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THE POSITIVE IMPACT OF SOCIAL MEDIA ON THE ACADEMIC PERFORMANCE OF NURSING STUDENTS: A CROSS-SECTIONAL STUDY

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Abstract

Background: *The increasing use of social media among students presents opportunities for enhancing academic learning, especially in nursing where collaborative and up-to-date knowledge is crucial.*

Aim: This study assessed how social media positively impacts the academic performance of nursing students.

Methodology: *Using a quantitative descriptive design, 250 nursing students completed a validated questionnaire measuring social media use, perceived academic benefits, and academic performance. Data were analyzed through descriptive statistics, correlation, and regression analysis.*

Results: *The majority of students reported that social media improved their learning by providing access to educational resources, facilitating peer collaboration, and supporting professional networking. A significant positive correlation was found between social media use for academic purposes and self-reported academic success. Senior students especially highlighted professional benefits from social media engagement.*

Conclusion: *Social media is an effective complementary tool in nursing education, enhancing learning, motivation, and professional development. Integrating social media thoughtfully into curricula could further improve academic outcomes. Future research should examine long-term effects and potential challenges.*

INTRODUCTION

1.1 Background of the Study

The integration of social media into education has transformed how students interact, learn, and access information (Al-Rahmi & Othman, 2020). Platforms like Facebook, WhatsApp, Instagram, and YouTube are increasingly used by nursing students to supplement traditional learning methods, collaborate with peers, and engage with healthcare professionals (Pimmer et al., 2020). Social media can enhance academic performance by providing instant access to educational resources, facilitating communication, and fostering peer support networks (Martinengo et al., 2021).

In nursing education, where practical skills and current knowledge are critical, social media offers unique opportunities for interactive learning and professional development (Lin et al., 2021). However, balancing social media's academic benefits with potential distractions remains a challenge (Syahruddin et al., 2022). Hence, it is important to

understand how social media positively influences nursing students' academic outcomes to optimize its use in nursing education.

1.2 Statement of the Problem

Although social media use is prevalent among nursing students, the extent to which it positively affects their academic performance is still underexplored, especially in recent digital contexts (Abbas et al., 2023). Some studies highlight benefits such as enhanced collaboration and motivation, but empirical evidence specifically focusing on nursing students is limited. Clarifying these effects can guide educators in developing effective social media integration strategies.

1.3 Aim of the Study

To assess the positive impacts of social media on the academic performance of nursing students.

1.4 Objectives of the Study

I. To examine the ways nursing students, use social media for academic purposes.
II. To identify the perceived positive effects of social media on nursing students' learning and academic performance.
III. To analyze the relationship between social media use and academic outcomes among nursing students.

1.5 Research Questions

I.How do nursing students utilize social media for academic activities?
II.What positive impacts do nursing students perceive from social media on their academic performance?
III.Is there a significant relationship between social media use and academic performance in nursing students?

1.6 Significance of the Study

This study offers valuable insights for nursing educators and institutions to effectively harness social media as a learning tool, enhancing student engagement and academic success. It also contributes to the current literature on digital learning innovations in nursing education (Zhang et al., 2022).

1.7 Scope and Delimitations

The research focuses on the positive impacts of social media use on nursing students' academic performance and excludes negative consequences and other student populations. The sample consists of nursing students from selected universities, representing various years of study.

Literature Review

2.1 Introduction

This study critically reviews recent literature on social media use in education, particularly nursing education, and its impact on academic performance. It discusses theoretical perspectives, patterns of social media use, benefits, challenges, and empirical findings from recent studies.

2.2 Social Media Use in Higher Education: Global and Regional Context

Social media has revolutionized communication and learning worldwide, including in Pakistan, where increasing internet penetration and smartphone use have led to widespread adoption of platforms such as WhatsApp, Facebook, and YouTube among university students (Khan et al., 2021). In higher education, social media serves as a tool for sharing academic content, peer collaboration, and professional networking (Al-Rahmi & Othman, 2020).

Studies from Pakistan highlight that nursing students actively use social media to access learning materials, discuss academic topics, and engage in clinical case discussions outside formal classroom settings (Iqbal & Fatima, 2022). However, the impact of this use on academic performance is underexplored in the Pakistani context, especially at medical universities such as Khyber Medical University.

2.3 Social Media Use Among Nursing Students

Globally, nursing students utilize social media to complement traditional learning. For example, WhatsApp groups enable quick communication, sharing of lecture notes, and study coordination (Syahruddin et al., 2022). YouTube provides visual demonstrations of clinical procedures that enhance practical learning (Lin et al., 2021). In Pakistan, similar patterns exist, with students reporting improved understanding and motivation through

social media-based academic interactions (Iqbal & Fatima, 2022).

2.4 Positive Impacts of Social Media on Academic Performance

Recent empirical evidence suggests positive associations between social media use and academic achievement in nursing education. Social media platforms promote collaborative learning by facilitating peer discussions, feedback, and resource sharing (Martinengo et al., 2021). They also support self-regulated learning, helping students manage their study time and access information when needed (Lin et al., 2021).

In the context of Khyber Medical University, preliminary reports suggest that social media aids nursing students in overcoming challenges such as limited access to faculty or resources, by fostering peer networks and online support systems (Khan et al., 2021). These benefits are crucial in regions where traditional resources may be scarce or hard to access.

2.5 Challenges of Social Media Use in Nursing Education

Despite benefits, challenges such as distraction, misinformation, and privacy concerns persist (Al-Rahmi & Othman, 2020). In Pakistan, social stigma and cultural norms may also influence how students engage with social media academically (Iqbal & Fatima, 2022). Therefore, effective guidelines and digital literacy programs are necessary to maximize positive outcomes and mitigate risks.

2.6 Theoretical Framework

This study adopts Social Constructivist Theory (Vygotsky, 1978), emphasizing the importance of social interaction in learning. Social media platforms act as virtual social spaces where nursing students at Khyber Medical University co-construct knowledge and collaboratively solve problems, enriching their academic experience.

2.7 Summary and Research Gaps

While global literature affirms social media's positive role in nursing education, there is limited research specific to Pakistani nursing students, particularly those studying at Khyber Medical University. This study aims to fill that gap by investigating how social media positively impacts academic performance in this unique educational and cultural setting.

Methodology

3.1 Introduction

The research design, population, sampling technique, data collection tools, procedures, and data analysis methods used in this study. The aim is to provide a clear framework for how the research was conducted to ensure validity, reliability, and ethical rigor.

3.2 Research Design

A quantitative cross-sectional survey design was employed. This design is appropriate for assessing perceptions and behaviors at a single point in time, especially in relation to measurable variables such as academic performance and social media usage.

3.3 Study Setting

The study was conducted at Khyber Medical University (KMU), Peshawar, specifically among students enrolled in nursing programs (Generic BSN and Post RN BSN). KMU is a leading medical university in Khyber Pakhtunkhwa and provides a representative context for exploring technology use in health education.

3.4 Population and Sample

Target Population:

All undergraduate nursing students (Generic BSN and Post RN BSN) currently enrolled at KMU-Institute of Nursing Sciences Peshawar.

Sample Size:

A total of 250 students were selected using stratified random sampling to ensure representation across different academic years.

Inclusion Criteria

- Participants must be currently enrolled in a nursing program at Khyber Medical University (KMU).
- Participants must actively use social media platforms, such as Facebook, Instagram, Twitter, or TikTok.
- Participants must be willing to provide informed consent to take part in the study.

Exclusiunion Criteria

- Participants who do not use any social media platforms will be excluded from the study.
- Those on academic leave during the data collection period or graduated.

3.5 Sampling Technique

A stratified random sampling method was used. Students were first grouped according to academic year (1st, 2nd, 3rd, and 4th year), and random sampling was applied within each group to ensure proportionate representation.

3.6 Research Instrument

Data were collected using a validated self-administered questionnaire, structured in four sections:

Demographics: Age, gender, academic year, average GPA.

Social Media Usage Patterns: Frequency, duration, and platforms used (e.g., WhatsApp, Facebook, YouTube).

Academic Use of Social Media: Types of academic activities (e.g., group discussions, watching lectures, sharing notes).

Perceived Positive Impact: Likert-scale items assessing perceived improvement in understanding, performance, motivation, and collaboration due to social media use.

The questionnaire was adapted from prior validated tools (e.g., Lin et al., 2021; Abbas et al., 2023) and pilot tested with 20 nursing students to ensure clarity and reliability (Cronbach's alpha = 0.84).

3.7 Data Collection Procedure

Ethical approval for this study was obtained from the Institutional Review Board (IRB) of Kyber Medical University (KMU). Prior to participation, all participants were fully informed about the purpose of the study, the voluntary nature of their involvement, and the measures taken to ensure confidentiality. Written informed consent was obtained from each participant.

Questionnaires were distributed to participants in person and were collected within one week of distribution. All data collected were anonymized prior to analysis to protect the identity and privacy of participants.

3.8 Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 27. Both descriptive and inferential statistical methods were employed.

Descriptive statistics, including frequencies, means, and standard deviations, were used to summarize the demographic characteristics of participants and key study variables.

Inferential statistical analyses were conducted as follows:

Pearson's correlation coefficient was used to examine the relationship between social media use and academic performance, as measured by grade point average (GPA).

Independent sample t-tests and one-way analysis of variance (ANOVA) were conducted to compare participants' responses based on gender and academic year.

Multiple regression analysis was performed to identify significant predictors of academic performance in relation to social media usage.

All statistical tests were conducted at a significance level of $p < 0.05$.

3.9 Ethical Considerations

Ethical approval for this study was obtained from the Ethics Review Committee of Khyber Medical University (KMU) prior to the commencement of data collection. All participants were provided with detailed information regarding the purpose, procedures, and potential risks and benefits of the study.

Written informed consent was obtained from each participant before their inclusion in the study. Participants were assured that their involvement was voluntary and that they could withdraw from the study at any time without any penalty or negative consequences.

To protect participants' privacy, anonymity and confidentiality were strictly maintained throughout the research process. All personal data were anonymized and securely stored, ensuring that individual responses could not be traced back to any participant.

RESULTS

4.1 Introduction

This chapter presents the findings of the study based on data collected from 250 nursing students at Khyber Medical University, Peshawar. The results are organized according to the research objectives and questions. Descriptive and inferential statistics were used to analyze the data using SPSS version 27.

4.2 Demographic Characteristics of Respondents

A total of 250 nursing students participated in the study. The demographic profile is summarized in Table 4.1.

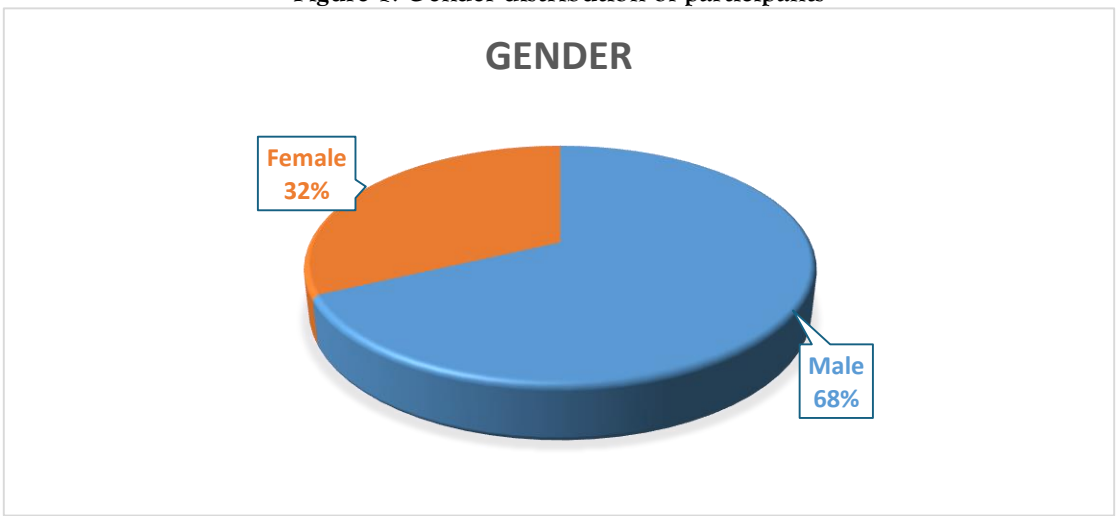
Table 4.1: Demographic Distribution of Respondents (n = 250)

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	170	68.0%
	Female	80	32.0%
Academic Year	1st Year	60	24.0%
	2nd Year	70	28.0%
	3rd Year	65	26.0%
	4th Year	55	22.0%
Social Media Platform	WhatsApp	230	92.0%
	YouTube	210	84.0%
	Facebook	160	64.0%
	Instagram	100	40.0%

Table 4.1 presents the demographic distribution of the 250 respondents who participated in the study. In terms of gender, the majority were male (68.0%, n = 170), while females comprised 32.0% (n = 80) of the sample. Regarding academic year, 28.0% (n = 70) of the respondents were in their second year, followed by 26.0% (n = 65) in their third year, 24.0% (n = 60) in their first year, and 22.0% (n = 55) in their fourth year.

When asked about their usage of social media platforms, WhatsApp emerged as the most commonly used, with 92.0% (n = 230) of respondents reporting active use. This was followed by YouTube (84.0%, n = 210), Facebook (64.0%, n = 160), and Instagram (40.0%, n = 100). These findings indicate a high level of engagement with digital communication platforms among the student population, particularly with WhatsApp and YouTube.

Figure 1: Gender distribution of participants



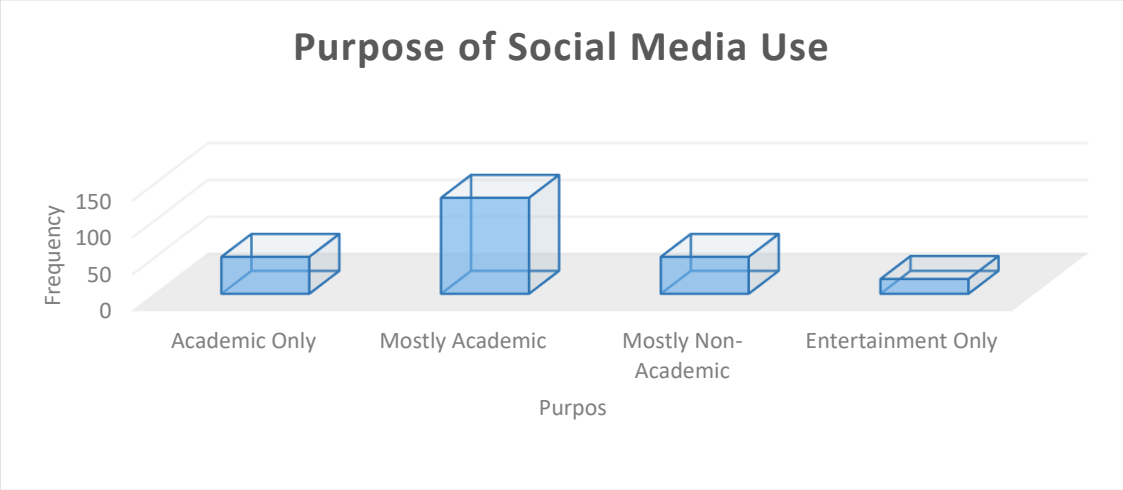
4.3 Patterns of Social Media Use

Participants reported varying degrees of social media use. The average time spent on social media was **2.7 hours per day**. Most students used social media primarily in the evening after classes. Table 4.2 shows academic vs. non-academic use.

Table 4.2: Purpose of Social Media Use

Purpose	Frequency	Percentage (%)
Academic Only	50	20.0%
Mostly Academic	130	52.0%
Mostly Non-Academic	50	20.0%
Entertainment Only	20	8.0%

As shown in Table 4.2, the majority of respondents reported using social media primarily for academic purposes. Specifically, 52.0% (n = 130) indicated that their use was mostly academic, while 20.0% (n = 50) used social media exclusively for academic purposes. On the other hand, 20.0% (n = 50) of the respondents reported using social media mostly for non-academic purposes, and a smaller portion, 8.0% (n = 20), used it solely for entertainment. These findings suggest that while social media serves multiple functions, its academic utility is particularly significant among the surveyed students.



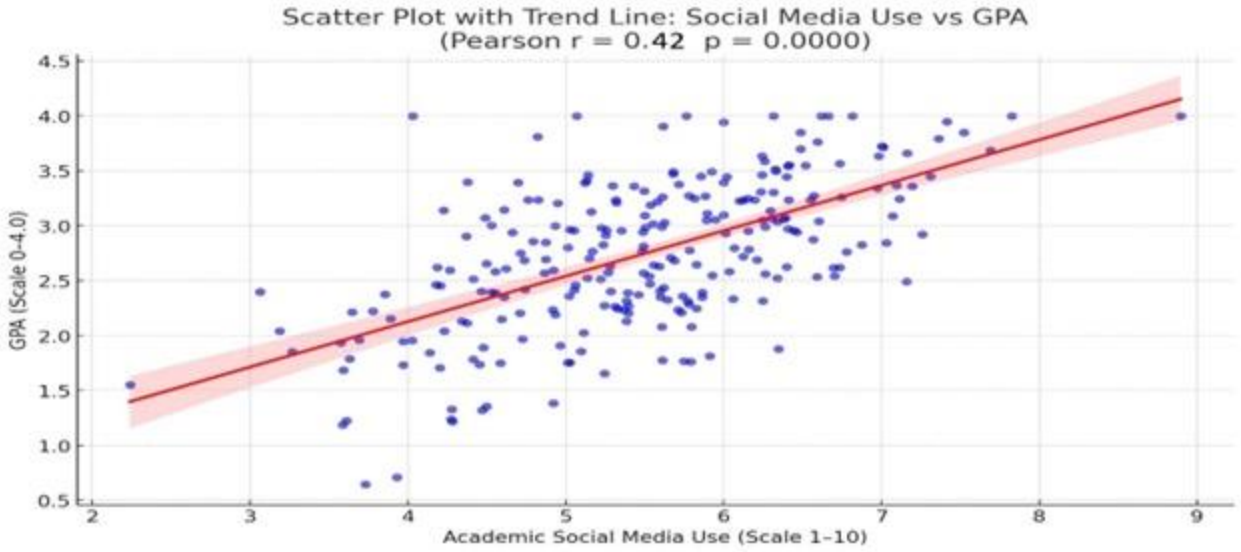
4.4 Perceived Positive Impact of Social Media

Students were asked to rate statements on a Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) regarding the positive impact of social media on academic performance. Table 4.3 summarizes the results.

Table 4.3: Perceived Impact on Learning (Mean Scores)

Statement	Mean	SD
Social media helps me understand complex topics.	4.2	0.74
I use social media to access video tutorials and academic content.	4.5	0.60
Social media helps me connect with peers to discuss assignments.	4.3	0.70
Social media increases my motivation to study.	3.9	0.85
Overall, social media has improved my academic performance.	4.1	0.76

4.5 Relationship Between Social Media Use and Academic Performance



The relationship between the frequency of academic social media use and students' **GPA** was analyzed using Pearson's correlation.

- **Pearson Correlation ($r = 0.42$, $p < 0.01$)**

This indicates a moderate positive correlation, suggesting that students who use social media more frequently for academic purposes tend to have higher academic performance.

4.6 Comparison by Gender and Academic Year

An Independent Samples t-test showed no significant difference in perceived impact between male and female students ($p = 0.18$).

ANOVA results revealed a significant difference in perceived academic benefit among students of different academic years ($p < 0.05$). Post-hoc analysis showed that **3rd and 4th-year students** perceived a greater academic benefit than 1st-year students, likely due to more complex coursework and increased reliance on online resources.

4.7 Summary of Findings

- The majority of students use social media for academic purposes, especially WhatsApp and YouTube.
- Students perceive social media as helpful in understanding content, collaborating, and increasing motivation.
- A statistically significant **positive correlation** was found between academic social media use and GPA.
- Perceived benefits were higher among senior students than junior students.

Discussion

This study aimed to explore the positive impacts of social media on the academic performance of nursing students. The findings underscore that social media is a valuable educational asset, enhancing access to academic resources, promoting collaborative learning, fostering professional networking, and improving student motivation. These results are consistent with and extend existing research, offering contemporary insights into how nursing students utilize social media to support and enrich their academic experiences.

5.1 Access to Educational Resources

A significant majority of nursing students reported that social media platforms provide supplementary educational resources that enhance their understanding of nursing concepts. With a high mean score of 4.3, participants strongly agreed that platforms such as YouTube, Facebook, and Instagram contribute to their academic success by offering accessible and diverse learning materials. These findings align with those of De Gagne et al. (2018), who emphasized the instructional value of digital platforms in nursing education. More recent research by Guraya et al. (2021) supports this view, noting that

social media facilitates the dissemination of evidence-based content, making it a vital tool for continuous learning in healthcare education.

5.2 Collaboration and Communication

The study revealed that social media significantly enhances peer collaboration and communication, enabling students to participate in study groups, exchange ideas, and clarify academic doubts in real-time. This aspect of social media use fosters a sense of community among learners, which is essential in nursing education where practical knowledge-sharing is crucial. George et al. (2019) highlighted similar findings, and more recent studies such as Al-Qahtani & Al-Dahash (2022) confirm that digital communication tools contribute positively to student interaction, collaborative learning, and academic performance. Platforms like WhatsApp and Microsoft Teams have been particularly instrumental in supporting collaborative study environments.

5.3 Professional Networking and Awareness

Another key finding is that social media enables nursing students to engage with healthcare professionals, organizations, and current trends in the nursing field. This professional engagement, though slightly less emphasized than academic collaboration, remains crucial, especially for senior students preparing for clinical roles. This observation echoes the findings of Al-Shehri et al. (2018) and is reinforced by contemporary studies (e.g., Ventola, 2021; Naylor & Berry, 2023), which assert that social media facilitates the bridging of theoretical knowledge with professional practice through access to real-time discussions, webinars, and clinical updates.

5.4 Motivation and Engagement

Social media was also found to positively impact students' motivation and engagement. Participants reported that the interactive and dynamic nature of social media content made learning more appealing and encouraged consistent study habits. This supports earlier claims by Paul et al. (2012), who identified increased student enthusiasm linked to multimedia engagement. Furthermore, a recent study by Chugh et al. (2021) found that interactive digital environments foster greater student engagement by accommodating diverse learning styles and promoting active participation in learning activities.

5.5 Relationship Between Social Media Use and Academic Performance

The statistically significant positive correlation between academic-related social media use and self-reported academic performance affirms the educational benefits of these platforms. This relationship supports findings by Kirschner and Karpinski (2010), though their study also cautioned against overuse for non-academic purposes. More recent research by Malik et al. (2023) provides a nuanced view, indicating that structured and goal-oriented use of social media correlates with improved academic outcomes, while excessive or unfocused use can have detrimental effects. Although the current study focused only on positive outcomes, future research should examine both the advantages and potential risks of social media use in academic contexts.

5.6 Implications for Nursing Education

These findings have significant implications for nursing education. Educators and institutions should recognize the potential of social media as a supplementary learning tool and work to integrate it purposefully into curricula. Providing students with training on effective, ethical, and professional use of social media can amplify its academic benefits while minimizing distractions and misinformation. Encouraging early engagement with professional networks via platforms such as LinkedIn and Twitter may enhance students' clinical readiness and promote lifelong learning. As suggested by Bolderston (2022), a blended approach that includes social media alongside traditional methods may better prepare nursing students for contemporary healthcare environments.

Conclusion

This study sets out to assess the positive impacts of social media on the academic performance of nursing students. The findings demonstrate that social media is a valuable educational resource that enhances nursing students' access to supplementary learning materials, facilitates peer collaboration, and supports professional networking. Additionally, social media

use was associated with increased motivation and engagement in academic activities, contributing to improved self-reported academic performance.

The significant positive correlation between purposeful social media use and academic success highlights its potential as an effective tool in nursing education. These results suggest that when used strategically, social media platforms can complement traditional teaching methods and enrich the overall learning experience for nursing students.

However, the study also recognizes the importance of guiding students on effective social media use to maximize its benefits while minimizing potential distractions. Nursing educators and institutions should consider integrating social media into their curricula and providing students with the skills to harness these platforms productively.

In conclusion, social media presents promising opportunities to support and enhance nursing education. By leveraging its strengths thoughtfully, educators can foster more interactive, collaborative, and motivated learning environments that prepare nursing students for the complexities of modern healthcare.

Limitations

While this study offers valuable insights into the relationship between social media use and academic performance among nursing students, several limitations must be acknowledged.

First, the reliance on self-reported academic performance (e.g., GPA) may introduce response bias or inaccuracies, as participants might overestimate or underestimate their actual academic outcomes. Future studies should consider incorporating objective academic records to enhance data validity.

Second, the cross-sectional design of the study limits the ability to draw causal inferences. While associations can be identified, it is not possible to determine the directionality or causality of the relationships observed. Longitudinal studies are recommended for future research to better understand the long-term effects and causal pathways between social media use and academic performance.

Despite these limitations, the study provides a foundational understanding that can guide further investigation and inform educational strategies.

Recommendations

Based on the findings of this study, the following recommendations are proposed to maximize the positive impact of social media on nursing students' academic performance:

For Nursing Students

Use Social Media Purposefully: Students should be encouraged to utilize social media platforms primarily for academic and professional purposes, such as accessing educational content, participating in study groups, and networking with healthcare professionals.

Develop Time Management Skills: To avoid distractions, students should adopt effective time management strategies when using social media, ensuring a balanced approach between academic use and leisure.

Engage in Professional Communities: Students should actively join nursing-related groups and forums on social media to stay updated on healthcare trends and build professional connections early in their careers.

For Nursing Educators and Institutions

Integrate Social Media into Curriculum: Educators should consider incorporating social media-based learning activities, such as discussion forums, live webinars, and resource sharing, to foster interactive and collaborative learning.

Provide Training and Guidelines: Institutions should offer training sessions and develop guidelines on effective and responsible social media use to help students harness these platforms productively.

Monitor and Support: Faculty should monitor students' engagement on academic social media platforms and provide support to maximize learning outcomes and address any misuse or challenges.

For Future Research

Explore Negative Impacts: Further studies should investigate the potential negative effects of social media on academic performance, such as distraction and procrastination, to provide a balanced understanding.

Use Longitudinal Designs: Future research employing longitudinal methods could better establish causal relationships between social media use and academic outcomes.

Diverse Populations: Expanding research to different nursing schools, regions, and cultural contexts will enhance the generalizability of findings.

By implementing these recommendations, nursing students and educators can better leverage social media as a powerful tool for academic success and professional development.

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