly implementing restrictions on online media presence, adopting strategies like a "digital diet" involving partial constraints on digital interactions, engaging in "digital detox" for temporary disengagement from the digital realm, and embracing "media asceticism" as a conscious retreat into an offline environment. These practices not only exemplify the principles of digital minimalism but also serve as effective tools in mitigating the risks of addiction associated with excessive online engagement.

**Reduced Distractions:** Embracing digital minimalism in the context of studying involves consciously limiting the digital tools and platforms students engage with. By eliminating unnecessary apps, notifications, and online distractions during study sessions, students create an environment that promotes focused and undisturbed learning. This intentional approach helps them concentrate on their academic tasks without succumbing to the constant interruptions that can come from social media, emails, or other non-essential digital activities.

**Enhanced Time Management:** Digital minimalism encourages students to streamline their digital activities and allocate specific time slots for online engagement. By adopting practices such as setting designated periods for checking emails or social media, students gain better control over their time and can allocate more focused, uninterrupted blocks for studying. This disciplined approach to time management allows students to prioritize their academic responsibilities, leading to increased efficiency and productivity in their studies.

Furthermore, by implementing these IS technological interventions, students can better cope with the challenges posed by strike actions. These tools promote student well-being, improve academic performance, and aid in maintaining a work-life balance during such disruptive events.

## **Research Methodology**

The study made use of the Google form to design the questionnaire for a cross-sectional survey using the Bergen Social media addiction Scale (BSMAS). BSMAS was developed from the Bergen Facebook Addiction Scale (BFAS) with a simple modification of the term Facebook to social media. It's a short survey used in psychological research that has been widely accepted by the psychology community. It's quick and something you can take yourself. It has a 5-item scale designed to expose the difficulties an individual face due to social media's excessive usage and assess the severity accordingly. The five items of BSMAS are measured against 5 standard responses of 1. very rarely 2. rarely 3. sometimes 4. Often, and 5. very often.

This scale has been tested by many researchers Bányai et al (2017); Monacis et al (2017) all over the world. But has not been tested in Nigeria context or during this strike period to investigate the addictive level of HEI student in Nigeria universities.

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# **Participants and Procedure**

This study focused on undergraduate students from Nigerian public universities affected by the ASUU strike. A combination of purposive and random sampling methods was employed, selecting universities on ASUU strike in 2022. Geopolitical zones were comprehensively considered to ensure national representation.

#### **Method of Distribution**

The Google link questionnaire was distributed to students via email, WhatsApp, and Facebook communities across Nigeria's six geopolitical zones during the strike period. About 200 students were reached, resulting in 113 responses due to the strike's constraints.

#### Instruments

In addition to a set of standardized social media questions, background information on respondents' demographics, such as age, gender, parental education, and the number of hours per day spent on social media, was gathered. The BSMAS, which is adapted from the Bergen Facebook Addiction Scale (Andreassen & Brunborg, 2012), consists of a 5-point Likert scale ranging from 1 (very rarely) to 5 (very often). The Bergen Facebook Addiction Scale Bányai et al (2017); Andreassen & Brunborg (2012) was used to develop the BSMAS, which uses a 5-point Likert scale with a range of 1 (very rarely) to 5 (very often). In order to evaluate the experience of using social media over the previous year, the BSMAS incorporates the six key addiction characteristics (salience, mood modulation, tolerance, withdrawal, conflict, and relapse). A higher score of the BSMAS indicates stronger addiction to the social media, and a BSMAS score over 19 indicates an individual is at-risk of developing problematic social media use (Bányai et al., 2017). Moreover, the structure of the BSMAS has been identified as a onefactor solution with measurement invariance supported across gender in an Italian sample (Monacis et al., 2017). However, it has not been validated with a Nigerian population as far as the research know. Meanwhile, R 4.3.1 and Smart PLS 4 were used to analyze the dataset collected from the university students.

# **Analysis**

Interpreting the data from Table 2 of SMA during the ASUU indusial strike action, we can gain insights into how university students' social media usage and addiction patterns changed during the academic disruption caused by the strike. The table presents the percentage of respondents who selected each response option for specific statements related to social media addiction.

- 1. Thinking: Approximately 30% of respondents reported thinking about social media "Sometimes" during the ASUU strike, indicating that a considerable proportion of students had social media on their minds occasionally.
- 2. Urge: A significant portion (39.45%) of respondents felt a strong "Urge" to use social media "Very often" during the strike. This suggests that social media usage might have increased substantially for many students during the academic disruption.
- 3. Forget\_prob: About 27% of respondents reported using social media to forget their personal problems, with responses ranging from "Sometimes" to "Very often." This finding indicates that social media was seen as a means of escape for some students during the stressful period of the strike.
- 4. No reduction: Interestingly, 24.07% of respondents indicated that they made "No reduction" in their social media usage during the strike, despite the academic disruption. This

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suggests that the strike might not have significantly affected the social media habits of a considerable number of students.

- 5. Restless: Over 30% of respondents felt "Restless" when prohibited from using social media, with responses ranging from "Rarely" to "Sometimes." This finding highlights the potential addictive nature of social media for some students during the strike.
- 6. Negative: Around 43.52% of respondents reported using social media in a way that had a "Negative" effect on their studies, with responses ranging from "Sometimes" to "Very often." This indicates that social media usage might have interfered with academic responsibilities for a considerable portion of the student population.
- 7. First last: A notable percentage (28.44%) of respondents reported that social media was both their "First and last" activity of the day during the ASUU strike, implying that it played a significant role in their daily routines.
- 8. Check\_notif: A significant majority (48.62%) of respondents had a strong "Urge" to check their phones whenever they heard a notification sound, indicating high levels of smartphone dependency during the strike.
- 9. Concentration: About 40% of respondents reported measuring life events by social media uploads, with responses ranging from "Very rarely" to "Sometimes." Additionally, some students (18.35%) mentioned losing "Concentration" when on social media. These findings suggest that social media might have influenced their perception of events and their ability to focus on other tasks.
- 10. Virtual meetings: Nearly half of the respondents (49.07%) preferred "Virtual meetings" with friends and family during the ASUU strike, potentially indicating a shift in communication patterns due to the academic disruption.

Summarily, the data from Table 1 reveals that social media addiction during the ASUU strike was characterized by various behaviors, including a strong urge to use social media, using it as an escape from personal problems, restlessness when prohibited from using it, and a negative impact on academic performance for some students. It also highlights social media's significant role in students' daily routines and its influence on their communication preferences during times of academic disruptions. These findings provide valuable insights into the relationship between ASUU strikes, social media addiction, and the behavioral patterns of university students.

In Table 2, the summary statistics of the Bergen Social Media Addiction Scale (BSMAS) provide valuable insights into the social media usage patterns and addiction levels among university students during the ASUU strike. The data indicates that a significant proportion of participants reported a strong "Urge" to use social media (67.89%) and an intense desire to check their notifications (66.055%). This suggests that social media played a prominent role in their daily routines and digital interactions during the academic disruption. Additionally, approximately half of the respondents (47.664%) used social media as a means to forget personal problems, highlighting the platform's potential role as an escape mechanism during stressful times like the strike.

While some participants exhibited high social media addiction levels, other aspects showed more mixed responses. For instance, thoughts about social media ("Thinking") were reported as neither too high nor too low, with 30.275% of participants falling into the "neutral" category. The "No reduction" item had 44.444% of respondents attempting to reduce social media usage with some success, indicating a desire to control their usage even during the academic disruption. The "Negative" item received the highest percentage in the "low" category (61.111%), indicating that many participants did not perceive social media as

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negatively affecting their studies. However, the "Concentration" item showed a higher percentage (58.716%) of respondents reporting low concentration loss when on social media. The summary statistics suggest that social media played a significant role in the lives of the undergraduate university students during the ASUU industrial strike action. The high percentages of respondents with strong urges and frequent notification checks indicate the addictive nature of social media for some individuals. Despite this, the mixed responses regarding thoughts about social media and attempts to reduce usage suggest that social media addiction levels varied among the participants. While some reported using social media to forget personal problems, others did not perceive negative effects on their studies.

Table 2
Measurement of Social media addiction (SMA) during ASUU strike

ITEM	LOW	NEUTRAL	HIGH	MEAN	SD
Thinking	24.771	30.275	44.954	3.330	1.348
Urge	12.844	19.266	67.890	3.890	1.173
Forget_prob	33.645	18.692	47.664	3.234	1.457
No_reduction	44.444	28.704	26.852	2.731	1.351
Restless	55.963	11.009	33.028	2.661	1.547
Negative	61.111	13.889	25.000	2.361	1.501
First_last	37.615	17.431	44.954	3.183	1.479
Check_notif	22.936	11.009	66.055	3.826	1.400
Concentration	58.716	23.853	17.431	2.266	1.303
Virtual_meetings	63.889	15.741	20.370	2.157	1.368

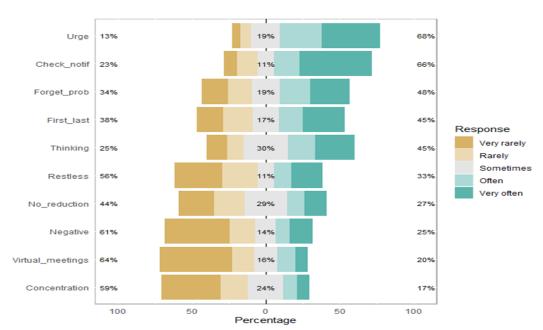


Figure. 1: Likert scale plot for BSMAS Addiction test

Thinking = Do you spend a long time thinking about social media or planning to start using? Urge = Do you feel an urge to use social media more and more always? Forget prob = Do you use social media so as to forget your personal problem(s) always?

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No\_reduction = Have you tried to reduce social media usage without success?

Restless = Do you become restless whenever you are prohibited from social media usage?

Negative = Do you use social media such that it has had negative effect on your studies?

First\_last = Is social media your first and last activity on a daily basis as your daily routine?

Check\_notif = Do you always have the urge to check your phone whenever you hear a notification sound?

Concentration = Do you always measure life events by the uploads on social media and lose concentration when on social media?

Virtual\_meetings = Do you distance yourself from your family even now that ASUU is on strike and prefer virtual meetings with friends and family?

# Gender distribution of respondents by SMA

Table 3 and Figure 2 presents the relationship between sex (gender) and Social Media Addiction (SMA) levels among participants. The table is organized into rows representing gender categories (Female and Male) and columns representing the levels of SMA (Excessive, Moderate, Neither). Among female participants, 17 individuals reported experiencing "Excessive" levels of Social Media Addiction, 30 individuals reported "Moderate" levels, and only 2 individuals reported "Neither" excessive nor moderate addiction levels. Among male participants, 22 individuals reported "Excessive" levels of Social Media Addiction, 37 individuals reported "Moderate" levels, and only 1 individual reported "Neither" excessive nor moderate addiction levels. These findings indicate that both male and female participants exhibited varying levels of SMA. The majority of participants fell into the "Excessive" and "Moderate" categories, with a limited number reporting "Neither" excessive nor moderate addiction levels. The data highlights the significance of gender in influencing social media usage patterns and addiction levels among the participants.

Table 3
Relationship between Sex and SMA

	Excessive	Moderate	Neither
Female	17	30	2
Male	22	37	1

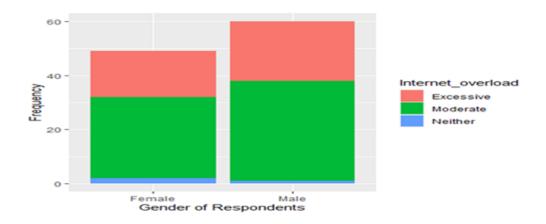


Figure 2. Stacked bar chart showing gender distribution of respondents by SMA

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#### **Parental Education and SMA**

Table 4 as well as the Figure 3 shows the relationship between parental education and Social Media Addiction (SMA) levels among the participants. The table is organized into rows representing two categories of parental education (Educated and Not educated) and columns representing the levels of SMA (Excessive, Moderate, Neither).

Among participants with educated parents, 30 individuals reported experiencing "Excessive" levels of Social Media Addiction, 50 individuals reported "Moderate" levels, and only 2 individuals reported "Neither" excessive nor moderate addiction levels.

Among participants with parents who are not educated, 9 individuals reported "Excessive" levels of Social Media Addiction, 17 individuals reported "Moderate" levels, and only 1 individual reported "Neither" excessive nor moderate addiction levels.

The data indicates that parental education is associated with varying levels of SMA among the participants. Individuals with educated parents showed a higher number of cases falling into the "Excessive" and "Moderate" categories, whereas those with parents who are not educated had relatively fewer cases in these categories. The majority of participants across both categories reported experiencing some level of SMA (either "Excessive" or "Moderate"). Only a small number of participants in each category reported "Neither" excessive nor moderate addiction levels. The findings highlight the potential influence of parental education on the development of social media addiction among university students and may provide valuable insights for understanding and addressing social media usage patterns in different family contexts.

Table 4

Parental education and SMA

	Excessive	Moderate	Neither
Educated	30	50	2
Not educated	9	17	1

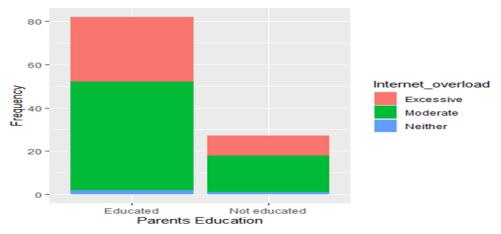


Figure 3. Parental Education and SMA

## Relationship between Students' level and SMA

Table 5 and Figure 4 provides valuable insights into the relationship between students' academic levels as it impacts on their SMA levels. The data suggests that there is a correlation between academic progression and social media addiction among university students. As students advance in their academic levels, there is a notable increase in the number of

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individuals reporting higher levels of SMA. For instance, students in the 400 level exhibited the highest number of cases in both "Excessive" and "Moderate" SMA categories, indicating a potential link between higher academic years and increased SMA. However, it's worth noting that the overall prevalence of SMA, represented by the "Neither" excessive nor moderate addiction level, remains relatively low across all academic levels. This could imply that the majority of university students do experience some level of social media addiction, either "Excessive" or "Moderate," with few students reporting no addiction symptoms. While the findings in Table 5 offer valuable insights, further research and analysis are necessary to fully understand the underlying factors contributing to the observed relationship. Additional variables, such as academic stress, lifestyle changes, and individual coping mechanisms, could also influence social media addiction levels among students. These findings may be instrumental in designing targeted interventions and awareness programs to promote healthier social media habits among university students, particularly as they progress in their academic journeys.

Table 5
Relationship between Students' level and SMA

Level	Excessive	Moderate	Neither
100 level	1	4	0
200 level	5	4	0
300 level	12	25	1
400 level	16	32	1
500 level	5	2	1

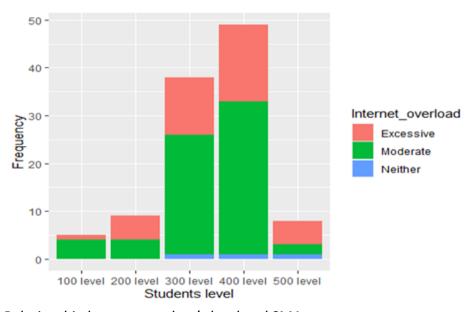


Figure 4. Relationship between student's level and SMA

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## Relationship between academic performance strike Action and SMA

Figure 5 and Table 6 presents the relationship between academic performance before the strike and SMA levels among the participants. The table is organized into rows representing two categories of academic performance (Not Ok and Ok) and columns representing the levels of SMA (Excessive, Moderate, Neither). Among participants who reported their academic performance as "Not Ok" before the industrial strike action, five individuals reported "Excessive" SMA, four individuals reported "Moderate" SMA, and none reported "Neither" excessive nor moderate addiction levels. Among participants who reported their academic performance as "Ok" before the industrial strike action, 34 individuals reported "Excessive" SMA, 63 individuals reported "Moderate" SMA, and three individuals reported "Neither" excessive nor moderate addiction levels. Imperatively, the data suggests a relationship between academic performance before the strike and Social Media Addiction levels. Participants who perceived their academic performance as "Ok" exhibited a higher number of cases in both "Excessive" and "Moderate" SMA categories compared to those who felt their academic performance was "Not Ok." Moreover, the number of cases in the "Neither" excessive nor moderate addiction level was relatively small for both academic performance categories.

Based on the results obtained from the study, several key findings emerge regarding the relationship between ASUU strike and social media addiction among university students.

Table 6
Relationship between academic performance before strike and SMA

Options	Excessive	Moderate	Neither
Not Ok	5	4	0
Ok	34	63	3

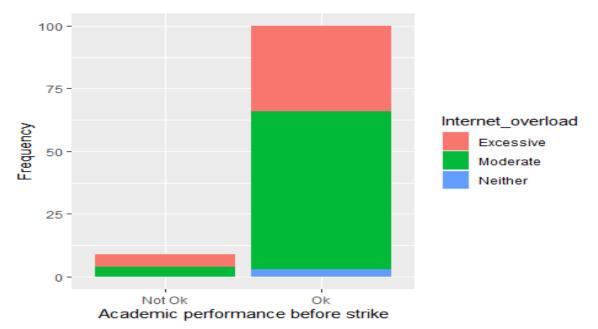


Figure 5. Stacked bar chart showing academic performance of students before strike by SMA

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#### **Results and Discussions**

- 1. Social media addiction during ASUU industrial strike action in Nigeria: The study reveals that the ASUU strike had a significant impact on social media addiction among university students. Participants reported varying levels of addiction, with a considerable number experiencing strong urges to use social media, checking notifications frequently, and using it to forget personal problems. The strike period seemed to influence students' social media habits, with some students reporting increased addiction levels during the academic disruption.
- 2. Gender and SMA: The study found differences in social media addiction between male and female students. Females generally showed higher levels of addiction, particularly in terms of experiencing an urge to use social media and checking notifications more frequently. These gender differences may reflect distinct social media usage patterns and preferences.
- 3. Parental Education and SMA: Parental education was associated with social media addiction levels among university students. Those with educated parents tended to have higher proportions of excessive and moderate addiction compared to those with parents who were not educated. This finding suggests that family background and educational influences might play a role in shaping social media addiction patterns.
- 4. Academic Level and SMA: The study revealed a relationship between academic levels and social media addiction. As students progressed in their academic years, there was a noticeable increase in the number of individuals reporting higher levels of addiction. This finding indicates that academic progression might influence students' social media habits and addiction tendencies.
- 5. Academic Performance and SMA: Students who perceived their academic performance as "Ok" before the ASUU strike exhibited higher levels of social media addiction compared to those who felt their academic performance was "Not Ok." This finding suggests that students with better academic performance might be more susceptible to social media addiction.

# **Conclusions**

The study highlights the significance of the ASUU industrial strike action in shaping social media addiction patterns among university students. Social media addiction levels varied across different demographic factors, such as gender, parental education, academic level, and academic performance. The findings suggest the need for targeted interventions and awareness programs to promote healthier social media habits and mitigate excessive usage during academic disruptions. Educators, parents, and policymakers can use this information to develop strategies to support students in maintaining a balance between their academic responsibilities and social media engagement. The study hereby proposes the adoption of the effectiveness of using parental control, digital wellbeing, and digital minimization techniques as technological control intervention to manage SMA among undergraduate students.

Future studies could explore the longitudinal effects of such disruptions on academic performance and mental well-being. Additionally, researchers could investigate the role of specific social media platforms in exacerbating or alleviating addiction tendencies during prolonged academic disruptions. Understanding how different platforms contribute to social media addiction may inform targeted interventions.

Moreover, exploring the effectiveness and user experiences of specific technological control interventions, such as parental control applications, digital well-being applications, and digital minimization methods, can provide valuable insights. Comparative studies evaluating the

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efficacy of these interventions in diverse cultural and educational contexts could help tailor strategies for different student populations.

Additionally, further research could also probe into the perceptions and attitudes of students, educators, and parents towards these technological interventions. Understanding the acceptance and potential barriers to the adoption of parental control applications, digital well-being tools, and digital minimization techniques would be crucial for designing effective and user-friendly interventions.

Consequently, considering the dynamic nature of social media platforms and technological advancements, future studies could explore emerging trends and the impact of new features or platforms on social media addiction patterns. This could inform the continuous development of relevant interventions and policies to address evolving challenges in the digital landscape.

In addition to the conclusions drawn from the study, it is essential to emphasize the theoretical and contextual contributions of this research to the existing knowledge on SMA among undergraduate students in Nigeria, particularly during the ASUU industrial strike action. This study adds to the theoretical understanding of SMA by uncovering its important dynamics within the context of academic disruptions such as ASUU industrial strike. By examining the impact of the ASUU strike on SMA levels, as well as exploring demographic factors such as gender, parental education, academic level, and academic performance, the research expands our knowledge of the socio-cultural influences shaping addiction patterns. The findings provide empirical evidence supporting the role of environmental factors, individual characteristics, and social contexts in exacerbating or mitigating SMA among university students in Nigeria.

Moreover, this research contributes to the contextual understanding of SMA by highlighting the specific challenges and implications of academic disruptions on social media usage behaviours. The identification of increased addiction levels during the ASUU strike period underscores the need for targeted interventions to address heightened reliance on social media as a coping mechanism during academic disruptions. Additionally, the examination of gender differences, parental education, academic progression, and perceived academic performance in relation to SMA prevalence offers valuable insights for developing tailored intervention strategies that consider the diverse needs and experiences of undergraduate students in Nigeria.

Finally, this research advances both theoretical and practical knowledge on SMA among undergraduate students in Nigeria by uncovering its complex interplay with socio-cultural factors and academic disruptions. By shedding light on the demographic correlates and contextual influences of SMA, the study provides a foundation for future research and intervention efforts aimed at promoting healthier social media habits and enhancing academic outcomes among university students in Nigeria.

## Reference

Abanobi, C. C., Abanobi, C. H., Ibe, I. M. A., Airiavbere, R. A. (2022). Perceived Impact of Industrial Actions on the Academic Performance of Students in Tertiary Institutions in Delta State Nigeria Education Education. Innovare Journal of Education 10(6), 14–19.

Adavbiele, J. A. (2015). Implications of incessant strike actions on the implementation of technical education programme in Nigeria. *Journal of Education and Practice*, 6(8), 134–138. www.iiste.org

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

- Alhusban, A., Mismar, T., Al Husban, A., & Alzoubi, K. H. (2022). Problematic Social Media Use and Academic Performance among University Students: An Evaluation from The Middle East. *The Open Nursing Journal*, *16*(1), 1–7. https://doi.org/10.2174/18744346-v16-e2207050
- Andreassen, C. S., & Brunborg, G. S. (2012). *Development of a facebook addiction scale 1 , 2. Psychological Reports, 2012, 110, 2, 501-517.110*(2).

  https://doi.org/10.2466/02.09.18.PR0.110.2.501-517
- Asanga, M. P. (2023). Social Media and Academic Performance: A Survey Research of Senior Secondary School Students in Uyo, Nigeria. 22(2), 323–337.
- Atteh, E., Assan-Donkoh, I., Mensah, Y. A., Boadi, A., Badzi, S. C., & Lawer, V. T. (2020). A Thoughtful Overview of Social Media Usage among Students and Its Impact on their Academic Work. *Asian Journal of Advanced Research and Reports*, 8(3), 30–39. https://doi.org/10.9734/ajarr/2020/v8i330201
- Augustine, C. (2022). INVESTIGATION OF HOW SOCIAL MEDIA INFLUENCED THE ENDSARS PROTEST IN LAGOS, NIGERIA.
- Bányai, F., Zsila, Á., Király, O., Maraz, A., Elekes, Z., Griffiths, M. D., Andreassen, C. S., & Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PLoS ONE*, *12*(1), 10–14. https://doi.org/10.1371/journal.pone.0169839
- Bebenimibo, P. (2023). THE IMPACT OF SOCIAL MEDIA ON RELATIONSHIP BUILDING AMONG UNDERGRADUATES STUDENTS IN NIGERIAtle. 4(13), 119–145. https://doi.org/10.58934/jgss.v4i13.135
- Brooks, S., Wang, X., & Schneider, C. (2020). Technology addictions and technostress: An examination of the U.S. And China. *Journal of Organizational and End User Computing*, 32(2), 1–19. https://doi.org/10.4018/JOEUC.2020040101
- Casale, S., & Banchi, V. (2020). Narcissism and problematic social media use: A systematic literature review. *Addictive Behaviors Reports*, 11(January). https://doi.org/10.1016/j.abrep.2020.100252
- Chen, Q., Xu, X., Cao, B., & Zhang, W. (2016). Social media policies as responses for social media affordances: The case of China. *Government Information Quarterly*, 33(2), 313–324. https://doi.org/10.1016/j.giq.2016.04.008
- Cylkowski, K. (2020). Impact of Social Media on Academic Journals. *Journal of Perinatal and Neonatal Nursing*, *34*(4), 287–288. https://doi.org/10.1097/JPN.0000000000000487
- D'Arienzo, M. C., Boursier, V., & Griffiths, M. D. (2019). Addiction to Social Media and Attachment Styles: A Systematic Literature Review. *International Journal of Mental Health and Addiction*, 17(4), 1094–1118. https://doi.org/10.1007/s11469-019-00082-5
- Dalvi-Esfahani, M., Niknafs, A., Alaedini, Z., Ahmadabadi, B. H., Kuss, D. J., & Ramayah, T. (2021). Social Media Addiction and Empathy: Moderating impact of personality traits among high school students. *Telematics and Informatics*, *57*, 101516. https://doi.org/https://doi.org/10.1016/j.tele.2020.101516
- Emmanuella, G. (2022). STRIKE ACTION AND THE ACADEMIC PERFORMANCE OF STUDENTS IN BENUE STATE UNIVERSITY, MAKURDI BY IN PARTIAL FULFILMENT FOR THE AWARD OF POST GRADUATE DIPLOMA IN EDUCATION ( PGDE ) APRIL , 2021. *Scienceopen, November*, 0–1. https://doi.org/10.14293/S2199-1006.1.SOR-.PPF7U5X.v1
- Ergün, G., & Alkan, A. (2020). The social media disorder and ostracism in adolescents: (OSTRACA-SM study). *Eurasian Journal of Medicine*, *52*(2), 139–144. https://doi.org/10.5152/eurasianjmed.2020.19076

- Fatokun, K. (2019). Effect of social media on undergraduate students achievement and interest in chemistry in the North-central geo-political zone of Nigeria. *International Journal of Science and Technology Education Research*, 10(2), 9–15. https://doi.org/10.5897/ijster2019.0453
- Ho, S. S., Lwin, M. O., & Lee, E. W. J. (2017). Till logout do us part? Comparison of factors predicting excessive social network sites use and addiction between Singaporean adolescents and adults. *Computers in Human Behavior*, *75*, 632–642. https://doi.org/10.1016/j.chb.2017.06.002
- Hwang, H. S. (2017). The influence of personality traits on the Facebook addiction. *KSII Transactions on Internet and Information Systems*, 11(2), 1032–1042. https://doi.org/10.3837/tiis.2017.02.022
- Jayasekara, U., Maniyangama, H., Vithana, K., Weerasinghe, T., Wijekoon, J., & Panchendrarajan, R. (2022). Al-Based Child Care Parental Control System. 4th International Conference on Advancements in Computing, ICAC 2022 Proceeding, 120–125. https://doi.org/10.1109/ICAC57685.2022.10025332
- KATIE NIEMZ, MARK GRIFFITHS, and P. B. (2005). Prevalence of Pathological Internet Use among University Students and Correlations with Self-Esteem, the General Health Questionnaire (GHQ), and Disinhibition. 8(6), 7–9.
- Kelly, J. (2015). *Conflict: trends and forms of collective action*. 720–732. https://doi.org/10.1108/ER-06-2015-0102
- Li, Y., Wang, A., Wu, Y., Han, N., & Huang, H. (2021). Impact of the COVID-19 Pandemic on the Mental Health of College Students: A Systematic Review and Meta-Analysis. *Frontiers in Psychology*, *12*(July), 1–14. https://doi.org/10.3389/fpsyg.2021.669119
- Lin, J. S., Lee, Y. I., Jin, Y., & Gilbreath, B. (2017). Personality Traits, Motivations, and Emotional Consequences of Social Media Usage. *Cyberpsychology, Behavior, and Social Networking*, 20(10), 615–623. https://doi.org/10.1089/cyber.2017.0043
- Liu, Y., Liu, J., & Wang, W. (2023). The Effect of Future Time Perspective on Internet Dependence Among College Students in Pandemic Time: A Moderated Mediation Analysis. *Psychology Research and Behavior Management*, *16*, 509–520. https://doi.org/10.2147/PRBM.S396622
- Malak, M. Z., Shuhaiber, A. H., Al-amer, R. M., Abuadas, M. H., & Aburoomi, R. J. (2021). Correlation between psychological factors, academic performance and social media addiction: model-based testing. *Behaviour and Information Technology*. https://doi.org/10.1080/0144929X.2021.1891460
- Monacis, L., Palo, V. De, Griffiths, M. D., & Sinatra, M. (2017). *Exploring Individual Differences in Online Addictions: the Role of Identity and Attachment*. 853–868. https://doi.org/10.1007/s11469-017-9768-5
- Monge Roffarello, A., & De Russis, L. (2019). The race towards digital wellbeing: Issues and opportunities. *Conference on Human Factors in Computing Systems Proceedings*, 1–14. https://doi.org/10.1145/3290605.3300616
- Nwanyanwu, D. H., Beeson, K., Bori, S. P., & State, R. (2023). *Innovative Research in Education The impact of academic staff union of universities' strikes on Nigerian students*. *10*(1), 110–122.
- Obiekwe, C. J., Onukwu, J., Obiekwe, S. J., Modum, E. R., Edeh, G. C., Anigwe, F. C., & Chima, C. J. (2023). A Cross-Sectional Study on Perceptions of Nigerian Secondary School Students towards Persistent Teacher Strikes: Analyzing Causes, Government Actions, and Teachers' Engagement. Archives of Current Research International, 23(6), 66–72.

Vol. 14, No. 2, 2024, E-ISSN: 2222-6990 © 2024

- https://doi.org/10.9734/acri/2023/v23i6581
- Sankar, V. S. (2020). Impact of Social Media on Academic Performance of University Students-A Field Survey of Academic Development. *TechnoLearn An International Journal of Educational Technology*, 10(1&2), 1–7. https://doi.org/10.30954/2231-4105.02.2020.1
- Siah, P. chua, Brian Siew, Y., & Sai, Z. Y. (2020). Social Media Addiction and Academic Adjustment: The Mediating or Moderating Effect of Grit Personality. *International Journal of Psychology and Educational Studies*, 7(3), 143–151. https://doi.org/10.17220/ijpes.2020.03.013
- Stănculescu, E. (2021). The Bergen Social Media Addiction Scale Validity in a Romanian Sample Using Item Response Theory and Network Analysis. *International Journal of Mental Health and Addiction*, 0123456789. https://doi.org/10.1007/s11469-021-00732-7
- Suleiman, Y., Olanrewaju, M. K., & Suleiman, J. M. (2019). Perceived Problems of Strike Action and Deviant Behavior at Selected Higher Institutions in Ekiti State, Nigeria. *Indonesian Journal of Educational Counseling*, *3*(2), 97–106. https://doi.org/10.30653/001.201932.78
- Tandon, A., Dhir, A., Almugren, I., AlNemer, G. N., & Mäntymäki, M. (2021). Fear of missing out (FoMO) among social media users: a systematic literature review, synthesis and framework for future research. *Internet Research*, 31(3), 782–821. https://doi.org/10.1108/INTR-11-2019-0455
- Throuvala, M. A., Griffiths, M. D., Rennoldson, M., & Kuss, D. J. (2019). A 'control model' of social media engagement in adolescence: A grounded theory analysis. *International Journal of Environmental Research and Public Health*, 16(23). https://doi.org/10.3390/ijerph16234696
- Tijani, H. I. (2015). *Union Education in Nigeria: Labor, Empire, and Decolonization since 1945*. Van Den Eijnden, R., Koning, I., Doornwaard, S., Van Gurp, F., & Bogt, T. Ter. (2018). The impact of heavy and disordered use of games and social media on adolescents' psychological, social, and school functioning. *Journal of Behavioral Addictions*, 7(3), 697–706. https://doi.org/10.1556/2006.7.2018.65
- 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), 1–10. https://doi.org/10.1186/s12888-023-04799-5