

EFFECT OF SOCIAL MEDIA ADDICTION ON ACADEMIC PERFORMANCE AMONG UNDERGRADUATE NURSING STUDENTS

Naveed Umar^{*1}, Adnan Rashid¹, Izhar Rahman^{*2}, Maheeb Ullah², Ijaz Ahmad³,
Sayed Anwar³, Abid Khan⁴, Salim Malik⁴

^{1,2,3,4}Advanced Health Science Institute of Nursing, Karachi, Pakistan, Affiliated with Dow University,
Karachi, Pakistan

¹naveedumar112233@gmail.com, ¹adnanrashid602@gmail.com, ²dearprofessor376@gmail.com
²maheebullahfsc@gmail.com ³ijazk3860@gmail.com ³sayedaimal460@gmail.com
⁴ak2174929@gmail.com ⁴salim.malik2098@gmail.com

DOI: <https://doi.org/10.5281/zenodo.21259770>

Keywords

Addiction, Nursing student, social media, Academic Performance

Article History

Received: 25 April 2026

Accepted: 04 June 2026

Published: 21 June 2026

Copyright @Author

Corresponding Author: *

Naveed Umar

Izhar Rahman

Abstract

Background

The use of social media in society's lifestyle and culture has been increasingly taken place recently. social media has become essential part of life especially as a student. Social media has many effects Both positive and negative in all age groups especially on young and nursing students. Nursing students should utilize the various platforms for their benefits either for academic or personal life.

Aim

To determine the effect of social media addiction on academic performance among undergraduate nursing students.

Methods

A descriptive cross-sectional design was used. The sample size was calculated through open EPI software. The sample size was 191. An adopted questionnaire was used from (Fauzi,2011). The permission was taken from the primary author. In the study, the "Social Media Addiction Scale- Student Form" and the students' Grade Point Average (GPA) were used. The data was obtained through online questionnaire in google form. This study was done at the private institute of Karachi the data was entered and analyzed through SPSS 22.

Results

This study result showed that 81. 5% of the participants had high level of social media addiction. 85.5% of the students had GPA between 3. 0 and 3. 6, while 9% of the students had a GPA of 4. Strongly positive correlation was found between the social media addiction and academic performance $r=0.94$. Among the students, first-year students and fourth-year students used social media most, 33% and 32%, respectively. What's App which received 30% of the response was most commonly used among the students.

Conclusion

This study revealed most of the students engaged in the various social media platforms for various reasons and majority of them to undertake academic purposes. There was a positive effect on students' academic performance. Further studies should be done to assess the effects of social media addiction among nursing students.

INTRODUCTION

Social media networks have become fully integrated into daily life, particularly among students, adolescents, and young adults. Social media platforms, including Facebook, Instagram, and TikTok, provide opportunities for communication, entertainment, and the exchange of ideas (Kaplan & Haenlein, 2010). However, excessive and compulsive use of these platforms, commonly referred to as social media addiction, has emerged as a growing public health concern (Andreassen, 2015). Social media addiction refers to the compulsive urge to access social networking platforms, often at the expense of important responsibilities such as academic work (Griffiths, 2013).

Among undergraduate students, nursing students face particularly demanding academic and clinical responsibilities. They are required to manage intensive coursework, prolonged study hours, and clinical practice, all of which require concentration, discipline, and effective time management (Alshammari et al., 2022). Excessive social media use can interfere with these essential academic activities, leading to reduced concentration, academic procrastination, and poor academic achievement (Kuss & Griffiths, 2017).

Although social media provides educational resources, facilitates professional networking, and enables peer support, its uncontrolled use may negatively affect students' academic performance. Previous studies have shown that nursing students who excessively use social media are more likely to experience poor time management, sleep disturbances, anxiety, and stress, all of which contribute to lower academic performance in both theoretical and clinical settings (Andreassen, Pallesen, & Griffiths, 2017; Dhir et al., 2018).

LITERATURE REVIEW

The study "Influence of Social Media on Nursing Students" examined the impact of social media use on learning and academic performance among nursing students. The findings revealed that a large proportion of students considered social media an effective communication tool for interacting with classmates and instructors, thereby contributing positively to their learning experience. Approximately 74% of nursing students reported that social media helped them

learn new expressions and improve their English language skills, ultimately supporting their academic performance (Alshammari et al., 2022). The study was based on the Uses and Gratifications Theory, which suggests that individuals actively use media to satisfy their needs for information, personal identity, entertainment, and social interaction (Katz, Blumer, & Gurevitch, 1973). The researchers found a statistically significant positive relationship between social media use and academic performance, with social media accounting for approximately 6.7% of the variance in students' academic achievement.

However, the literature also demonstrates that excessive social media use among nursing students is associated with increased levels of depression, anxiety, insomnia, and psychological distress. These negative effects became even more pronounced during the COVID-19 pandemic, when students relied heavily on online communication (Dhir et al., 2018; Andreassen et al., 2017). Consequently, researchers recommend integrating social media into nursing education in a structured and supervised manner to enhance collaboration and communication while minimizing its adverse effects on students' mental health and academic success. Overall, the literature highlights that social media can be both beneficial and harmful depending on the pattern and duration of its use, emphasizing the need for further longitudinal research on its effects on nursing students' academic performance and well-being (Kuss & Griffiths, 2017).

Research Method

A descriptive cross-sectional design was used. An adopted questionnaire was used from (Fauzi, 2011). In the study, the "Social Media Addiction Scale- Student Form" and the students' Grade Point Average (GPA) was used. The data is obtained through online questionnaire in google form. This study was done at the private institute of Karachi.

SIMPLE SIZE

The simple size is 192.

Sampling Technique

The EPI softer is used.

Variables

Dependent variable; Academics performance
Independent Variable; Social media addiction

Instrument

In this study, the questionnaire of (Fauzi,2011) is used for data collect.

Result

The study revealed that the majority of the nursing students demonstrated moderate levels of social media addiction, with 60.6% classified within this category. A substantial proportion, 32.6%, were found to be mildly addicted, whereas only 6.8% of students

exhibited severe addiction. Regarding academic performance, most students fell within the GPA range of 3.0 to 3.6, comprising 81.7% of the sample, indicating that moderate to high academic achievers are prevalent among the participants. A smaller segment, 8.7%, achieved GPAs of 4.0 or above. Interestingly, the data suggests that social media addiction levels do not directly correlate with academic performance, as students across various GPA ranges display differing levels of addiction. This emphasizes the complexity of the relationship between social media use and academic achievement among undergraduate nursing students.

Ttble 1: GPA Distribution

GPA Range	Percentage (%)	Description
GPA 4.0 or higher	8.7%	Highest GPA category
GPA 3.0 - 3.6	81.7%	Majority of students
GPA less than 3.0	0.6%	Smallest group
GPA 3.0 - 3.0 (less than 3.0)	9.6%	Slightly confusing label, possibly overlapping categories



The findings of the study showed that a large percentage of nursing students had moderate levels of social media addiction, where 60.6% of them fall in this category. A large percentage, that is 32.6%, were having mild addiction, while only 6.8% of the sample had severe levels of addiction. Academically, the majority of the students fell in the range of GPA 3.0 to 3.6, which is 81.7% of the sample, and this shows that moderately to high-performing students are prevalent among the subjects. A smaller

percentage, that is 8.7%, had GPAs of 4.0 and above. Surprisingly, the findings show that levels of social media addiction are not specifically related to academic performance since students in various GPA categories reflect varying levels of addiction. This confirms the complex relationship between social media usage and academic performance among undergraduate nursing students.

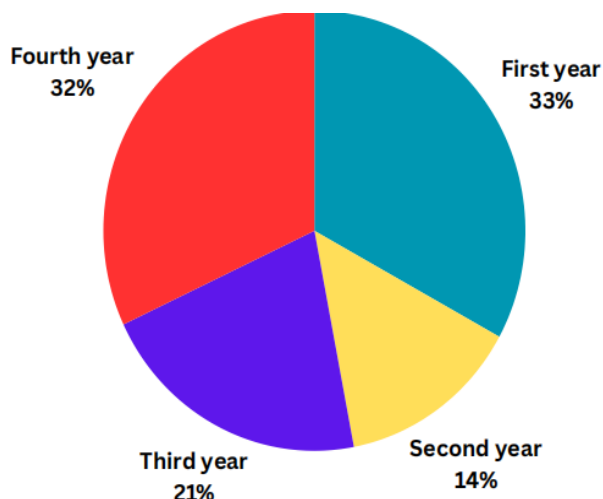


Table 3: Year Wise Distribution

Academic Year	Percentage (%)	Description
First Year	33%	Largest group in the first year
Fourth Year	32%	Similar proportion as first-year students
Third Year	21%	Second largest group after first and fourth
Second Year	14%	Smallest group

Year-wise Distribution and Usage Patterns of Social Media Apps Analysis of the distribution based on academic years indicated that first-year students constituted the largest group, accounting for approximately 33% of the sample, followed closely by fourth-year students at 32%, and third-year students at 21%. Second-year students represented the smallest group with 14%.

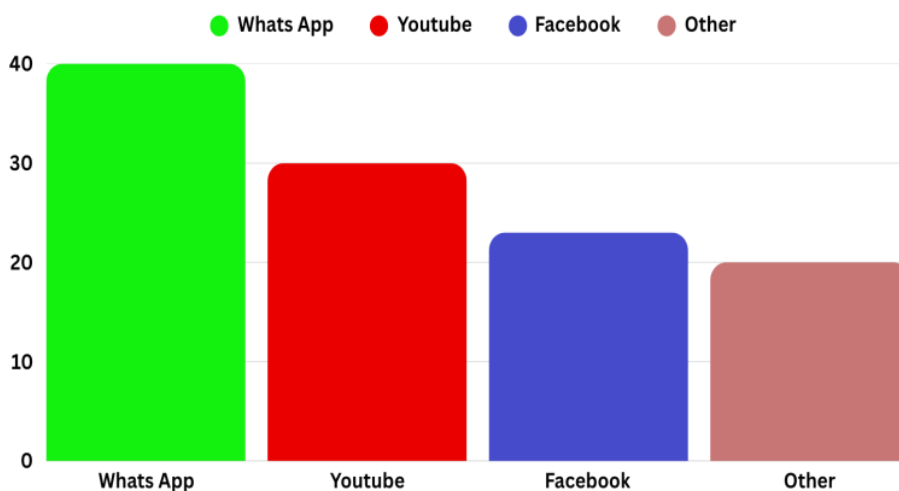


Table 4: Mostly Used Apps

Social Media Platform	Approximate Number of Students	Description
WhatsApp	40	Most used app
YouTube	30	Second most used
Facebook	20	Less used than WhatsApp and YouTube
Other Platforms	Remaining students	Least used platforms

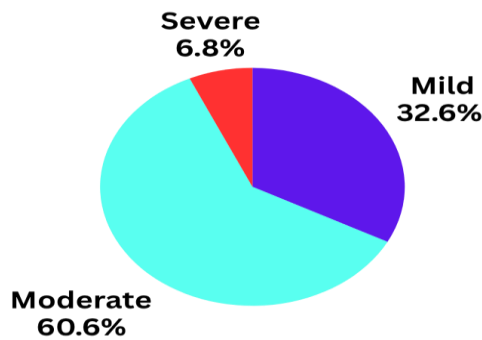


Table 2: Social Media Addiction Levels

Addiction Level	Percentage (%)	Description
Severe	6.8%	Severely addicted
Moderate	60.6%	Moderately addicted
Mild	32.6%	Mildly addicted
Less than GPA 3.0	0.0%	No data provided for this category

Summary

These results underscore that although the majority of nursing students participate in social media usage to different extents, the extent of addiction based on classification in this study does not necessarily hinder academic achievement since students in all levels of GPA have varied levels of social media activity. In addition, WhatsApp's widespread prevalence suggests its key position within students' everyday social lives, and this may have implications for examining how social media affects their academic and social lives

Discussion

The findings of the present study highlight the multifaceted and complex role of social media in the education of undergraduate nursing students. Consistent with previous studies, social media platforms serve as valuable educational tools by enhancing learning opportunities, supporting professional identity development, and fostering collaboration and a sense of belonging among

nursing students (Alshammari et al., 2022; Kaplan & Haenlein, 2010). Students who actively engaged with social media reported better understanding of nursing concepts and professional responsibilities, supporting earlier evidence that educational use of social media contributes positively to professional development (George et al., 2013).

Furthermore, the study revealed that the majority of participants (81.5%) demonstrated a high level of social media addiction, with WhatsApp being the most frequently used platform (30%). Despite this high prevalence of social media addiction, a strong positive correlation ($r = 0.94$) was observed between social media addiction and academic performance. Most participants achieved a Grade Point Average (GPA) between 3.0 and 3.6, while some attained a GPA of 4.0. These findings suggest that when social media is used primarily for academic communication, collaborative learning, and access to educational resources, it may contribute positively to students' academic

achievement (Junco, 2012; Alshammari et al., 2022).

However, the findings should be interpreted cautiously, as extensive evidence indicates that excessive or uncontrolled social media use is associated with adverse psychological and physical health outcomes. Previous research has shown that problematic social media use is linked to sleep disturbances, anxiety, depression, and reduced psychological well-being (Andreassen et al., 2017; Dhir et al., 2018). Sleep deprivation, in particular, has been identified as an important mediator between excessive social media use and poor academic performance because inadequate sleep negatively affects attention, memory, and learning capacity (Levenson et al., 2017).

Studies have also reported that individuals with problematic social media use are significantly more likely to experience insomnia, with one study reporting an odds ratio (OR) of approximately 6.9 for insomnia among heavy social media users (Wong et al., 2020). Such findings suggest that although social media may enhance academic collaboration and communication, excessive dependence on these platforms may eventually compromise students' mental health and academic productivity if left unmanaged.

Overall, the present study indicates that social media platforms, particularly WhatsApp, can be valuable tools for academic communication, collaborative learning, and professional development when used appropriately. Nevertheless, educational institutions should promote balanced and responsible social media use by developing awareness programs and institutional guidelines that encourage healthy digital habits among nursing students. Future longitudinal and multicenter studies are recommended to determine the optimal pattern of social media use that maximizes educational benefits while minimizing adverse effects on students' health and academic performance (Kuss & Griffiths, 2017).

CONCLUSION

This research uncovered the majority of students used the different social media sites for different reasons and most of them to pursue academic needs. There was a positive impact on the academic performance of students. More research should be conducted to determine the impacts of

social media addiction among nursing students. This review identifies the complex influence of social media on nursing students, showing both its potential advantages and related risks. Social media is a worthwhile learning tool that strengthens learning, promotes professional identity construction, and encourages civic engagement among nursing students. Yet, its overuse is strongly related to negative health consequences, such as insomnia and depression, that can adversely affect academic performance and overall well-

Reference

- Alshammari, F., Saguban, R., Pasay-an, E., Altheban, A., & Al-Shammari, L. (2022). Influence of social media on nursing students. *Nurse Education Today*, 112, 105327.
- Andreassen, C. S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports*, 2(2), 175–184. <https://doi.org/10.1007/s40429-015-0056-9>
- 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. <https://doi.org/10.1016/j.addbeh.2016.03.006>
- Dhir, A., Yossatorn, Y., Kaur, P., & Chen, S. (2018). Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, 141–152. <https://doi.org/10.1016/j.ijinfomgt.2018.01.012>
- Fauzi, A. (2011). Social Media Addiction Scale—Student Form. (Please verify the complete bibliographic details of the questionnaire before submission.)
- Griffiths, M. D. (2013). Social networking addiction: Emerging themes and issues. *Journal of Addiction Research & Therapy*, 4(5), 1–2.

- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and gratifications research. *Public Opinion Quarterly*, 37(4), 509-523.
- Kuss, D. J., & Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311. <https://doi.org/10.3390/ijerph14030311>
- George, D. R., Dellasega, C., Whitehead, M. M., & Bordon, A. (2013). Facebook-based peer mentoring in undergraduate nursing education. *Computers, Informatics, Nursing*, 31(1), 23-29.
- Junco, R. (2012). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education*, 58(1), 162-171.
- Stevenson, J. C., Sheena, A., Sidani, J. E., Col ditz, J. B., & Primack, B. A. (2017). The association between social media use and sleep disturbance among young adults. *Preventive Medicine*, 85, 36-41.
- Wong, H. Y., Mo, H. Y., Potenza, M. N., Chan, M. N. M., La, W. M., Chi, 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.

