

SOCIAL MEDIA ADDICTION AND PSYCHOLOGICAL DISTRESS AMONG UNIVERSITY STUDENTS: A CROSS-SECTIONAL STUDY ACROSS PSYCHOLOGY, SOCIOLOGY, AND MEDIA DEPARTMENT

Unzila Haider Shirazi ^{a*}, Rubab Rasheed ^b, Shah Jahan Ashraf ^c, & Muhammad Ramzan ^d, & Faizah Shaheen ^e

^a Clinical Psychologist at Quaid-e-Azam Divisional Public School and College, Gujranwala, Pakistan. Email: unzelajawwad12@gmail.com
ORCID: <https://orcid.org/0009-0005-4025-8107>

^b Senior Clinical Psychologist, Specialized Healthcare & Medical Education Department, Rawalpindi Teaching Hospital, Rawalpindi, Pakistan.
Email: rubab8665@gmail.com. ORCID: <https://orcid.org/0009-0006-3077-0438>

^c PhD Scholar, Department of Sociology, Government College University Faisalabad, Faisalabad, Pakistan. Email:
shahjahan_ashraf@yahoo.com. ORCID: <https://orcid.org/0009-0002-7837-6676>

^d PhD Scholar, Department of Mass Communication, Government College University Faisalabad, Faisalabad, Pakistan. Email:
m.rmzaan@gmail.com

^e Alumna, Department of Applied Psychology, University of Sahiwal, Sahiwal, Pakistan. Email: faizahshaheen4123@gmail.com

*Correspondence to: Ms. Unzila Haider Shirazi, Clinical Psychologist at Quaid-e-Azam Divisional Public School and College, Gujranwala, Pakistan. Email: unzelajawwad12@gmail.com. ORCID: <https://orcid.org/0009-0005-4025-8107>

KEYWORDS:

Social Media Addiction,
Psychological Distress, Students

CITE THIS ARTICLE:

Shirazi, U. H., Rasheed, R., Ashraf, S. J., Ramzan, M., & Shaheen, F. (2026). Social media addiction and psychological distress among university students: a cross-sectional study across psychology, sociology, and media department. *Pakistan Journal of Positive Psychology*, 3(6), 273-278.

ABSTRACT

In Pakistan, the increasing use of social media among university students has become an important area of concern, particularly regarding its potential association with psychological well-being. However, excessive and addictive social media use may be associated with psychological distress. The present study examined the relationship between social media addiction and psychological distress and compared these variables among university students from Psychology, Sociology, and Media departments in Pakistan. A cross-sectional correlational design was used, and data were collected through purposive sampling from 230 university students aged 18 to 35 years. Participants completed the Bergen Social Media Addiction Scale and the Depression Anxiety Stress Scale (DASS-21). The results showed a significant positive association between social media addiction and psychological distress, $r = .32, p < .001$. A one-way analysis of variance revealed no significant difference in social media addiction among Psychology, Sociology, and Media students, $F(2, 227) = 0.54, p = .57, \eta^2 = .005$. However, a significant difference was found in psychological distress across the three departments, $F(2, 227) = 6.02, p = .003, \eta^2 = .05$. Psychology students reported the lowest level of psychological distress ($M = 38.93, SD = 12.67$), followed by Sociology students ($M = 42.55, SD = 12.73$), whereas Media students reported the highest level ($M = 45.95, SD = 11.69$). These findings indicate that social media addiction is positively associated with psychological distress, while departmental differences were observed for psychological distress but not for social media addiction.

I. INTRODUCTION

Technology is rapidly developing, and social media has become an important part of university students' daily lives. These platforms have both positive and negative aspects. Students use social media for academic discussions,

communication, social interaction, and business purposes (Asad et al., 2025; Khan et al., 2024; Zachos et al., 2018). However, excessive use may interfere with social, academic, occupational, and daily activities. Difficulty stopping use, irritation when unable to use social media, constant thoughts about using it, and strong cravings may indicate addictive patterns of use (Griffiths et al., 2014; Imtiaz et al., 2026; Imtiaz & Elbedour, 2025; Shahid et al., 2024; Zubair et al., 2023). Previous research has shown an association between problematic social media use and psychological distress. Psychological distress includes symptoms of depression, anxiety, and stress, such as sadness, negative thoughts, nervousness, fatigue, and difficulty coping with daily demands. A systematic review and meta-analysis found significant associations between problematic social media use and depression, anxiety, and stress (Shannon et al., 2022). Similarly, a systematic review reported associations with depression and anxiety and suggested that these relationships may be complex and bidirectional (Lopes et al., 2022).

Research among university students has also linked problematic social media use with anxiety (Jiang, 2021). A longitudinal study further found reciprocal relationships between problematic social media use and psychological distress (Chang et al., 2022). Depression and stress have also been associated with different patterns of problematic social media use among college students and university students (Shahid et al., 2024; Zhang et al., 2023). Social comparison on social networking sites may also be related to depression, anxiety, and psychological well-being (Shahid et al., 2026; Verduyn et al., 2020). The present study is guided by the Compensatory Internet Use Theory, which proposes that individuals may use the Internet to cope with negative emotions and difficulties in their offline lives (Kardefelt-Winther, 2014). Students experiencing psychological distress may therefore use social media for distraction, emotional regulation, or temporary escape. However, excessive reliance on social media may be associated with problematic use and further psychological difficulties (Chang et al., 2022). Social comparison may also contribute to negative psychological outcomes (Verduyn et al., 2020). Although previous research has examined these relationships, limited evidence is available on differences across academic disciplines in Pakistan. Pakistani cultural and social contexts may shape students' social media use, coping patterns, and psychological experiences. In particular, research comparing Psychology, Sociology, and Media students remains limited. Therefore, the present study addresses this gap by examining social media addiction and psychological distress among university students from these three departments in Pakistan.

H1. There are significant differences in social media addiction and psychological distress among students from the Psychology, Sociology, and Media departments.

II. METHOD

The study utilized a cross-sectional correlational design, which allowed for the assessment of the variables at a single point in time and was consistent with the survey approach. A purposive sampling technique was used to collect the data, as the target population consisted of university students aged 18 to 35 years who used smartphones and were active on social media from the Sociology, Psychology, and Media departments. Therefore, purposive sampling was considered the most appropriate technique for the study. A total of 270 students were approached in Lahore, Faisalabad, Gujranwala, and Rawalpindi from public and private universities. Of these, 230 participants completed the questionnaire and fulfilled the study criteria.

Participants

The study included 230 participants, with no missing data. Participants had a mean age of 24.95 years ($SD = 4.12$), with ages ranging from 18 to 35 years. The largest proportion of participants was 28 years old (26.1%), followed by 20 years (24.3%) and 27 years (16.5%). Regarding academic department, 81 participants (35.2%) were from Psychology, 79 (34.3%) were from Sociology, and 70 (30.4%) were from Media. The sample consisted of 118 men (51.3%) and 112 women (48.7%). In terms of residence, 76 participants (33.0%) were from Faisalabad, followed by 68 (29.6%) from Lahore, 58 (25.2%) from Gujranwala, and 28 (12.2%) from Rawalpindi. Overall, the sample was relatively balanced across academic departments and gender, while participants were recruited from four major cities of Punjab and the surrounding region.

Measures

Following questionnaires were utilized in the study. [I] Bergen Social Media Addiction Scale was used for assessing the social media addiction. The scale comprises 6 items with items Likert ranges from strongly disagree (1) to strongly disagree (5), the Cronbach alpha of the scale in this study was 0.72 which is satisfactory. [II] Depression Anxiety Stress Scale (DASS-21) was utilized to measure the psychological distress; the scale comprises 21 items and its Likert ranges from 0 to 3. The higher score depicts higher level psychological distress. The Cronbach's alpha of the scale in this study was 0.91 which is excellent.

Procedure

The study followed the ethical guidelines of the APA 7th edition. Departmental permission was obtained before data collection. Participants were approached with a consent form, demographic questionnaire, and study instruments. First, participants were provided with a consent form that clearly explained their voluntary participation and their right to withdraw from the study without any adverse consequences. After signing the consent form, participants were provided with the demographic questionnaire and study instruments, which took approximately 20 minutes to complete. After data collection, the data were entered into IBM SPSS 27 version for analysis. It is noteworthy that the data were collected physically; therefore, only universities accessible to the authors were included in the data collection process.

III. RESULTS

Table I: Correlational Analysis (N = 230)

Variables	1	2
1. Social Media Addiction	--	.32***
2. Psychological Distress		--

*** $p < .001$

The above table shows significant and positive association between social media addiction and psychological distress.

Table II: Mean Comparison between Students of Sociology, Psychology and Media Department (N = 230)

Variables	PD (n = 81)	SoD (N = 79)	MD (n = 70)	F	p	η^2
	M (SD)	M(SD)	M(SD)			
1. Social Media Addiction	19.08 (4.94)	18.25 (5.17)	18.74 (5.03)	.54	.57	.005
2. Psychological Distress	38.93 (12.67)	42.55 (12.73)	45.95 (11.69)	6.02	.003	.05

Note. PD = Psychology Department, SoD = Sociology Department, MD = Media Department

A one-way analysis of variance (ANOVA) was conducted to compare social media addiction and psychological distress among students from the Psychology, Sociology, and Media Departments. The results showed that there was no significant difference in social media addiction scores among Psychology students ($M = 19.08$, $SD = 4.94$), Sociology students ($M = 18.25$, $SD = 5.17$), and Media students ($M = 18.74$, $SD = 5.03$), $F = 0.54$, $p = .57$, $\eta^2 = .005$. In contrast, a significant difference was found in psychological distress scores among Psychology students ($M = 38.93$, $SD = 12.67$), Sociology students ($M = 42.55$, $SD = 12.73$), and Media students ($M = 45.95$, $SD = 11.69$), $F = 6.02$, $p = .003$, $\eta^2 = .05$.

IV. DISCUSSION

The present study demonstrated a significant positive association between social media addiction and psychological distress indicating that students with higher levels of social media addiction also reported greater psychological distress. This finding is consistent with previous research showing that problematic social media use is associated with depression, anxiety, and stress among university students (Shannon et al., 2022; Wong et al., 2020). Similarly, previous research has indicated that excessive social media engagement may be associated with

poorer psychological well-being and greater emotional difficulties among young people (Keles et al., 2020). The finding can be explained through Compensatory Internet Use Theory, which proposes that individuals may engage in excessive Internet use to cope with negative emotions, psychological difficulties, or unmet needs in their offline lives (Kardefelt-Winther, 2014). From this perspective, students experiencing psychological distress may turn to social media to temporarily escape from negative emotions, seek social support, or regulate their mood. However, excessive reliance on social media for coping may develop into problematic or addictive patterns of use, potentially maintaining or exacerbating psychological difficulties. The finding can also be understood through Social Comparison Theory, as frequent exposure to idealized content on social media may increase upward social comparisons and contribute to negative self-evaluations and psychological distress (Verduyn et al., 2020). Therefore, the significant positive association observed in the present study suggests that social media addiction and psychological distress are closely related among university students.

The findings also indicated that social media addiction did not significantly differ among Psychology, Sociology, and Media students, whereas psychological distress differed significantly across the three departments. Although the overall ANOVA was significant for psychological distress, the descriptive means showed that Media students reported the highest distress followed by Sociology students and Psychology students. This pattern may reflect differences in academic demands, technology exposure, or other contextual factors, although these explanations were not directly examined. In the Pakistani context, students across disciplines may experience social media similarly because digital platforms are widely integrated into academic communication, social interaction, and entertainment. However, differences in psychological distress may be associated with discipline-specific academic pressures or learning environments. Previous research has linked problematic social media use with psychological distress among university students (Ahmed et al., 2024; Hu et al., 2025). These findings highlight the importance of considering academic context when examining students' psychological well-being.

V. CONCLUSION

The present study aimed to examine the relationship between social media addiction and psychological distress and to compare these variables among university students from Psychology, Sociology, and Media departments in Pakistan. The findings demonstrated a significant positive association between social media addiction and psychological distress, indicating that students with higher levels of social media addiction also reported greater psychological distress. The results further showed that social media addiction did not differ significantly among Psychology, Sociology, and Media students. However, a significant difference was observed in psychological distress across the three departments, with Media students reporting the highest mean level, followed by Sociology students and Psychology students. Overall, the study highlights the relationship between problematic social media use and psychological distress among university students and suggests that these concerns should be addressed across academic disciplines. However, the study has some limitations. The use of English-language standardized questionnaires without specific cultural adaptation may have affected participants' understanding of some items, and the use of purposive sampling limits the generalizability of the findings. In addition, the inclusion of only three academic departments and the cross-sectional design restricts the broader applicability and causal interpretation of the results. Future studies should use culturally adapted and validated measures, probability-based sampling techniques, students from a wider range of academic disciplines, and longitudinal research designs. Such research may provide a more comprehensive understanding of the relationship between social media addiction and psychological distress among university students in Pakistan.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

The author received no funding from any organizations.

VI. REFERENCES

- Ahmed, O., Walsh, E. I., Dawel, A., Alateeq, K., Oyarce, D. A. E., & Cherbuin, N. (2024). Social media use, mental health and sleep: A systematic review with meta-analyses. *Journal of affective disorders*, 367, 701-712.
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive behaviors*, 64, 287-293.
- Asad, M., Magableh, I. K., Ta'Amnha, M., Mahrouq, M. H., & Asif, M. U. (2025). Mediating role of social media adoption between the impact of entrepreneurial orientation and perceived benefits of social media on performance of Jordanian entrepreneurial firms. *Cogent Business & Management*, 12(1), 2592424.
- Bharucha, J. (2018). Exploring education-related use of social media: business students perspectives in a changing India. *Education+ Training*, 60(2), 198-212.
- Chang, C. W., Huang, R. Y., Strong, C., Lin, Y. C., Tsai, M. C., Chen, I. H., ... & Griffiths, M. D. (2022). Reciprocal relationships between problematic social media use, problematic gaming, and psychological distress among university students: A 9-month longitudinal study. *Frontiers in public health*, 10, 858482.
- Chen, Z., Wu, Y., Ma, H., Niu, G., & Wang, W. (2023). The effect of social networking site use on depression in graduate students: The mediating role of negative social comparison and moderating role of implicit personality theories. *Behavioral Sciences*, 13(5), 412.
- Cui, J., Wang, Y., Liu, D., & Yang, H. (2023). Depression and stress are associated with latent profiles of problematic social media use among college students. *Frontiers in psychiatry*, 14, 1306152.
- Griffiths, M. D., Kuss, D. J., & Demetrovics, Z. (2014). Social networking addiction: An overview of preliminary findings. *Behavioral addictions*, 119-141.
- Hu, N., Xiao, X., & Soh, K. L. (2025). Association between problematic social media use and psychological distress among college students: a cross-sectional study in China exploring the mediating role of eating disorders. *BMJ open*, 15(5), e092863.
- Imtiaz, U., & Elbedour, H. (2025). Cybersecurity risk management in the digital era: The strategic value of ethical hacking. *Spectrum of Engineering Sciences*, 1076-1086.
- Imtiaz, U., Amin, F., & Khan, A. (2026). Crash2Compromise: CrashGuard-FS for security-aware Linux file updates. *Multidisciplinary Research in Computing Information Systems*, 6(2), 294-310.
- Jiang, Y. (2021). Problematic social media usage and anxiety among university students during the COVID-19 pandemic: The mediating role of psychological capital and the moderating role of academic burnout. *Frontiers in psychology*, 12, 612007.
- 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.
- Keles, B., McCrae, N., & Grealish, A. (2020). A systematic review: the influence of social media on depression, anxiety and psychological distress in adolescents. *International journal of adolescence and youth*, 25(1), 79-93.
- 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.
- Kumar, R., Yousif, A. O., & Humaida, M. I. (2025). Investigation of the relationship between university students' nomophobia and psychological distress: A cross-sectional study. *International Journal of Medical Sciences*, 22(12), 3154-3161. <https://doi.org/10.7150/ijms.112738>
- Lopes, L. S., Valentini, J. P., Monteiro, T. H., Costacurta, M. C. D. F., Soares, L. O. N., Telfar-Barnard, L., & Nunes, P. V. (2022). Problematic social media use and its relationship with depression or anxiety: A systematic review. *Cyberpsychology, Behavior, and Social Networking*, 25(11), 691-702.
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour research and therapy*, 33(3), 335-343.
- Masaeli, N., & Farhadi, H. (2021). Prevalence of Internet-based addictive behaviors during COVID-19 pandemic: A systematic review. *Journal of addictive diseases*, 39(4), 468-488.
- Mateen, M., & Agha, S. A. (2023). Social media usage and depressive symptoms in university students: a correlation study. *Clinical and Counselling Psychology Review*, 5(1), 1-16.

- Shahid, M. S., Abid, S., Anmol, H., Ain, S. F. U., & Saleem, Z. E. H. (2025). Addictive behaviours and mental health outcomes: A quantitative comparative study. *Regional Lens*, 4(3), 144-154.
- Shahid, M. S., Bashir, S., & Fatima, S. (2024). Social media addiction and aggression in Pakistani young adults: Social connectedness as a moderator. *Journal of Professional & Applied Psychology*, 5(3), 424-433.
- Shahid, M. S., Naeem, S., & Naeem, A. (2026). Problematic Social Media Use and Psychological Distress: The Mediating Role of Upward Social Comparison. *Qlantic Journal of Social Sciences and Humanities*, 7(1), 293-299.
- 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.
- Shannon, H., Bush, K., Villeneuve, P. J., Hellemans, K. G., & Guimond, S. (2022). Problematic social media use in adolescents and young adults: Systematic review and meta-analysis. *JMIR mental health*, 9(4), e33450.
- Verduyn, P., Gugushvili, N., Massar, K., Täht, K., & Kross, E. (2020). Social comparison on social networking sites. *Current opinion in psychology*, 36, 32-37.
- Wong, H. Y., Mo, H. Y., Potenza, M. N., Chan, M. N. M., Lau, W. M., Chui, T. K., Pakpour, A. H., & Lin, C. Y. (2020). Relationships between severity of Internet gaming disorder, severity of problematic social media use, sleep quality and psychological distress. *International Journal of Environmental Research and Public Health*, 17(6), 1879.
- Zachos, G., Paraskevopoulou-Kollia, E. A., & Anagnostopoulos, I. (2018). Social media use in higher education: A review. *Education Sciences*, 8(4), 194.
- 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.