

SOCIAL MEDIA ADDICTION AND PSYCHOLOGICAL WELLBEING AMONG COLLEGE AND UNIVERSITY STUDENTS: A QUANTITATIVE ANALYSIS

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Abstract

The objective of this study is to address a gap in the existing literature by exploring the relationship between social media addiction and psychological wellbeing among college and university students, as well as examining mean differences between the two educational levels. The study employed a quantitative, cross-sectional correlational design and used a purposive sampling technique to collect data from 228 students aged 15 to 35 years ($M = 20.28$, $SD = 5.04$). Two instruments were used: the Bergen Social Media Addiction Scale (BSMAS) and the Psychological Wellbeing Scale. Data were collected following the APA 7th edition code of conduct and analyzed using IBM SPSS Version 26. The correlational analysis revealed a significant negative relationship between social media addiction and psychological wellbeing, while regression analysis indicated that social media addiction significantly and negatively predicted psychological wellbeing among college and university students. The analysis of mean differences showed that university students scored significantly higher on social media addiction and lower (though not significantly) on psychological wellbeing compared to their college counterparts. The study provides important implications for promoting students' mental health and managing excessive social media use. These findings suggest the need for awareness programs, digital literacy workshops, and counseling interventions aimed at fostering healthy online behavior. Universities and colleges can also integrate psychological support services to help students balance digital engagement with overall wellbeing.

Keywords: Social media addiction, psychological wellbeing, students.

Introduction

In today's digital era, social media has become an essential part of daily life. The widespread availability of smartphones and the internet has transformed how individuals communicate, share information, and build relationships (Astapova, 2016; Khan et al., 2024). Social media platforms such as Facebook, Instagram, TikTok, and Twitter provide entertainment, education, and opportunities for social connection (Carr & Hayes, 2015; Badr et al., 2024). Despite these advantages, excessive or problematic use of social media can lead to addictive behaviors that negatively affect psychological wellbeing (Shahid et al., 2024).

Psychological wellbeing refers to an individual's overall functioning and emotional health, encompassing positive relationships, autonomy, environmental mastery, self-acceptance, purpose in life, and personal growth (Ryff & Singer, 1996). Research indicates that high levels of social media addiction are associated with lower psychological wellbeing, reduced self-esteem, and increased symptoms of depression and anxiety (Worsley et al., 2018; Islam et al., 2021).

A study conducted in Bangladesh with 5,511 college and university students found that excessive social media use significantly correlated with poor psychological wellbeing (Islam et al., 2021). Similarly, studies from Italy and Finland have shown that problematic social media use is linked with lower life satisfaction and greater emotional distress among students (Casale et al., 2015; Paakkari et al., 2021). A recent study aimed to examine the impact of problematic social media use on psychological wellbeing among adolescents (12–19) and young adults (20–35), including college and university students. Using a cross-sectional correlational design with 322 participants, results showed adolescents had higher social media addiction and lower psychological wellbeing, indicating greater vulnerability to negative psychological effects (Awan et al., 2025).

The present study aligns with the Compensatory Internet Use Theory (Kardefelt-Winther, 2014), which states that excessive internet use functions as a coping mechanism for daily stress related to family conflicts, academic activities, or other life challenges. The study is aligned with this theory as college and university students often face demanding academic tasks, peer bullying, family pressure to achieve good results, financial constraints, and loneliness. Low self-esteem may also contribute to the tendency to seek compensation through social media use. However, this compensatory behavior can become problematic over time, leading to social withdrawal, poor time management, sleep disturbances, and reduced real-life interactions—factors that ultimately diminish psychological wellbeing.

There is a lack of substantial literature regarding the relationship between social media addiction and psychological wellbeing among college and university students, and the differences between these two groups have not been widely explored. Therefore, the present study aims to investigate the relationship between social media addiction and psychological wellbeing among college and university students. It also seeks to examine whether there are significant mean differences between these groups in terms of social media addiction and psychological wellbeing.

Objectives

1. To examine the relationship between social media addiction and psychological wellbeing among college and university students.
2. To determine the predictive role of social media addiction in explaining psychological wellbeing among students.
3. To compare college and university students on study variables i.e. social media addiction and psychological wellbeing.

Hypotheses

H1: Social media addiction will have a significant negative relationship with psychological wellbeing among college and university students.

H2: Social media addiction will significantly predict psychological wellbeing among college and university students.

H3: There will be significant mean differences in social media addiction and psychological wellbeing between college and university students.

Method

The study adopted a cross-sectional correlational research design to examine the relationship between social media addiction and psychological wellbeing among college and university students. A purposive sampling technique was used to collect data from 228 participants aged between 15 and 35 years, all of whom had been using social media for at least one year.

Two standardized instruments were administered to assess the study variables. Social media addiction was measured using the Bergen Social Media Addiction Scale (BSMAS), a six-item Likert scale (1–5) developed by Andreassen et al. (2016), which demonstrated satisfactory internal consistency ($\alpha = .80$). Psychological wellbeing was assessed using the Psychological Well-Being Scale by Ryff and Keyes (1995), consisting of 18 items rated on a seven-point Likert scale ($\alpha = .87-.93$).

Data were collected through online and paper-based questionnaires after obtaining informed consent. The ethical standards of the American Psychological Association (APA, 2019) were followed, ensuring confidentiality, voluntary participation, and the right to withdraw at any stage. It is noteworthy that students younger than 18 years were not given consent forms directly; instead, consent was first obtained from their parents, in accordance with APA ethical guidelines. The collected data were analyzed using SPSS Version 26, employing descriptive statistics, Pearson correlation, regression analysis, and independent-sample t tests to test the hypotheses.

Results

Table 1

Characteristics of the Participants (N=228)

Characteristics	Frequency	Percentage	<i>M</i>	<i>SD</i>
Educational Level				
College Students	114	50		
University Students	114	50		
Age			20.28	5.04
Gender				
Male	35	15.4		
Female	193	84.6		
Socioeconomic Status				
Lower Class	110	48.2		
Middle Class	67	29.4		
Upper Class	51	22.4		

Note. *M*= Mean, *SD*= Standard Deviation

Table 1 presents the demographic characteristics of the participants ($N = 228$). The sample consisted of an equal number of college students ($n = 114$, 50%) and university students ($n = 114$, 50%), with a mean age of 20.28 years ($SD = 5.04$). Regarding gender, the majority of participants

were female (84.6%), while male represented 15.4% of the sample. In terms of socioeconomic status, nearly half of the participants belonged to the lower class (48.2%), followed by those from the middle class (29.4%) and upper class (22.4%).

Table 2

Correlational Analysis of Study Variables Among College and University Students (N = 228)

Characteristics	1	2
1.Social Media Addiction	-	-.37**
2.Psychological Wellbeing		-

Note. ** $p < .01$

The results presented in Table 2 indicate that social media addiction is significantly and negatively correlated with psychological wellbeing ($r = -.37, p < .01$). This suggests that higher levels of social media addiction are associated with lower levels of psychological wellbeing among college and university students.

Table 3

Simple Linear Regression Predicting Psychological Wellbeing from Social Media Addiction (N = 228)

Variables	B	SE	β	p	R^2	F	95% CI	
							LL	UL
					.14	37.96		
Constant	90.40***	4.60		<.001			81.32	99.48
SMA	-1.63***	.26	-.37***	<.001			-2.15	-1.11

Note. *** $p < .001$, SMA= Social Media Addiction

The results in Table 3 indicate that social media addiction significantly and negatively predicted psychological wellbeing among students, $\beta = -.37, t(226) = -6.16, **p < .001$. The model explained 14% of the variance in psychological wellbeing, $R^2 = .14, F(1, 226) = 37.96, **p < .001$.

Table 4

Mean Differences Between College and University Students on Study Variables (N = 228)

	College Students (n=114)		University Students (n=114)				
Variables	M	SD	M	SD	t (226)	p	Cohen's d
SMA	15.85	4.56	17.62	4.61	-2.91	.004	0.38
PW	64.78	20.43	61.32	19.69	1.30	.19	0.17

Note. *** $p < .001$, M= Mean, SD= Standard Deviation, SMA= Social Media Addiction, PW= Psychological Wellbeing

The results in Table 4 compare college students ($n = 114$) and university students ($n = 114$) on social media addiction (SMA) and psychological wellbeing (PW). Findings indicated that university students ($M = 17.62, SD = 4.61$) reported significantly higher levels of social media addiction compared to college students ($M = 15.85, SD = 4.56$), $t(226) = -2.91, p = .004, d = 0.38$, representing a small-to-medium effect size. However, no significant difference was found between college ($M = 64.78, SD = 20.43$) and university students ($M = 61.32, SD = 19.69$) on psychological wellbeing, $t(226) = 1.30, p = .19, d = 0.17$.

Discussion

The aim of the study was to examine the relationship between social media addiction and psychological wellbeing and to determine mean differences between college and university students with respect to these variables. The first hypothesis of the study was supported, as the correlational analysis revealed a significant negative relationship between social media addiction and psychological wellbeing, indicating that higher levels of social media addiction are associated with lower levels of psychological wellbeing. These findings align with recent research showing that excessive or compulsive social media engagement is linked to poor psychological wellbeing among students (Awan et al., 2025). Another study also supports this result, which examined social media's impact on academic performance and psychological wellbeing among 600 undergraduate students from Sindh, revealing a negative relationship between social media addiction, GPA, and wellbeing (Qureshi et al., 2023). The reason for the result being significant could be that students who spend too much time on social media often experience less real-life interaction, more comparison with others, and increased stress. These factors can lower happiness and overall mental wellbeing.

The second hypothesis of the study was also supported, as the regression analysis showed that social media addiction significantly and negatively predicted psychological wellbeing, explaining 14% of the variance. This suggests that social media addiction serves as a risk factor for decreased psychological health. Similar findings were reported in previous research, where problematic social media use predicted lower wellbeing among students aged 13 to 18 years in Al-Emara City, Maysan Governorate (Al-Musawi, 2024). The regression results were significant because increased social media use leads to reduced face-to-face interactions, poor sleep quality, and diminished academic focus, all of which contribute to emotional distress. These cumulative effects explain the strong predictive role of social media addiction in lowering wellbeing.

The third hypothesis of the study was partially supported, as the mean difference analysis revealed that college students reported significantly lower scores on social media addiction compared to university students, while university students showed lower scores on psychological wellbeing, though this difference was not statistically significant. These findings contradict a recent study conducted on Pakistani students, which demonstrated that younger students (i.e., adolescents) scored higher on problematic social media use and lower on psychological wellbeing than older students (Awan et al., 2025). University students may have shown higher social media addiction due to greater academic and social connectivity demands, such as online collaboration and networking. However, the non-significant difference in psychological wellbeing suggests that both groups experience similar coping mechanisms or resilience levels, minimizing the overall impact on wellbeing.

Limitations and Recommendations

The first limitation of the study is its cross-sectional correlational design. Future research should employ longitudinal designs to examine changes in variables over extended periods. The study sample consisted only of students; however, non-studying adolescents and young adults may also engage in problematic social media use. Therefore, future studies should include non-student populations to gain a more comprehensive understanding of the impact of social media addiction on psychological wellbeing. Additionally, there was an imbalance in demographic variables such as gender (male and female) and socioeconomic status (lower, middle, and upper class), which

limited the ability to conduct further analyses for these groups. Future research should ensure balanced data collection across demographic categories to improve the generalizability of findings.

Implications

This study highlights the growing concern of social media addiction and its negative impact on psychological wellbeing among college and university students. The issue is becoming increasingly serious due to limited mental health awareness and insufficient attention to its consequences. There is a strong need for awareness programs about the harmful effects of problematic social media use. Educational institutions should organize workshops and seminars to promote healthy digital habits, and students should be encouraged to seek mental health support from professionals to maintain psychological wellbeing. Counseling services should be made available in both private and public institutions. Moreover, parents should take an active role in guiding and monitoring adolescents' social media use. Policymakers and social media platform authorities should also develop strategies to educate users about the risks of excessive screen time and encourage regular breaks for healthier media engagement.

References

- Al-Musawi, M. A. N. (2024). A study of the effects of social media addiction on psychological well-being among secondary school students in Al-Emara city. *Journal of Medical and Life Science*, 6(3), 429-442.
- American Psychological Association. (2019). Publication manual of the american psychological association, (2020). *American Psychological Association*, 428.
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). Bergen Social Media Addiction Scale. *Psychology of Addictive Behaviors*.
- Astapova, A. A. (2016). THE INVENTION THAT CHANGED THE WORLD. THE MOBILE PHONE. *Экономика и социум*, (9 (28)), 523-524.
- Awan, A., Sohail, S. M., Robert, Z. E., Bukhari, S. S. A., & Kiani, S. (2025). The Impact of Social Media Problematic Use on Psychological Wellbeing and Frustration among Adolescents and Young Adults: A Comparative Study. *Regional Lens*, 4(3), 79-87.
- Badr, A. M., Al-Abdi, B. S., Rfeqallah, M., Kasim, R., & Ali, F. A. (2024). Information quality and students' academic performance: the mediating roles of perceived usefulness, entertainment and social media usage. *Smart Learning Environments*, 11(1), 45.
- Carr, C. T., & Hayes, R. A. (2015). Social media: Defining, developing, and divining. *Atlantic journal of communication*, 23(1), 46-65.
- Casale, S., Lecchi, S., & Fioravanti, G. (2015). The association between psychological well-being and problematic use of Internet communicative services among young people. *The Journal of psychology*, 149(5), 480-497.
- Islam, M. S., Sujon, M. S. H., Tasnim, R., Mohona, R. A., Ferdous, M. Z., Kamruzzaman, S. K., ... & Pontes, H. M. (2021). Problematic smartphone and social media use among Bangladeshi college and university students amid COVID-19: the role of psychological well-being and pandemic related factors. *Frontiers in psychiatry*, 12, 647386.
- Kardefelt-Winther, D. (2014). A conceptual and methodological critique of internet addiction research: Towards a model of compensatory internet use. *Computers in human behavior*, 31, 351-354.

- Khan, P., Shahid, M. S., & Majid, H. A. (2024). Mediating role of online social connectedness in smartphone addiction and online relationship among young adults. *Gomal University Journal of Research*, 40(3), 327-336.
- Paakkari, L., Tynjälä, J., Lahti, H., Ojala, K., & Lyyra, N. (2021). Problematic social media use and health among adolescents. *International journal of environmental research and public health*, 18(4), 1885.
- Qureshi, J. A., Bhatti, T., & Khoso, P. A. (2023). Effects of social media on psychological wellbeing and academic performance among university students in Sindh. *Pakistan Journal of personality and social psychology*, 69(4), 719.
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719.
- Shahid, M. S., Yousaf, R., & Munir, H. (2024). Social media addiction, depression and aggression in young adults. *Journal of Professional & Applied Psychology*, 5(2), 276-285.
- Worsley, J. D., Mansfield, R., & Corcoran, R. (2018). Attachment anxiety and problematic social media use: The mediating role of well-being. *Cyberpsychology, Behavior, and Social Networking*, 21(9), 563-568.