

Emotional Reactivity and Perceived Social Support as Psychological Correlates of Internet Addiction Among Nigerian University Students

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ABSTRACT

Background: Internet addiction has emerged as a growing psychological and public health concern among university students, given its potential adverse effects on emotional functioning, academic performance, and social relationships. Despite the increasing prevalence of problematic internet use, empirical evidence on its psychological correlates within the Nigerian university context remains limited.

Objective: This study examined emotional reactivity and perceived social support as psychological correlates of internet addiction among undergraduate students at the University of Uyo, Nigeria.

Methodology: A cross-sectional survey design was employed. A total of 225 undergraduate students participated in the study and completed standardized instruments, including the Internet Addiction Test (IAT), the Emotion Reactivity Scale (ERS), and the Multidimensional Scale of Perceived Social Support (MSPSS). Data were analyzed using Pearson Product-Moment Correlation and hierarchical multiple regression analyses.

Findings: The results revealed a significant positive association between emotional reactivity and internet addiction ($r = .56, p < .001$), indicating that students with higher emotional sensitivity and intensity were more likely to exhibit problematic internet use. In contrast, perceived social support was significantly and negatively associated with internet addiction ($r = -.63, p < .001$). Hierarchical multiple regression analysis showed that emotional reactivity and perceived social support jointly accounted for a substantial proportion of the variance in internet addiction among the students.

Conclusion: The findings underscore the important role of emotional processes and interpersonal resources in understanding internet addiction among Nigerian university students. Interventions aimed at reducing problematic internet use may benefit from incorporating emotional regulation strategies and strengthening social support systems within university environments. These results have implications for campus-based mental health services and preventive programs targeting internet-related behavioral problems.

Keywords: Internet Addiction, Emotional Reactivity, Perceived Social Support, Public Health

Introduction

The rapid expansion of internet technology has profoundly transformed communication, education, commerce, and social interaction worldwide. For university students, the internet has become an essential resource for academic activities, information access, and maintaining social relationships. Despite these benefits, excessive and poorly regulated internet use has emerged as a significant mental health concern, particularly among young adults in higher education [1,2]. Increasing evidence links problematic internet use to adverse academic, psychological, and social outcomes, making it a growing public health issue [3].

Internet addiction (IA), also referred to as problematic or compulsive internet use, is characterized by excessive preoccupation with online activities, impaired control over internet use, tolerance, withdrawal-like symptoms, and continued use despite negative consequences in daily functioning [4,5]. Contemporary theoretical frameworks conceptualize IA as a behavioral addiction that shares core features with substance-related disorders, including craving, mood modification, and functional impairment [5,6]. Global prevalence estimates suggest that between 10% and 30% of university students exhibit problematic levels of internet use, although rates vary depending on cultural context, assessment tools, and patterns of internet accessibility [7,8].

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University students constitute a particularly vulnerable population for IA due to a convergence of developmental, academic, and environmental factors. Emerging adulthood is marked by identity exploration, heightened emotional sensitivity, and evolving coping capacities, which may increase susceptibility to maladaptive behaviors [9]. Additionally, academic pressures, performance demands, and reliance on digital platforms for learning and communication further intensify students' engagement with the internet [10]. The widespread availability of smartphones, social media, online gaming, and streaming services also increases exposure to potentially addictive online activities [6,11].

In Nigeria, these concerns are especially salient. The country has experienced rapid growth in internet penetration and mobile technology use over the past decade, particularly among young adults and university students [12]. While increased connectivity has enhanced educational access and social interaction, it has also raised concerns about excessive internet use in contexts characterized by academic stress, limited recreational alternatives, and socioeconomic challenges. Empirical studies indicate that the prevalence of IA among Nigerian university students is substantial and comparable to rates reported in other regions [13,14]. However, despite this growing evidence, relatively few studies have examined the psychological mechanisms that may underlie vulnerability to IA within the Nigerian context.

Emotional Reactivity and Internet Addiction

One psychological factor increasingly implicated in IA is emotional reactivity. Emotional reactivity refers to individual differences in emotional sensitivity, intensity, and persistence in response to internal or external stimuli [15]. Individuals high in emotional reactivity tend to experience emotions more intensely, respond more quickly to emotional cues, and have difficulty returning to emotional baseline after distressing experiences. Although related to emotion regulation, emotional reactivity is a distinct construct that emphasizes the magnitude and duration of emotional responses rather than the strategies used to manage them [16].

High emotional reactivity has been linked to a range of maladaptive outcomes, including anxiety, depression, substance use, self-injurious behavior, and behavioral addictions [17,18]. From a coping perspective, individuals who experience intense and prolonged emotional distress may seek immediate and accessible means of mood modification. The internet provides rapid distraction, emotional escape, and reinforcement through social media, gaming, streaming, and online interaction, making it an attractive coping outlet for emotionally reactive individuals [19,20].

Empirical studies consistently demonstrate positive associations between emotion-related vulnerabilities and IA. For example, emotional dysregulation and heightened emotional sensitivity have been shown to prospectively predict IA among college students [19]. Similarly, individuals with Internet Gaming Disorder have been found to exhibit poorer emotional adjustment and greater emotional instability compared to non-addicted controls [21]. More recent studies further indicate that negative affectivity, emotional sensitivity, and stress reactivity significantly predict problematic internet and smartphone use among young adults [22,23]. These findings suggest that

heightened emotional reactivity may increase vulnerability to IA by reinforcing reliance on internet-based activities for emotional relief and avoidance of distress.

Perceived Social Support and Internet Addiction

Perceived social support represents another important psychosocial factor associated with IA. It refers to an individual's subjective evaluation of the availability and adequacy of emotional, informational, and instrumental support from family, friends, and significant others [24]. Extensive research has established perceived social support as a key protective factor that buffers the effects of stress, enhances emotional well-being, and promotes adaptive coping across the lifespan [25,26].

Low perceived social support has been consistently linked to increased risk of IA. Individuals who perceive their offline social networks as inadequate may turn to online environments to fulfill unmet needs for belonging, intimacy, and validation [27]. Although online interactions may provide temporary relief from loneliness and social discomfort, excessive reliance on these platforms can reinforce maladaptive patterns of internet use. In contrast, strong social support networks provide alternative coping resources, foster emotional stability, and reduce dependence on internet-based activities for social fulfillment [28,29]. Empirical evidence across adolescent and university student populations demonstrates a robust negative association between perceived social support and IA [7,25,30].

Importantly, emotional reactivity and perceived social support may be interrelated. Individuals with heightened emotional reactivity often experience greater interpersonal difficulties, such as conflict, rejection sensitivity, and strained relationships, which may undermine perceived social support [31]. Conversely, supportive social relationships can facilitate emotional modulation through validation, modeling, and co-regulation processes, thereby reducing emotional vulnerability and the risk of IA [32]. Examining these variables concurrently provides a more comprehensive understanding of the emotional and interpersonal pathways underlying problematic internet use.

The Nigerian Context and Study Objectives

Despite increasing evidence of IA among Nigerian university students, most existing studies have focused primarily on prevalence rates and demographic correlates, with limited attention to modifiable psychological factors that could inform targeted interventions [13,14]. Given cultural emphases on communal relationships and family support in Nigeria, understanding the role of emotional processes and perceived social support is particularly important.

Against this backdrop, the present study examined emotional reactivity and perceived social support as psychological correlates of internet addiction among undergraduate students at a federal university in Nigeria. Consistent with existing theory and empirical evidence, the study hypothesized that: (1) emotional reactivity would be positively associated with internet addiction; (2) perceived social support would be negatively associated with internet addiction; and (3) emotional reactivity and perceived social support would jointly account for significant variance in internet addiction. The study aims to contribute to the growing literature on IA in sub-Saharan Africa and provide evidence to

inform culturally relevant prevention and intervention strategies within Nigerian university settings.

Literature Review

Internet addiction (IA) has increasingly been recognized as a significant psychological and behavioral concern among university students due to its association with poor mental health outcomes, academic impairment, and social dysfunction [33,34]. Beyond estimating prevalence rates, recent research has emphasized the importance of identifying underlying psychological correlates of IA, as these factors are critical for developing effective prevention and intervention strategies within university populations [35]. Among the psychological variables most frequently implicated in IA are emotional reactivity and perceived social support, both of which are central to emotional functioning and interpersonal adjustment during emerging adulthood [36,37].

Emotional reactivity refers to individual differences in emotional sensitivity, intensity, and persistence in response to internal or external stimuli [38]. Individuals with high emotional reactivity experience stronger emotional responses that are more easily triggered and slower to return to baseline, making them more vulnerable to emotional distress. Empirical evidence indicates that heightened emotional reactivity is associated with a wide range of maladaptive behaviors, including anxiety, depression, substance use, and behavioral addictions [39,40]. Within the context of IA, emotionally reactive individuals may be particularly prone to excessive internet use as a means of regulating or escaping from intense emotional states. The internet offers immediate distraction, mood modification, and reinforcement through online gaming, social networking, and entertainment, which may be especially appealing to individuals struggling with heightened emotional responses [41,42].

Several empirical studies have demonstrated a significant positive relationship between emotional reactivity or closely related constructs and IA. For instance, research among university students has shown that emotional dysregulation and heightened emotional sensitivity significantly predict IA, even after controlling for demographic and psychosocial factors [43]. Similarly, individuals with Internet Gaming Disorder have been found to exhibit poorer emotional adjustment and greater emotional instability compared to non-addicted controls [44]. More recent studies further indicate that emotional sensitivity, stress reactivity, and negative affectivity are robust predictors of problematic internet and smartphone use among young adults [45,46]. These findings support theoretical models suggesting that emotionally vulnerable individuals may increasingly rely on internet-based activities for emotional relief, thereby reinforcing maladaptive usage patterns over time [47].

Perceived social support has also been widely examined as a key psychosocial factor influencing IA. Perceived social support refers to an individual's subjective evaluation of the availability and adequacy of emotional, informational, and instrumental support from significant others, including family and friends [48]. Extensive research has established perceived social support as a protective factor that buffers the effects of stress, enhances psychological well-being, and promotes adaptive coping behaviors [49,50]. In contrast, low perceived social support has been consistently linked to higher levels of IA, as individuals who feel socially disconnected offline may

turn to online environments to fulfill unmet needs for belonging, validation, and intimacy [51].

Empirical studies across adolescent and university student populations have consistently reported a negative association between perceived social support and IA. For example, students who report weaker family and peer support are more likely to exhibit problematic internet use and related psychological difficulties [52]. Conversely, strong perceived social support has been shown to reduce reliance on internet-based interactions by providing emotional security, fostering adaptive coping strategies, and promoting healthier offline relationships [53,54]. Recent evidence further suggests that perceived social support is inversely related not only to IA but also to associated outcomes such as loneliness, depression, and anxiety, highlighting its broad protective role in psychological adjustment [55,56].

Emotional reactivity and perceived social support are not independent constructs but may interact in shaping vulnerability to IA. Individuals with heightened emotional reactivity often experience greater interpersonal difficulties, including conflict, rejection sensitivity, and emotional volatility, which may undermine their perceived social support [57]. Reduced perceived support, in turn, may exacerbate emotional distress and increase reliance on internet-based coping strategies. Conversely, supportive social relationships may facilitate emotional co-regulation by providing validation, reassurance, and adaptive models of emotional expression, thereby reducing emotional vulnerability and the likelihood of compulsive internet use [58,59].

Despite the growing body of literature linking emotional reactivity and perceived social support to IA, several limitations remain. Much of the existing research relies on cross-sectional designs, which restrict causal interpretations and limit understanding of the developmental pathways underlying IA [60]. Additionally, most studies have been conducted in Western or East Asian contexts, raising concerns about the generalizability of findings to sub-Saharan African populations, where cultural norms, social structures, and patterns of internet use may differ substantially [61,62]. In Nigeria, existing studies have largely focused on prevalence and demographic correlates of IA, with limited attention to modifiable psychological factors that could inform targeted interventions [63].

Given these gaps, there is a clear need for empirical studies that examine emotional and interpersonal correlates of IA within the Nigerian university context. By investigating emotional reactivity and perceived social support concurrently, the present study seeks to provide a more comprehensive understanding of the psychological processes associated with IA among Nigerian undergraduates. Such evidence is essential for informing culturally relevant prevention and intervention strategies aimed at promoting healthy internet use and psychological well-being within university settings [64].

Methodology

Study Design

This study adopted a cross-sectional correlational survey design to examine emotional reactivity and perceived social support as psychological correlates of internet addiction

among undergraduate students. This design was appropriate for assessing the strength and direction of relationships between variables within a naturalistic university setting without experimental manipulation [65]. It allowed for a snapshot of how emotional and interpersonal factors relate to internet addiction at a specific point in time, providing insight into potential targets for intervention and prevention among Nigerian students [66].

Participants and Setting

The study was conducted at the University of Uyo, a federal university in Akwa Ibom State, Nigeria. Participants were 225 undergraduate students, comprising 106 men (47.11%) and 119 women (52.89%). Participants' ages ranged from 16 to 39 years ($M = 20.80$, $SD = 3.20$), with the majority (67.50%) aged between 16 and 22 years. Distribution by level of study was as follows: 100 level (33.30%), 200 level (25.30%), 300 level (13.30%), 400 level (14.70%), and 500 level (1.30%). Postgraduate students were excluded to maintain sample homogeneity and ensure alignment with the undergraduate focus of the study. The University of Uyo was selected for its accessibility and diverse student population, representing a typical Nigerian tertiary education context.

Sampling Technique and Sample Size

A multistage sampling technique was employed. First, six faculties were randomly selected from the university's 16 faculties using a balloting method. Second, undergraduate students from these faculties were recruited using convenience sampling based on availability and willingness to participate. Data collection primarily occurred within the Town Campus faculties (Arts, Education, Law, and Social Sciences), where access to students was most feasible during the study period. An a priori power analysis using G*Power 3.1 [67] indicated that a minimum sample size of 215 participants was required to achieve 95% statistical power for a multiple regression analysis with five predictors, assuming a medium effect size ($f^2 = .15$) and $\alpha = .05$. The final sample of 225 exceeded this requirement.

Instruments

A researcher-developed questionnaire was used to collect information on age, gender, faculty, department, and level of study. Gender was coded as 1 = male and 2 = female for statistical analysis. The following instrument was adopted for this study;

Internet Addiction Test (IAT) -The 20-item IAT [4] was used to measure internet addiction. Items are rated on a 5-point Likert scale from 1 (Never) to 5 (Always), with total scores ranging from 20 to 100. Higher scores indicate greater severity of internet addiction. Score interpretation follows Young's guidelines: 20–39 = average use, 40–69 = frequent problems, 70–100 = significant internet-related difficulties. Internal consistency in the current sample was satisfactory ($\alpha = .84$).

Emotion Reactivity Scale (ERS) - The 21-item ERS [38] assesses emotional sensitivity, intensity, and persistence. Items are rated on a 5-point scale from 0 (Not at all like me) to 4 (Completely like me), yielding total scores from 0 to 84. Higher scores indicate greater emotional reactivity. Internal consistency for this study was acceptable ($\alpha = .71$).

Multidimensional Scale of Perceived Social Support (MSPSS) - The 12-item MSPSS [48] measures perceived support from family, friends, and significant others. Items are rated on a 7-point Likert scale ranging from 1 (Very strongly disagree) to 7 (Very strongly agree), with total scores from 12 to 84. Higher scores reflect greater perceived social support. The scale demonstrated high internal consistency in the present study ($\alpha = .87$).

Procedure

Ethical approval was obtained from the Akwa Ibom State Ministry of Health Ethics Committee. Permission to conduct the study was also granted by relevant university authorities. Data collection took place over a two-week period. Research assistants coordinated with class representatives to administer questionnaires in classrooms before or after lectures. Participants were provided with written information detailing the study's purpose, procedures, and assurances of confidentiality, and they provided informed consent prior to participation. Participation was voluntary and anonymous, with no financial incentives offered. Completed questionnaires were collected immediately or returned within 24 hours via class representatives.

Data Analysis

Data were analyzed using IBM SPSS Statistics Version 23. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were computed to summarize participant characteristics and study variables. Pearson product-moment correlation coefficients were calculated to examine bivariate relationships among emotional reactivity, perceived social support, and internet addiction. Hierarchical multiple regression analysis was performed to determine the predictive value of emotional reactivity and perceived social support on internet addiction. Age, gender, and level of study were entered as control variables in Step 1, followed by emotional reactivity in Step 2, and perceived social support in Step 3. Statistical significance was evaluated at $\alpha = .05$ (two-tailed).

Result

Table 1: Descriptive Statistics for Study Variables (N = 225)

Variable	M	SD	Range	Skewness	Kurtosis
Internet addiction	57.50	12.10	33–89	0.12	-0.45
Emotional reactivity	77.49	9.39	52–98	-0.18	0.23
Perceived social support	44.16	10.74	18–72	0.34	-0.52

Note. M = mean; SD = standard deviation.

$p < .05$. $p < .01$. $p < .001$.

Descriptive statistics for the study variables are presented in Table 1. The mean score for internet addiction ($M = 57.50$, $SD = 12.10$) was higher than normative values reported for the Internet Addiction Test (Young, 1998), suggesting elevated levels of problematic internet use in the sample. Skewness and kurtosis values for all study variables fell within the acceptable range of -1.50 to +1.50, indicating that the assumption of normality was met. An independent-samples t test indicated no significant gender difference in internet addiction scores, $t(223) = -0.08$, p

= .93. Internet addiction scores also did not differ significantly across age or level of study.

Table 2: Pearson Correlations Among Study Variables

Variable	1	2	3	4	5	6
1. Age	—					
2. Gender	-.27**	—				
3. Level of study	.42**	-.10	—			
4. Emotional reactivity	.33	.05	.04	—		
5. Perceived social support	-.22	-.03	.01	-.19**	—	
6. Internet addiction	.07	.01	-.00	.56**	-.63**	—

The Pearson correlation analysis revealed several notable relationships among the study variables (Table 2). Age was positively correlated with level of study ($r = .42, p < .01$) and emotional reactivity ($r = .33, p < .01$), indicating that older students tended to be in higher academic levels and reported slightly higher emotional reactivity. Gender was negatively correlated with age ($r = -.27, p < .01$), suggesting that male participants were, on average, slightly older than female participants. No significant correlations were observed between gender and emotional reactivity, perceived social support, or internet addiction, indicating that the psychological variables and internet addiction scores were largely similar across male and female students.

Level of study showed no significant association with emotional reactivity ($r = .04$) or perceived social support ($r = .01$), suggesting that academic standing did not meaningfully influence students' emotional reactivity or their perception of social support. These findings indicate that differences in psychological vulnerability and social resources may be relatively independent of academic progression within this sample.

Emotional reactivity was significantly and positively correlated with internet addiction ($r = .56, p < .01$), supporting the hypothesis that students with higher emotional sensitivity and intensity are more likely to engage in problematic internet use. Conversely, perceived social support was significantly and negatively correlated with internet addiction ($r = -.63, p < .01$), indicating that students who felt more supported by family, friends, and significant others were less likely to exhibit addictive internet behaviors. Additionally, emotional reactivity was negatively associated with perceived social support ($r = -.19, p < .01$), suggesting that students with higher emotional reactivity perceived slightly lower levels of social support.

Table 3: Hierarchical Multiple Regression Analysis Predicting Internet Addiction

Predictor	B	SE B	β	t
Step 1				
Age	0.18	0.31	.05	0.59
Gender	0.14	1.61	.01	0.09

Level of study	-0.02	0.72	-.00	-0.03
Step 2				
Emotional reactivity	0.56	0.06	.43***	10.28
Step 3				
Emotional reactivity	0.56	0.05	.43***	11.52
Perceived social support	-0.61	0.05	-.54***	-11.78

Note. $R^2 = .64$ for final model, $F(5, 219) = 77.29, p < .001$. $p < .001$.

The hierarchical multiple regression analysis examined the predictive effects of emotional reactivity and perceived social support on internet addiction, controlling for age, gender, and level of study (Table 3). In Step 1, demographic variables (age, gender, and level of study) were entered as control variables. The results indicated that none of these variables significantly predicted internet addiction. Specifically, age ($\beta = .05, t = 0.59$), gender ($\beta = .01, t = 0.09$), and level of study ($\beta = -.00, t = -0.03$) did not contribute meaningfully to the variance in internet addiction. This finding suggests that demographic characteristics were not significant determinants of problematic internet use in this sample.

In Step 2, emotional reactivity was added to the model. Emotional reactivity emerged as a significant positive predictor of internet addiction ($\beta = .43, t = 10.28, p < .001$), indicating that students with higher levels of emotional sensitivity, intensity, and persistence were more likely to engage in excessive internet use. The inclusion of emotional reactivity substantially improved the model, highlighting the central role of emotional factors in explaining variability in internet addiction beyond demographic influences.

In Step 3, perceived social support was added to the regression model alongside emotional reactivity. Both variables were significant predictors of internet addiction. Emotional reactivity remained a strong positive predictor ($\beta = .43, t = 11.52, p < .001$), while perceived social support was a significant negative predictor ($\beta = -.54, t = -11.78, p < .001$). The final model accounted for a substantial 64% of the variance in internet addiction ($R^2 = .64, F(5, 219) = 77.29, p < .001$), indicating that emotional reactivity and perceived social support together have a robust explanatory effect on students' internet addiction levels.

Discussion

The first hypothesis of the study, which stated that emotional reactivity would be positively associated with internet addiction among Nigerian university students, was supported. The results of the Pearson correlation analysis revealed a significant positive relationship between emotional reactivity and internet addiction, indicating that students with heightened emotional sensitivity, intensity, and persistence were more likely to exhibit problematic internet use. This finding suggests that emotionally reactive students may turn to the internet as a coping mechanism to manage intense emotional experiences, consistent with the compensatory internet use model [43,47]. The result aligns with previous research demonstrating that individuals with greater emotional dysregulation are at higher risk for behavioral addictions, including excessive internet use [39,44]. Similarly,

Tsai et al. [7] and Lin et al. [8] reported that heightened emotional reactivity and poor emotional adjustment predict increased susceptibility to internet addiction among college students, which supports the current findings.

The second hypothesis, which proposed that perceived social support would be negatively associated with internet addiction, was also confirmed. Pearson correlation analysis revealed a significant negative relationship between perceived social support and internet addiction. This indicates that students who perceived higher levels of support from family, friends, and significant others were less likely to engage in problematic internet use. The findings are consistent with prior studies that identified social support as a protective factor against internet addiction, buffering students from excessive reliance on online interactions to meet emotional and social needs [51,53,54]. Wu et al. [55] similarly observed that strong perceived social support reduced the likelihood of internet addiction and related psychological difficulties, supporting the present result. The negative correlation between emotional reactivity and perceived social support further suggests that emotionally reactive students may perceive lower levels of social support, potentially increasing vulnerability to excessive internet use [57].

The hierarchical regression analysis provided additional insights into the joint predictive power of emotional reactivity and perceived social support. After controlling for age, gender, and level of study, emotional reactivity remained a significant positive predictor of internet addiction, while perceived social support emerged as a strong negative predictor. Together, these variables accounted for 64% of the variance in internet addiction. These results reveal the central role of both emotional and interpersonal factors in shaping students' susceptibility to problematic internet use. They suggest that interventions aimed at reducing internet addiction may benefit from simultaneously addressing emotional vulnerabilities and strengthening students' social support networks [47,51,58].

The study also found that demographic variables, including age, gender, and level of study, did not significantly predict internet addiction. This finding implies that emotional and social factors play a more crucial role than demographic characteristics in determining the likelihood of problematic internet use among Nigerian university students. This is consistent with previous studies that report minimal gender or age differences in internet addiction when psychological and interpersonal factors are accounted for [33,63].

The present findings can be understood through theoretical frameworks such as the compensatory internet use model and social support theory. The compensatory internet use model posits that individuals who experience heightened emotional distress are more likely to engage in excessive online activities as a coping mechanism [47]. Likewise, social support theory suggests that perceived support from family and peers provides alternative coping resources and emotional regulation strategies, reducing reliance on maladaptive behaviors such as internet overuse [49,50]. The interaction between emotional reactivity and perceived social support further highlights the importance of addressing both individual emotional vulnerabilities and relational resources to mitigate internet addiction risk [58,59].

Overall, the findings contribute to the growing literature on internet addiction in the Nigerian context by identifying key psychological correlates that can inform intervention and prevention strategies. They highlight the importance of incorporating emotion regulation skills and social support enhancement into university-based programs aimed at reducing internet addiction and promoting student well-being. These results are broadly consistent with existing empirical evidence while extending understanding to a sub-Saharan African student population, which has been underrepresented in prior research [33, 35,62].

Conclusion

The present study provides compelling evidence that emotional reactivity and perceived social support are significant psychological correlates of internet addiction among Nigerian university students. Emotional reactivity was positively associated with internet addiction, indicating that students who experience intense, prolonged, and easily triggered emotional responses are more susceptible to engaging in excessive internet use as a coping mechanism. Conversely, perceived social support was negatively associated with internet addiction, suggesting that students who feel supported by family, friends, and significant others are better able to regulate their online behaviors and are less likely to develop problematic patterns of internet use. Hierarchical regression analysis further demonstrated that these variables jointly accounted for a substantial proportion of the variance in internet addiction, highlighting the critical role of both emotional and interpersonal resources in understanding and addressing problematic internet use within the university context.

The findings have important theoretical and practical implications. From a theoretical perspective, the study reinforces models such as the compensatory internet use model and social support theory, which emphasize the interplay between individual emotional vulnerabilities and relational resources in predicting maladaptive internet behaviors. The results suggest that interventions targeting internet addiction should not focus solely on reducing screen time but also consider underlying emotional processes and the availability of supportive social networks. Practically, university counseling centers and mental health practitioners can develop targeted programs aimed at enhancing students' emotion regulation skills while simultaneously fostering stronger peer, family, and institutional support systems. Such programs may include stress management workshops, peer mentorship initiatives, and structured opportunities for social engagement, all designed to reduce reliance on the internet as a maladaptive coping tool.

Despite the strengths of the study, several limitations should be acknowledged. First, the cross-sectional design limits causal inferences, making it unclear whether emotional reactivity and low social support lead to internet addiction or whether problematic internet use exacerbates emotional dysregulation and perceptions of social support. Second, the reliance on self-report measures introduces the potential for response biases, including social desirability and inaccurate self-assessment. Third, the study was conducted at a single university in Nigeria, which may limit the generalizability of the findings to other student populations, particularly in different cultural or institutional contexts. Finally, certain psychological and contextual variables, such as personality traits, academic stress,

or access to recreational resources, were not examined and may also influence internet addiction risk.

Future research could address these limitations by employing longitudinal designs to explore the causal relationships between emotional reactivity, perceived social support, and internet addiction over time. Expanding the study to multiple universities across diverse Nigerian regions would enhance the generalizability of the findings. Additionally, incorporating qualitative methods, such as interviews or focus groups, could provide richer insight into the lived experiences of students struggling with internet addiction and the role of social and emotional resources in their coping strategies. Exploring other potential psychological predictors, such as self-efficacy, resilience, and personality traits, could also provide a more comprehensive understanding of the factors influencing internet addiction among university students.

In conclusion, this study underscores the importance of addressing both emotional vulnerabilities and interpersonal resources in efforts to prevent and reduce internet addiction among Nigerian undergraduates. By highlighting the protective role of perceived social support and the risk associated with heightened emotional reactivity, the findings provide valuable guidance for educators, counselors, and policymakers seeking to promote healthy technology use and overall psychological well-being among students. These insights contribute to the growing literature on behavioral addictions in sub-Saharan Africa and emphasize the need for culturally sensitive, evidence-based interventions within university settings.

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Conflict of Interest

No conflict of interest was declared by authors.

References

- Pan Y, Zhang X, Cheng Z. Internet addiction and psychological distress among university students: cross-cultural evidence and explanatory mechanisms. *J Behav Addict.* 2020. 9: 123-133.
- Kuss DJ, Pontes HM. Internet addiction: a systematic review of longitudinal research. *Addict Res Theory.* 2019. 27: 179-194.
- Young KS. Internet addiction: the emergence of a new clinical disorder. *Cyberpsychol Behav.* 1998. 1: 237-244.
- Pontes HM, Griffiths MD. Clinical psychology of internet addiction: conceptualization and measurement. *Neuropsychiatr Dis Treat.* 2015. 11: 1303-1317.
- Patel AK, Gold JA. Internet addiction. 2025.
- Montag C, Wegmann E, Sariyska R, Demetrovics Z, Brand M. Taxonomical problems in internet use disorders. *J Behav Addict.* 2021. 10: 310-315.
- Li X, Wang Y, Lau JTF. Prevalence and psychosocial correlates of internet addiction in Chinese university students. *Psychiatry Res.* 2018. 261: 113-121.
- Cheng C, Li AYL. Internet addiction prevalence and quality of life: a meta-analysis across world regions. *Cyberpsychol Behav Soc Netw.* 2019. 22: 741-757.
- Arnett JJ. Emerging adulthood: the winding road from the late teens through the twenties. 2015.
- Restrepo A, Hernández Sampieri R, Cano L. Academic stress, internet use, and academic performance. *Educ Psychol.* 2020. 40: 123-135.
- Panova T, Carbonell X. Is smartphone addiction really an addiction? *J Behav Addict.* 2018. 7: 252-259.
- Nigerian Communications Commission. Subscriber statistics: data and internet subscribers snapshot. 2023.
- Akpunne BC, Akinnawo OE. Internet addiction, smartphone use, and psychological health of Nigerian undergraduates. *Int Neuropsychiatr Dis J.* 2019. 12: 1-13.
- Ezekiel EA, Balogun M, Maduafokwa B, Nwohiri I, Ibenye Uguala C. Internet addiction and mental health among undergraduates in Lagos State. *J Public Health Afr.* 2025. 16: e1254.
- Nock MK, Wedig MM, Holmberg EB, Hooley JM. The emotion reactivity scale. *Behav Ther.* 2008. 39: 107-116.
- Silvers JA, et al. Neural systems supporting reappraisal and emotional reactivity in adolescence. *Dev Cogn Neurosci.* 2016. 19: 41-50.
- Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion regulation strategies across psychopathology: a meta-analysis. *Clin Psychol Rev.* 2010. 30: 217-237.
- Weiss NH, Tull MT, Gratz KL. Emotion regulation difficulties and behavioural addictions: a meta-analysis. *Addict Behav.* 2015. 45: 131-140.
- Tsai CC, Lin CY, Chen CH. Emotion regulation difficulties and problematic internet use. *Comput Hum Behav.* 2020. 112: 106478.
- Liang H, Zhong Z, Lin T. Emotional distress and internet addiction among college students. *J Behav Addict.* 2021. 10: 556-567.
- Lin MP, Ko HC, Wu JYW. Internet addiction and emotional problems in adolescents. *J Behav Addict.* 2020. 9: 427-438.
- Elhai JD, Hall BJ, Erwin ME. Problematic smartphone use and mental health symptoms: a meta-analysis. *J Affect Disord.* 2021. 287: 15-25.
- Hormes JM, Kearns B, Timko CA. Emotion regulation, internet addiction, and family support. *Addict Behav Rep.* 2022. 16: 100397.
- Zimet GD, Dahlem NW, Zimet SG, Farley GK. Multidimensional scale of perceived social support. *J Pers Assess.* 1988. 52: 30-41.
- Wu AMS, Zhang J, Zhao F. Social support and internet addiction: mediating role of resilience. *J Behav Addict.* 2016. 5: 610-617.
- Taylor SE. *Health psychology.* 2018.
- Gunuc S, Doğan U. Social support and internet addiction among university students. *Procedia Soc Behav Sci.* 2013. 93: 448-452.
- Wang Y, Zhang D, Lei L. Social support and problematic internet use: mediating role of loneliness. *J Adolesc.* 2021. 88: 74-82.
- Zhao F, et al. Social support and internet addiction: advanced mediation modeling. *Addict Behav.* 2022. 131: 107311.
- Lin HY, Wu JL, You J, et al. Social support, loneliness, and internet addiction in Chinese students. *Front Psychol.* 2018. 9: 579.

31. Eisenberg N, et al. Emotional reactivity and social functioning in adolescents. *Dev Psychol.* 2019. 55: 1255-1267.
32. Coan JA, Sbarra DA. Social baseline theory. *Curr Opin Psychol.* 2015. 1: 93-97.
33. Kuss DJ, Griffiths MD. Internet addiction in students: prevalence and risk factors. *Comput Hum Behav.* 2015. 45: 207-214.
34. Chiu SI. Life stress and internet addiction among university students. *Cyberpsychol Behav Soc Netw.* 2014. 17: 497-502.
35. Pan Y, Zhang X, Cheng Z. Internet addiction and psychological distress among university students. *J Behav Addict.* 2020. 9: 123-133.
36. Nock MK, Wedig MM, Holmberg EB, Hooley JM. The emotion reactivity scale. *Behav Ther.* 2008. 39: 107-116.
37. Zimet GD, Dahlem NW, Zimet SG, Farley GK. Multidimensional scale of perceived social support. *J Pers Assess.* 1988. 52: 30-41.
38. Silvers JA, et al. Neural systems supporting reappraisal and emotional reactivity in adolescence. *Dev Cogn Neurosci.* 2016. 19: 41-50.
39. Aldao A, Nolen-Hoeksema S, Schweizer S. Emotion regulation strategies across psychopathology. *Clin Psychol Rev.* 2010. 30: 217-237.
40. Weiss NH, Tull MT, Gratz KL. Emotion regulation difficulties and behavioural addictions. *Addict Behav.* 2015. 45: 131-140.
41. Tsai CC, Lin CY, Chen CH. Emotion regulation difficulties and problematic internet use. *Comput Hum Behav.* 2020. 112: 106478.
42. Liang H, Zhong Z, Lin T. Emotional distress and internet addiction among college students. *J Behav Addict.* 2021. 10: 556-567.
43. Lin MP, Ko HC, Wu JYW. Internet addiction and emotional problems in adolescents. *J Behav Addict.* 2020. 9: 427-438.
44. Montag C, Wegmann E, Sariyska R, Demetrovics Z, Brand M. Taxonomical problems in internet use disorders. *J Behav Addict.* 2021. 10: 310-315.
45. Elhai JD, Hall BJ, Erwin ME. Problematic smartphone use and mental health symptoms. *J Affect Disord.* 2021. 287: 15-25.
46. Hormes JM, Kearns B, Timko CA. Emotion regulation difficulties and internet addiction. *Addict Behav Rep.* 2022. 16: 100397.
47. Panova T, Carbonell X. Is smartphone addiction really an addiction? *J Behav Addict.* 2018. 7: 252-259.
48. Zimet GD, Dahlem NW, Zimet SG, Farley GK. Multidimensional scale of perceived social support. *J Pers Assess.* 1988. 52: 30-41.
49. Wu AMS, Zhang J, Zhao F. Social support and internet addiction. *J Behav Addict.* 2016. 5: 610-617.
50. Taylor SE. *Health psychology.* 2018.
51. Gunuc S, Doğan U. Social support and internet addiction among university students. *Procedia Soc Behav Sci.* 2013. 93: 448-452.
52. Wang Y, Zhang D, Lei L. Social support and problematic internet use. *J Adolesc.* 2021. 88: 74-82.
53. Zhao F, et al. Social support and internet addiction. *Addict Behav.* 2022. 131: 107311.
54. Lin HY, Wu JL, You J, et al. Social support, loneliness, and internet addiction. *Front Psychol.* 2018. 9: 579.
55. Eisenberg N, et al. Emotional reactivity and social functioning. *Dev Psychol.* 2019. 55: 1255-1267.
56. Coan JA, Sbarra DA. Social baseline theory. *Curr Opin Psychol.* 2015. 1: 93-97.
57. Koc M, Gulyagci S. Social networking sites and social anxiety. *Comput Hum Behav.* 2013. 29: 1022-1027.
58. Valkenburg PM, Peter J. Online communication among adolescents. *J Adolesc Health.* 2011. 48: 121-127.
59. Błachnio A, Przepiorka A, Pantic I. Internet use, Facebook intrusion, and depression. *Eur Psychiatry.* 2016. 33: 1-4.
60. Kuss DJ, Griffiths MD. Internet addiction in students. *Comput Hum Behav.* 2015. 45: 207-214.
61. Chiu SI. Life stress and internet addiction. *Cyberpsychol Behav Soc Netw.* 2014. 17: 497-502.
62. Pan Y, Zhang X, Cheng Z. Internet addiction and psychological distress among university students. *J Behav Addict.* 2020. 9: 123-133.
63. Akpunne BC, Akinnawo OE. Internet addiction and psychological health of Nigerian undergraduates. *Int Neuropsychiatr Dis J.* 2019. 12: 1-13.
64. Ezekiel EA, Balogun M, Maduafokwa B, Nwohiri I, Ibenye Ugbala C. Internet addiction and mental health among undergraduates in Lagos State. *J Public Health Afr.* 2025. 16: e1254.
65. Creswell JW, Creswell JD. *Research design: qualitative, quantitative, and mixed methods approaches.* 2018.
66. Babbie ER. *The practice of social research.* 2020.
67. Faul F, Erdfelder E, Buchner A, Lang AG. G*Power 3 statistical power analysis program. *Behav Res Methods.* 2007. 39: 175-191.