Understanding the Path from Study Demands to Social Media Addiction: The Role of Burnout

Ike E. ONYISHI[1,2] . Chijioke K. AYOGU[1] . Damian C. UGWU[1] . Charity N. ONYISHI[3]

[1]*Department of Psychology, University of Nigeria, Nsukka, Nigeria.*
[2]*Department of Educational Psychology, University of Johannesburg, South Africa.*
[3]*Enugu State University of Medical and Applied Sciences, Igbo-Eno, Nigeria.*

Abstract

This study examined the mediation role of burnout on the relationship between study demands and social media addiction among university students. The participants were 373 undergraduate students (40.5% male, 59.5% female) aged 16–29 years (M = 21.13, SD = 2.96) drawn from a large public university in Southeast Nigeria. Participants completed the University Demand-Resource Questionnaire (UDRQ), Maslach Burnout Inventory-Student Survey (MBI-SS), and Bergen Social Media Addiction Scale (BSMAS). Regression analysis using Hayes' PROCESS macro indicated that study demands significantly predicted both burnout (β = .65, p < .001) and social media addiction (β = .76, p < .001). Burnout also significantly predicted social media addiction (β = .41, p < .001) and partially mediated the relationship between study demands and social media addiction (indirect effect = .27, p < .001). These findings support the Job Demands-Resources model and the Stress-Adaptation model, highlighting burnout as a key but partial pathway through which academic pressures contribute to problematic social media use. The results underscore the need for universities to implement workload management strategies and mental health interventions to mitigate burnout and social media addiction among students.

Ike E. Onyishi (*Corresponding author*)
ernest.onyishi@unn.edu.ng
https://orcid.org/0000-0003-0908-6413

Department of Psychology,
University of Nigeria, Nsukka, Nigeria.

Introduction

The rising prevalence of social media addiction is a pressing issue, particularly among university students who are devoting substantial amount of time to platforms such as Facebook, Instagram, and Twitter (Cheng et al., 2021). Due to increasing popularity of these platforms, individuals frequently experience prolonged periods of online activity, resulting in social media overload (Tyrväinen et al., 2025) and detrimental effects on their mental well-being and academic achievements (Andreassen et al., 2016). Addiction is characterised by an uncontrollable urge to use social media, disregard for personal and professional obligations, and a constant longing to use social media, even in situations where it is inappropriate (Kuss & Griffiths, 2017). This issue is widespread globally, as of a substantial increase in the prevalence of social media addiction among young individuals (Bányai et al., 2017; Cheng et al., 2021; Pellegrino et al., 2022; Zewde et al., 2022). The issue is especially severe in sub-Saharan Africa. A meta-analysis conducted by Zewde et al. (2022) revealed that the combined prevalence of internet addiction, encompassing social media addiction, among African university students is approximately 34.5%. In Nigeria, the situation is similarly alarming, with studies revealing high levels of social media usage, leading to negative impacts on academic performance and mental well-being (Afe et al., 2020; Anyira & Udem, 2020; Aondowase & McCarty, 2017; Idiedo & Eyaufe, 2023). Excessive social media use in adolescents has been associated with increase in depression, anxiety, and psychological distress (Keles et al., 2019). Other psychological issues including melancholy, sleeplessness, stress, reduced subjective happiness, and a feeling of mental deprivation have also been showed to be associated with social media addiction (Zubair et al., 2023). Research suggests that among students, the use of social media can result in academic procrastination (Anierobi et al., 2021), has a negative effect on academic performance and attitudes (Lokurlu & Gündüz, 2021), and contribute to mental health problems such as anxiety, depression, and stress, especially with prolonged use (Draženović et al., 2023).

Despite the rising volume of literature on social media addiction, major study gaps remain, notably regarding the influence of academic demands on this behaviour. While studies have focused on the psychological implications of social media use (Bányai et al., 2017), few have examined how study demands—such as workload, deadlines, and academic pressure—may aggravate or alleviate addictive tendencies. This lack of focus on contextual factors highlights an important area for investigation, as academic contexts are ideally positioned to impact students' online behaviours (Avcı & Kula, 2022; Elhai et al., 2021; Masrom et al., 2021). While studies have investigated various elements of these issues independently, there remains a significant gap in understanding the relationship between study demands and social media addiction. Kuss and Griffiths (2017) underlined the need for greater study on the particular pathways that relate academic pressures to problematic social media use. Additionally, the role of psychological issues, such as burnout, in mediating the link between study demands and social media addiction has yet to be thoroughly explained. This is despite the fact that burnout has been shown to mediate the relationship between study demands and other students' outcomes such as intention to quit school, physical and psychological symptoms, and depressive symptoms (Koeske & Koeske, 1991; Salmela-Aro & Upadyaya, 2014). Therefore, this current research aims at studying the mediating effect of burnout in the relationship between academic demands and social media addiction.

We integrate the Stress-Adaptation (Lazarus & Folkman, 1984) and the Job Demand-Resources (JDR: Bakker & Demerouti, 2017; Demerouti et al., 2001) models to explain how burnout serves as a mechanism between study demands and social media addiction. The relationship between study demands and social media addiction can be understood through the Stress-Adaptation model, a framework originally proposed by Lazarus and Folkman (1984).

This model, also known as the Transactional Model of Stress and Coping posits that stress is a result of an individual's perception of external demands exceeding their ability to cope. When faced with such stressors, individuals are likely to engage in various coping mechanisms to manage the situation. Some of these mechanisms are adaptive and constructive (problem-focused), while others are maladaptive (emotion-focused), potentially leading to detrimental outcomes (Lazarus & Folkman, 1984). When an individual perceives that their resources can address the challenge (such as study demands), they are more likely to employ problem-focused strategies, like improving time management or seeking additional support from teachers or peers. However, if the individual feels unable to manage the stressors effectively, they may resort to emotion-focused coping strategies. This includes efforts to regulate the emotional distress caused by stressors, often through avoidance or distraction, which may include behaviours like excessive social media use (Lazarus & Folkman, 1987). In this sense, social media might be considered as a maladaptive emotion-focused coping strategy. Instead of dealing directly with study demands (problem-focused), individuals may turn to social media to divert themselves from the bad feelings connected with academic pressure.

According to the Stress-Adaptation model, external constraints like study demands might stimulate the need for coping mechanisms when students believe they are unable to meet these demands. Research has demonstrated that academic stress is a key predictor of excessive social media use, particularly in college students. For example, Basak and Manna (2023) as well as Chiu (2014) revealed that students facing high academic burdens were more likely to report social media addiction, utilizing it as a tool to withdraw from their stressors. Social media platforms offer quick and immediate emotional gratification through social interactions, entertainment, and escapism. In times of intense academic pressure, students may utilize social media to temporarily ease unpleasant feelings such as worry, frustration, or powerlessness. Studies indicate that social media use can provide a form of emotional release, even if it contributes to long-term avoidance behaviours that exacerbate academic challenges (Huang, 2018). Over time, excessive social media use in response to academic stress can become habitual, leading to addiction. As students spend more time on social media to cope with stress, they may neglect their academic responsibilities, creating further stress due to uncompleted work or poor academic performance. This, in turn, leads them back to social media as a coping tool, reinforcing the addiction cycle. Research supports this negative feedback loop, where stress leads to avoidance via social media, worsening academic performance, and thus causing additional stress (Kuss & Griffiths, 2011).

It should be noted that while existing literature has demonstrated correlations between social media addiction and various psychosocial factors (e.g., Basak & Manna, 2023; Chiu, 2014; Huang, 2018), the mechanisms of how study demands specifically influence this addiction through mediating variables like burnout is not clearly understood. Research has emphasised that high academic workload and expectations can lead to significant stress and strain, which can drive students toward excessive social media use as a coping mechanism (Elhai et al., 2021). However, the precise mechanisms, particularly the mediating role of burnout in this relationship, have not been adequately examined, indicating a need for further investigation in this area.

The Job Demand-Resources (JD-R) model provides a useful framework for understanding the linkages between study demands, burnout, and social media addiction (Bakker & Demerouti, 2017). The model posits that high job demands, if not adequately managed, can lead to burnout (Demerouti et al., 2001). In the JD-R model, burnout, characterised by emotional exhaustion, depersonalisation, and reduced personal accomplishment, is assumed to mediate the relationship between job demands and outcomes like health issues, job performance, or turnover. High job demands can lead to burnout, which in turn negatively affects these outcomes (Bakker et al., 2004). Thus, the model assumes that

burnout is a critical pathway through which job demands influence various adverse outcomes. Originally developed in the context of occupational psychology, this model has been successfully adapted to educational settings (Salmela-Aro & Upadyaya, 2014). Drawing from this model, high study demands (a form of job demand) deplete students' mental and emotional resources, leading to burnout (Demerouti et al., 2001). Burnout, in turn, may drive students to seek relief or escape through social media, which can eventually lead to addiction (Błachnio et al., 2015).

Multiple studies have consistently shown a positive relationship between high study demands and burnout among students. Teuber et al. (2020) found that high study demands positively relate to burnout in Chinese high school students. This finding is corroborated by Olson et al. (2023), who reported that academic workload is positively related to burnout among German university students. Bergmann et al. (2019) further support this relationship, noting that high academic demands and workload are positively related to burnout. Studies have also found a significant relationship between burnout and problematic social media use. Walburg et al. (2016) observed that burnout is associated with problematic use of Facebook, with gender-specific dimensions. For girls, the "exhausting at schoolwork" dimension was particularly relevant, while for boys, the "feelings of inadequacy at school" dimension was more prominent. This finding is further supported by Ma and Liu (2019), who reported a positive correlation between burnout scores and social media addiction among university students in China. Their study utilised a Chinese version of the social media burnout scale, indicating the cross-cultural relevance of this relationship. The connection between burnout and problematic internet use extends beyond social media. Tomaszek and Muchacka-Cymerman (2019) found that higher school burnout is related to higher Internet addiction indicators, with a stronger connection observed in male students. This gender difference aligns with the findings of Walburg et al. (2016), suggesting that gender may play a significant role in how burnout manifests in relation to internet use. In a subsequent study, Tomaszek and Muchacka-Cymerman (2020) further confirmed that higher levels of school burnout are significantly connected with higher levels of problematic Internet use. Importantly, they found that school burnout significantly predicts problematic Internet use among students, suggesting a causal relationship. While not directly related to social media addiction, some studies have explored the relationship between burnout and other forms of addiction, which may provide insights into the underlying mechanisms. Jackson et al. (2016) found that burnout was strongly related to alcohol abuse/dependence among medical students. Ziari et al. (2017) found that higher school burnout is associated with increased susceptibility of students to addiction.

While the relationships between study demands, burnout, and social media addiction have been separately explored in various contexts, there is a notable dearth of research directly addressing the mediating role of burnout in the relationship between study demands and social media addiction. However, several studies have explored similar mediating relationships in related contexts, which can provide insights into this potential relationship. In educational settings, Koeske and Koeske (1991) found that burnout mediates the impact of student-specific stress on negative consequences, including the intention to quit school and physical and psychological symptoms. Although this study doesn't directly address social media addiction, it establishes burnout as a mediator between academic stressors and negative outcomes in educational environments. Numerous studies have examined burnout as a mediator in work-related contexts, which may have parallels to the academic environment. Shaukat et al. (2017) demonstrated that the three dimensions of job burnout (exhaustion, cynicism, and interpersonal strain) distinctively mediate the linkages between relationship conflict, task and contextual performance, and turnover intentions. In a more recent study, Fang et al. (2024) found that burnout mediates the relationship between social media use for work during non-work hours

and turnover intention among Chinese teachers. Further supporting the mediating role of burnout, Baka (2015) showed that job burnout mediates the negative effects of job demands on mental and physical health in a group of teachers. Similarly, Ju and Pak (2024) revealed that burnout mediates the relationship between cyber incivility and work withdrawal and turnover intention. Aminihajibashi et al. (2024) found that burnout mediates the relationship between some job demands (work-family interference and role conflict) and job resources with secondary traumatic stress and turnover intention. Additionally, Kyoung and Seek (2021) demonstrated that psychological burnout mediates the relationship between job stress and turnover intention among child-care teachers. While these studies don't directly address the relationship between study demands, burnout, and social media addiction, they provide valuable insights. Consistently, burnout acts as a mediator between various stressors and negative outcomes in both educational and work-related contexts. The relationship between social media use and burnout has been established in work settings, suggesting a potential parallel in academic environments. Moreover, burnout mediates the relationship between demands (both in academic and work settings) and various negative outcomes, which could potentially include social media addiction.

The lack of studies specifically examining the mediating role of burnout in the relationship between study demands and social media addiction necessitates further research for several reasons. Firstly, while work-related studies provide valuable insights, the academic environment presents unique challenges and stressors that may influence the relationships between study demands, burnout, and social media addiction differently. Secondly, with the growing integration of social media in students' lives, understanding its relationship with academic stressors and burnout is crucial for developing effective interventions and support systems. Furthermore, identifying burnout as a mediator could lead to more effective, targeted interventions that address not only study demands but also the burnout that may lead to social media addiction. Exploring this relationship could provide a more comprehensive understanding of the factors affecting student well-being and academic performance. The present study was conducted in a peculiar Nigerian educational setting where limited studies have been conducted on social media addiction (Adelua et al., 2021). Lastly, research in this area could inform educational policies and practices aimed at reducing burnout and promoting healthy social media use among students.

We therefore hypothesize that:
1. Study demands will be positively associated with burnout
2. Study demands will be positively associated with social media addiction
3. Burnout will be positively associated with social media addiction
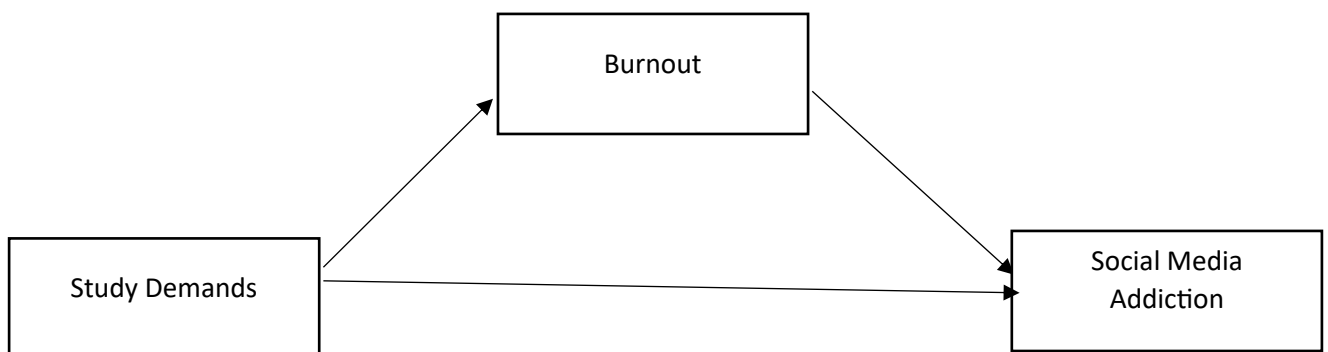4. Burnout will significantly mediate the relationship between study demands and social media addiction.

Figure 1. Proposed hypothetical model

Method
Participants and procedure

The participants for the study were 373 students (males = 40.5%, and females = 59.5%) in a large federal university in Southeast Nigeria. Their ages ranges from 16 to 29 years ($M = 21.13$, $SD = 2.96$). Additional demographic details can be found in Table 1 below. Eligibility criteria for participation included being able to read and understand in English as well as being and undergraduate student. After receiving approval from the ethical research committee of the Department of Psychology, University of Nigeria, Nsukka, data collection commenced with the help of three trained research assistants. The researchers and assistants administered the questionnaire to students who agreed to participate in the study. Informed consents were obtained from all participants. The copies of the questionnaire were administered individually based on the availability and accessibility of the participants. All participants were informed that participation in the study was voluntary and no monetary reward or its kind was given for their participation in the study. Participants were also informed that their responses would be kept strictly confidential, hence they were required to give correct and honest responses. Four hundred copies of the questionnaire were distributed to the respondents, and 373 were returned, representing a return rate of 93.25%.

Table 1: *Demographics and Characteristics of the Study Population*

Variables	Frequency	Percentage
Sample Size	373	
Age	**(16 - 29 years)**	
Mean	**21.13 years**	
Gender		
Male	151	40.5%
Female	222	59.5%
Marital Status		
Single	329	88.2%
Married	33	8.8%
Separated	7	1.9%
Divorced	3	0.8%
Widowed	1	0.3%
Religion		
Christianity	336	90.1%
Islam	8	2.1%
African Traditional Religion	22	5.9%
Others	7	1.9%
Ethnicity		
Igbo	349	93.6%
Hausa	2	0.5%
Yoruba	9	2.4%
Others	13	3.5%

Variables	Frequency	Percentage
Level		
100 Level	89	23.9%
200 Level	67	18.0%
300 Level	39	10.5%
400 Level	178	47.7%

Measures

The study demands subscale of the University Demand-Resource Questionnaire (UDRQ) by Jagodics and Szabó (2022) was used to measure the demands that university students encounter in their academic environment which are aspects of the environment that require physical or mental effort and can lead to stress and exhaustion. The scale uses a five-factor structure: work style (four items, e.g., "I don't have enough time because my tasks related to the university"), mental demands (three items, e.g., "Exams completely exhaust me mentally"), emotional demands (four items, e.g., "I worry a lot about my grades"), career choice anxiety (three items, e.g., "It is difficult to decide what to do after I finish university"), and conflict with lecturers (three items, e.g., "There are lecturers who treat me unfairly"). The UDRQ was validated in a sample of 743 Hungarian undergraduate students and has a stable five-factor structure, with good fit indices and Cronbach's alpha coefficients ranging from 0.77 to 0.91 (Jagodics & Szabó, 2022). The UDRQ also showed good convergent and discriminant validity, as the subscales correlated with each other as expected and with the burnout dimensions (Jagodics & Szabó, 2022). In the current study, the Cronbach's α coefficient was found to be .94 for the demand subscale.

The Maslach Burnout Inventory-Student Survey (MBI-SS) was used to assess burnout based on three dimensions of exhaustion, cynicism and professional efficacy (Schaufeli et al., 2002). The MBI-SS consists of 15 items, rated on a 7-point frequency scale from 0 (never) to 6 (every day). The items are distributed as follows: five items for exhaustion (e.g., "I feel emotionally drained by my studies"), four items for cynicism (e.g., "I have become less interested in my studies since I started university"), and six items for professional efficacy (e.g., "I can solve the problems that arise in my studies") (Schaufeli et al., 2002). The MBI-SS has been validated in different languages and cultural contexts, such as Turkish (Kocak et al., 2022), Spanish (Shanmugam et al., 2018), Italian (Mariani et al., 2018), and Chinese (Kim et al., 2018). The factorial validity, reliability, and diagnostic accuracy of the MBI-SS have been supported by these studies, showing that it is a useful tool to measure burnout among university students. In the current study, the Cronbach's α coefficients is .88 for the scale.

The Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2012), a six-item scale was used to measure students' level of addiction to social media based on six core addiction components: salience, mood modification, tolerance, withdrawal, conflict, and relapse. The items are rated on a 5-point Likert scale from 1 (very rarely) to 5 (very often), and a higher sum score indicates a higher likelihood of being addicted to social media. The BSMAS was developed and validated by Andreassen et al. (2012) using a sample of 423 Norwegian university students. They found that the BSMAS has a good internal consistency reliability (Cronbach's alpha of 0.83), and a satisfactory convergent validity with other measures of personality traits, sleep quality, self-esteem, and social anxiety. The Cronbach's α coefficients of .79 was obtained for the current study.

Data Analysis

The statistical analysis was conducted using SPSS version 25. We conducted a mediation analysis using model 4 of the PROCESS macro for SPSS, to test our study main objectives (Hayes, 2018). Mediation analysis enables a more thorough investigation of intricate relationships within the data, providing insights that are essential for figuring out the underlying mechanisms and external variables that influence outcomes. The Hayes PROCESS is an acceptable method in tests of mediation in psychology and management sciences research (Onyedire et al., 2019).

Results

Table 2: *Correlations among demographic and study variables*

Variables	1	2	3	4	5
1. Age	1				
2. Gender	.01	1			
3. UDRQDtot	.06	-.02	1		
4. BSMAStot	.07	.01	.82**	1	
5. MBSSStot	.06	.02	.72**	.67**	1

Note. ***$p<.001$; **$p<.01$; *$p<.05$; Gender (1 = male, 2 = Female); UDRQDtot= study demands; MBSSStot = burnout; BSMAStot = social media addiction.*

Table 2 showed that age showed non-significant correlations with all study variables. Gender was also not significantly correlated with any of the study variables. Study demand was related positively to social media addiction ($r = .82$, $p<.01$), indicating that higher academic demands were associated with increased social media use. Similarly, study demands correlated positively and significantly with burnout ($r = .72$, $p<.01$), suggesting that students experiencing greater academic pressures also reported higher burnout levels. Additionally, social media addiction was related positively to burnout ($r = .67$, $p<.01$), implying that students with higher levels of social media addiction are more likely to report higher burnout levels.

Table 3: *Hayes Process Macro regression results for the effect of student burnout on the relationship between study demands and social media addiction.*

		Step 1 MBSSStot			Step 2 BSMAStot		
	B	β	*t*	*B*	β	*t*	
UDRQDtot	.65	.04	17.32***	.76	.05	16.29***	
MBSSStot				.41	.05	8.55***	
R^2		.45			.72		
F		299.84 (1, 371) ***			474.47 (2, 270) ***		

	B	*SE*	*t*	*p*	95%CI
Direct effect (UDRQDtot on BSMAStot)	.76	.05	16.29	.00	(.66, .85)
Indirect effect (UDRQDtot on BSMAStot via MBSSStot)	.27	.04			(.19, .34)

Note. ***$p<.001$; **$p<.01$; *$p<.05$; UDRQDtot= study demands; MBSSStot = burnout; BSMAStot = social media addiction.*

A mediation analysis using Hayes' PROCESS macro was conducted to examine the indirect effect of student burnout (MBSSStot) on the relationship between study demands (UDRQDtot) and social media addiction (BSMAStot). The results are presented in Table 3. In the first regression model, study demands (UDRQDtot) were entered as the predictor variable, with student burnout (MBSSStot) as the outcome. The results showed that study demands significantly predicted student burnout (B = .65, β = .04, t = 17.32, p < .001). This indicates that students experiencing higher study demands are more likely to report higher levels of burnout. The model accounted for 45% of the variance in burnout (R^2 = .45, F (1, 371) = 299.84, p < .001).

In the second regression model, study demands (UDRQDtot) and student burnout (MBSSStot) were entered as predictors, with social media addiction (BSMAStot) as the outcome variable. The results indicated that study demands remained a significant predictor of social media addiction (B = .76, β = .05, t = 16.29, p < .001). Additionally, burnout significantly predicted social media addiction (B = .41, β = .05, t = 8.55, p < .001). The model accounted for 72% of the variance in social media addiction (R^2 = .72, F (2, 370) = 474.47, p < .001), suggesting that both study demands and burnout contribute significantly to social media addiction.

The indirect effect of study demands on social media addiction via burnout was examined. The results revealed a significant indirect effect (B = .27, SE = .04, 95% CI [.19, .34]), indicating that burnout partially mediated the relationship between study demands and social media addiction. However, since the direct effect of study demands on social media addiction remained significant (B = .76, SE = .05, t = 16.29, p < .001, 95% CI [.66, .85]), this suggests a partial mediation rather than full mediation.

Discussion

We investigated the relationships between study demands, burnout, and social media addiction among Nigerian university students. Our findings confirmed that study demands were significantly associated with both burnout and social media addiction. Additionally, burnout partially mediated the relationship between study demands and social media addiction. The findings provide strong support for the first hypothesis, demonstrating that study demands positively predicted burnout. This aligns with the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2017), which posits that excessive demands deplete personal resources, leading to burnout. The results are consistent with prior studies that found a significant association between high academic demands and burnout among students (Teuber et al., 2020; Olson et al., 2023). The Nigerian educational context, characterized by intense academic workloads and limited institutional support, likely exacerbates this relationship.

The second hypothesis, which proposed a positive association between study demands and social media addiction, was also supported. This finding aligns with the Stress-Adaptation model (Lazarus & Folkman, 1984), which suggests that individuals may engage in maladaptive coping mechanisms, such as excessive social media use, when faced with stressors that surpass their coping abilities. This result corroborates studies showing that students under high academic pressure often turn to social media as an escape mechanism (Basak & Manna, 2023; Chiu, 2014). Given the growing accessibility and affordability of mobile internet in Nigeria, social media serves as an immediate and convenient coping strategy for students facing academic stress.

The third hypothesis, which posited a significant relationship between burnout and social media addiction, was confirmed. Burnout significantly predicted social media addiction, suggesting that students experiencing high levels of emotional exhaustion and disengagement are more likely to engage in excessive social media use. This finding is in line with previous

research (Ma & Liu, 2019; Walburg et al., 2016), which found that individuals suffering from burnout tend to seek distractions and coping mechanisms through online platforms. The Uses and Gratifications Theory (Katz et al., 1973) helps explain this behavior, as students experiencing burnout may turn to social media to fulfill emotional and social needs that academic stress has depleted.

The fourth hypothesis, which proposed that burnout would mediate the relationship between study demands and social media addiction, was partially supported. Empirical evidence supports the role of burnout as a mediator in various academic and occupational contexts. For instance, Koeske and Koeske (1991) found that burnout mediated the relationship between academic stress and adverse psychological outcomes among students. Similarly, Salmela-Aro and Upadyaya (2014) demonstrated that burnout mediated the impact of academic demands on engagement and well-being. In a digital behavior context, Walburg et al. (2016) found that burnout significantly predicted problematic social media use among students, further reinforcing the idea that emotionally exhausted individuals may turn to social media as a coping mechanism. While the indirect effect was statistically significant, the direct effect of study demands on social media addiction remained strong, indicating partial mediation rather than full mediation. This suggests that while burnout contributes to social media addiction, study demands exert a more immediate and direct influence. These findings challenge the assumption that burnout is the sole pathway linking academic stress to social media addiction and suggest that other psychological factors, such as stress-induced impulsivity or time management difficulties, may play a more prominent role.

Implications of the Study

The findings of this study have both theoretical and practical implications. Theoretically, this study expands the application of the JD-R model by demonstrating that while study demands significantly predict burnout, burnout also significantly predicts social media addiction. These results reinforce the relevance of the model in educational settings and suggest that burnout may serve as an energy-depleting mechanism that drives students toward excessive social media use. Furthermore, our findings contribute to the Stress-Adaptation model by illustrating how students may resort to maladaptive coping strategies, such as social media addiction, in response to both study demands and burnout.

Additionally, this study provides empirical support for the Uses and Gratifications Theory, highlighting that students experiencing academic stress and burnout actively seek digital environments for relief and social interaction. This finding suggests that future theoretical models examining the interplay between academic stress and digital behavior should incorporate the role of media consumption as a coping mechanism.

From a practical standpoint, these findings underscore the urgent need for academic workload management strategies to prevent burnout and its associated consequences. Universities should consider implementing structured academic support systems, such as better workload distribution, flexible deadlines, and mental health counseling services, to reduce the negative impact of study demands. The significant relationship between burnout and social media addiction highlights the need for digital wellness programs. Educational institutions should integrate workshops that teach students how to use social media responsibly and adopt healthier coping mechanisms, such as mindfulness, exercise, and peer support.

Furthermore, policymakers and educators should recognize the bidirectional relationship between burnout and social media addiction. While burnout may lead students to excessive social media use, uncontrolled social media consumption may further exacerbate stress and academic disengagement. To break this cycle, institutions should implement comprehensive digital literacy programs that educate students on managing screen time, fostering self-regulation, and recognizing early signs of social media overuse.

Finally, these findings emphasize the importance of personalized interventions. Since students react differently to academic stress, universities should tailor their support services based on individual needs, incorporating counseling services, peer mentorship programs, and resilience-building workshops to help students develop adaptive coping mechanisms.

Limitations and Future Research

This study is not without limitations. First, the cross-sectional design prevents causal inferences. Future research should employ longitudinal approaches to better understand the temporal sequence of these relationships. Second, the reliance on self-report measures may introduce social desirability bias. Future studies could incorporate objective measures of social media use and physiological indicators of stress. Additionally, cultural factors influencing coping mechanisms should be further explored to determine how burnout contributes to social media addiction in different sociocultural contexts.

Conclusion

This study provides important insights into the interplay between study demands, burnout, and social media addiction among Nigerian university students. The findings suggest that while study demands significantly contribute to both burnout and social media addiction, burnout serves as a partial mediator in this relationship. These results emphasize the need for academic institutions to implement workload management strategies and promote healthier coping mechanisms to mitigate the negative association of study demands on students' mental health and digital behaviors. Future research should continue to explore these dynamics using diverse methodologies to enhance our understanding of student well-being in higher education.

References

Adelua, M., Oyedepo, T., & Odiboh, O. (2021). Twitter usage during global pandemic and corporate reputation in Nigeria. *Heliyon*, *7*. https://doi.org/10.1016/j.heliyon.2021.e06920.

Afe, T. O., Ogunsemi, O. O., Osalusi, B. S., Adeleye, O. O., & Ale, A. O. (2020). Age and gender demographics in social media use, Smartphone addiction and psychological morbidity among university undergraduates in Southwest Nigeria. *Annals of Health Research (The Journal of the Medical and Dental Consultants' Association of Nigeria, OOUTH, Sagamu, Nigeria)*, *6*(1), 22-35. https://doi.org/10.30442/ahr.0601-03-63.

Aguayo, R., Cañadas, G., Assbaa-Kaddouri, L., Fuente, G., Ramírez-Baena, L., & Ortega-Campos, E. (2019). A Risk profile of sociodemographic factors in the onset of academic burnout syndrome in a sample of university students. *International Journal of Environmental Research and Public Health*, *16*. https://doi.org/10.3390/ijerph16050707.

Aminihajibashi, S., Jensen, T. K., & Skar, A. M. S. (2024). Exploring key job demands and resources in Norwegian child mental health services: a cross-sectional study of associations with and relationship between compassion satisfaction, burnout, secondary traumatic stress and turnover intention. *Frontiers in Public Health, 12*, 1304345. https://doi.org/10.3389/fpubh.2024.1304345

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. *Psychological Reports*, *110*(2), 501-517. doi: 10.2466/02.09.18.PR0.110.2.501-517.

Anierobi, E., Etodike, C., Okeke, N., & Ezennaka, A. (2021). Social media addiction as correlates of academic procrastination and achievement among undergraduates of Nnamdi Azikiwe University Awka, Nigeria. *International Journal of Academic Research in Progressive Education and Development*. https://doi.org/10.6007/ijarped/v10-i3/10709.

Anyira, I., & Udem, O. (2020). Effect of social media addiction on reading culture: A study of Nigerian students. *Library Philosophy and Practice*, 1-18. https://doi.org/10.31229/osf.io/bkzhc.

Ashiekpe, J. A., & Mojaye, E. M. (2017). Influence of social media use on the social development of Nigerian adolescents and youths. *Journal of Social and Management Sciences*, *12*(1), 91-100. https://doi.org/10.5987/UJ-JSMS.17.062.1.

Avcı, Ü., & Kula, A. (2023). Examining the predictors of university students' engagement, fear of missing out and Internet addiction in online environments. *Information Technology & People*, *36*(7), 2687-2717. https://doi.org/10.1108/itp-05-2021-0416.

Baka, Ł. (2015). Does job burnout mediate negative effects of job demands on mental and physical health in a group of teachers? Testing the energetic process of Job Demands-Resources model. *International Journal of Occupational Medicine and Environmental Health, 28*(2), 335-346. https://doi.org/10.13075/ijomeh.1896.00246

Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-328. https://doi.org/10.1108/02683940710733115

Bányai, F., Zsila, Á., Király, O., Maráz, A., Elekes, Z., Griffiths, M., Andreassen, C., & Demetrovics, Z. (2017). Problematic social media use: Results from a large-scale nationally representative adolescent sample. *PLoS ONE*, 12. https://doi.org/10.1371/journal.pone.0169839.

Basak, R., & Manna, P. (2023). Study on perceived stress, coping, & social media addiction among college students. *International Journal of Health Sciences and Research*. https://doi.org/10.52403/ijhsr.20230617.

Bergmann, C., Muth, T., & Loerbroks, A. (2019). Medical students' perceptions of stress due to academic studies and its interrelationships with other domains of life: a qualitative study. *Medical Education Online*, 24. https://doi.org/10.1080/10872981.2019.1603526.

Cheng, C., Lau, Y., Chan, L., & Luk, J. (2021). Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values. *Addictive Behaviors*, 117, 106845. https://doi.org/10.1016/j.addbeh.2021.106845

Chiu, S. I. (2014). The relationship between life stress and smartphone addiction on Taiwanese university student: A mediation model of learning self-efficacy and social self-efficacy. *Computers in Human Behavior*, *34*, 49-57. https://doi.org/10.1016/j.chb.2014.01.024.

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Draženović, M., Rukavina, T., & Poplašen, L. (2023). Impact of social media use on mental health within adolescent and student populations during COVID-19 pandemic: Review. *International Journal of Environmental Research and Public Health*, 20. https://doi.org/10.3390/ijerph20043392.

Fang, Z., Bao, Y., & Hua, M. (2024). Social media use for work during non-work hours and turnover intention: the mediating role of burnout and the moderating role of resilience. *Frontiers in Psychology, 15*, 1391554. https://doi.org/10.3389/fpsyg.2024.1391554

Hayes, A. F. (2018). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, *85*(1), 4-40. https://doi.org/10.1080/03637751.2017.1352100

Huang, C. (2018). Social network site use and academic achievement: A meta-analysis. *Computers & Education*, *119*, 76-83. https://doi.org/10.1016/j.compedu.2017.12.010

Idiedo, V., & Eyaufe, 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. https://doi.org/10.47524/jlst.v5i2.54.

Jackson, E., Shanafelt, T., Hasan, O., Satele, D., & Dyrbye, L. (2016). Burnout and alcohol abuse/dependence among U.S. medical students. *Academic Medicine*, 91, 1251–1256. https://doi.org/10.1097/ACM.0000000000001138.

Ju, B., & Pak, S. (2024). How does cyber incivility affect work withdrawal? The mediating role of basic need satisfaction and burnout and moderating role of conscientiousness. *Cross Cultural & Strategic Management, 31*(3), 406-436. https://doi.org/10.1108/CCSM-03-2022-0052

Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *The Public Opinion Quarterly*, *37*(4), 509-523. https://doi.org/10.1086/268109

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, 79 - 93. https://doi.org/10.1080/02673843.2019.1590851.

Kocak, O. E., Gencay, O., & Schaufeli, W. B. (2022). BAT-TR: Turkish adaptation of Burnout Assessment Tool (BAT). *Studies in Psychology-Psikoloji Calismalari Dergisi*, *42*(3), 509-549. DOI:10.26650/SP2020-799817

Koeske, G., & Koeske, R. D. (1991). Student "burnout" as a mediator of the stress-outcome relationship. *Research in Higher Education, 32*, 415-431. https://doi.org/10.1007/BF00992184

Kuss, D. J., & Griffiths, M. D. (2011). Online social networking and addiction—A review of the psychological literature. *International Journal of Environmental Research and Public Health, 8*(9), 3528-3552. https://doi.org/10.3390/ijerph8093528

Kyoung, H. Y., & Seek, L. C. (2021). The effect of job stress and psychological burnout on child-care teachers' turnover intention: a moderated mediation model of gratitude. *Перспективы науки и образования, 1* (49), 390-403. https://doi.org/10.32744/pse.2021.1.26

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing.

Lazarus, R. S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality, 1*(3), 141-169. https://doi.org/10.1002/per.2410010304

Lokurlu, İ., & Gündüz, Y. (2021). Effects of social media tools on student behavior. *Atlas Journal, 7*(45), 2284-2298. https://doi.org/10.31568/atlas.773.

Ma, J., & Liu, C. (2019). Psychometric properties of the Chinese version of the social media burnout scale. *Current Psychology*, *40,* 3556 - 3561. https://doi.org/10.1007/s12144-019-00304-y.

Masrom, M., Busalim, A., Abuhassna, H., & Mahmood, N. (2021). Understanding students' behavior in online social networks: a systematic literature review. *International Journal of Educational Technology in Higher Education*, *18,* 1-27. https://doi.org/10.1186/s41239-021-00240-7.

Olson, N., Oberhoffer-Fritz, R., Reiner, B., & Schulz, T. (2023). Study related factors associated with study engagement and student burnout among German university students. *Frontiers in Public Health*, *11*. https://doi.org/10.3389/fpubh.2023.1168264.

Onyedire, N. G., Chukwuorji, J. C., Orjiakor, T. C., Onu, D. U., Aneke, C. I., & Ifeagwazi, C. M. (2021). Associations of Dark Triad traits and problem gambling: Moderating role

of age among university students. *Current Psychology*, *40*(5), 2083-2094. https://doi.org/10.1007/s12144-018-0093-3

Pellegrino, A., Stasi, A., & Bhatiasevi, V. (2022). Research trends in social media addiction and problematic social media use: A bibliometric analysis. *Frontiers in Psychiatry*, *13*. https://doi.org/10.3389/fpsyt.2022.1017506.

Salmela-Aro, K., & Upadyaya, K. (2014). School burnout and engagement in the context of demands–resources model. *British Journal of Educational Psychology*, *84*(1), 137-151. https://doi.org/10.1111/bjep.12018.

Schaufeli, W. B., Martinez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of Cross-cultural Psychology*, *33*(5), 464-481. https://doi.org/10.1177/0022022102033005003

Shaukat, R., Yousaf, A., & Sanders, K. (2017). Examining the linkages between relationship conflict, performance and turnover intentions: Role of job burnout as a mediator. *International Journal of Conflict Management, 28*(1), 4-23. https://doi.org/10.3389/fpsyg.2024.1391554

Teuber, Z., Nussbeck, F., & Wild, E. (2020). The bright side of grit in burnout-prevention: exploring grit in the context of Demands-Resources Model among Chinese high school students. *Child Psychiatry and Human Development*, 52, 464 - 476. https://doi.org/10.1007/s10578-020-01031-3.

Tomaszek, K., & Muchacka-Cymerman, A. (2019). Sex Differences in the Relationship between Student School Burnout and Problematic Internet Use among Adolescents. *International Journal of Environmental Research and Public Health*, 16. https://doi.org/10.3390/ijerph16214107.

Tomaszek, K., & Muchacka-Cymerman, A. (2020). Examining the relationship between student school burnout and problematic internet use. *Kuram Ve Uygulamada Egitim Bilimleri*, 20, 16-31. https://doi.org/10.12738/jestp.2020.2.002.

Tyrväinen, O., Pirkkalainen, H., Salo, M., & Karjaluoto, H. (2025). Overloaded yet addicted? A meta-analysis of the outcomes of social media overload. *Telematics and Informatics*, 102247.

Walburg, V., Mialhes, A., & Moncla, D. (2016). Does school-related burnout influence problematic Facebook use? *Children and Youth Services Review*, 61, 327-331. https://doi.org/10.1016/J.CHILDYOUTH.2016.01.009.

Zeijen, M., Brenninkmeijer, V., Peeters, M., & Mastenbroek, N. (2021). Exploring the Role of Personal Demands in the Health-Impairment Process of the Job Demands-Resources Model: A Study among Master Students. *International Journal of Environmental Research and Public Health*, 18. https://doi.org/10.3390/ijerph18020632.

Zewde, E., Tolossa, T., Tiruneh, S., Azanaw, M., Yitbarek, G., Admasu, F., Ayehu, G., Amare, T., Abebe, E., Muche, Z., Fentie, T., Zemene, M., & Melaku, M. (2022). Internet Addiction and Its Associated Factors Among African High School and University Students: Systematic Review and Meta-Analysis. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.847274.

Ziari, A., Mirmohammadkhani, M., Vafaei, M., Moonesan, M., Soltani, M., & Babakhanian, M. (2017). Parental bonding and academic burnout on addiction potential among students. *Middle East Journal of Rehabilitation and Health*, 4. https://doi.org/10.5812/MEJRH.12323.

Zubair, U., Khan, M. K., & Albashari, M. (2023). Link between excessive social media use and psychiatric disorders. *Annals of Medicine and Surgery*, *85*(4), 875-878. https://10.1097/MS9.0000000000000112.