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| KEYWORDS                                                                                                                                                    | ABSTRACT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <i>Social Media, Social Media Addiction, Academic Performance, GPA, Nursing Students, Pakistan</i>                                                          | Social media is now a part of everyday life for university students. It gives students opportunities to learn new things and connect with people. However, social media can also be a distraction for students and can pull them away from their studies. Many students have difficulty managing their time, do not get enough sleep, and have trouble focusing. All these factors can affect how well students perform academically. Social media can be a problem for university students because excessive or inappropriate use can negatively affect their academic performance. Therefore, university students need to be careful about how they use social media. This study examined how social media use affects the academic performance, specifically the grade point average (GPA), of nursing students enrolled in private nursing colleges. A descriptive cross-sectional survey was conducted among 107 undergraduate nursing students selected through purposive sampling, using a structured, self-administered questionnaire comprising the Social Media and Academic Performance of Students Scale (Osharive, 2015) and the Social Media Addiction Scale-Student Form (Cengiz, 2018). Data were analyzed using descriptive statistics and the Chi-square test in SPSS Version 26. Participants spent an average of 4.83 hours (SD = 3.77) per day on social media, and the mean social media addiction score was 86.40 (SD = 13.78). No statistically significant association was found between overall social media usage and GPA ( $\chi^2$ , $p = .223$ ). However, students who used platforms such as Instagram and WhatsApp more frequently tended to report lower GPAs, whereas social media use for academic purposes was not associated with poorer academic performance. The effect of social media on students' academic performance therefore depends largely on how it is used. When students use social media appropriately and focus on academic activities, it can support their learning. On the other hand, excessive use for non-academic purposes can negatively affect their academic performance. Academic performance is strongly influenced by how students manage their time. When students use their time effectively for academic activities, their academic performance can improve. However, when they spend excessive amounts of time on non-academic activities, their academic performance may suffer. Therefore, nursing institutions should help students develop a healthy balance between social media engagement and academic responsibilities. |
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## Introduction

Social media refers to a collection of electronic and digital platforms that operate over the internet and facilitate the exchange, transformation, and sharing of ideas, information, educational resources, and content (Hussain & Ahmed, 2024). These platforms provide a real-time, interactive medium that has transformed human communication in a convenient and easily accessible manner (Alhusban et al., 2022). Since the start of the twenty-first century Facebook and other sites like Instagram and Twitter have become big places where people talk to each other from all around the world. Instagram is really popular with over one billion people using it every month. About 500 million people use Instagram every day. This is what some people found out: Alhusban and his friends in 2022 and Hill and his friends in 2024. Inappropriate or excessive internet use has reached concerning levels in many parts of the world. Beyond its impact on young people's daily routines, heavy social media use has been linked to a range of emerging mental health concerns and, in some contexts, to substance misuse, with unfavorable consequences for the academic performance of medical and nursing students (Alhusban et al., 2022; Hussain & Ahmed, 2024). The use of media and artificial intelligence has really changed the way the younger generation talks to each other learns new things and looks at information in daily life and at school. Social media and artificial intelligence are everywhere now. The younger generation uses media and artificial intelligence to communicate, learn and engage with information all the time both when they are at home and when they are at school. It was discovered by Shahzad and others in 2024. Social media and artificial intelligence play a huge role in the life of the generation. Notification driven applications like Outlook and Canvas encourage students to check their smartphones for academic updates, but continuous connection often directs attention towards social networking sites instead (Hill et al., 2024). Although there are no differences in time spent online by gender, there are reasons for using the Internet differently – men usually involve themselves in task-related activities such as news reading, while women prefer using social media for relationship building purposes (Hill et al., 2024). Academic performance of female medical and nursing students seems to be more affected by social media use than the one of their male peers (Alhusban et al., 2022), and lowering usage rate of frequent users correlates with the decrease of stress levels (Alhusban et al., 2022). Education of nursing professionals involves an especially challenging academic atmosphere with the mixture of classroom learning, clinical placement, skills assessment, and working in shifts. In this regard, efficient time management and concentration are crucial both for academic achievements and safe practice. Firstly, excessive use of social media by nursing students may cause poor academic performance due to the fact that social media can distract people from studying, cause poor time management skills, lack of sleep, and reduce studying time. At the same time, there are certain advantages of social media in terms of education if applied consciously – namely, it can be used for receiving educational materials, conducting study groups between peers, and communicating quickly with teachers and other students. It is crucial to consider this dual effect in order to improve the academic performance of nursing students, who have an impact on their future patients. This study can be considered relevant on various levels. Firstly, the results of this study can be useful for educators in healthcare in order to understand the importance of teaching students how to use digital technologies properly. Secondly, the study can be useful in terms of

developing the local literature on the role of social media in nursing education, as not much research has been done on this issue so far. In terms of policy-making, the findings can assist institutions in making policies that encourage proper use of social media rather than banning their use altogether because it is difficult to do so when the social media platforms have become an integral part of students' lives. This research sought to explore the impact of social media use on academic performance of nursing students based on the following research question: To what extent does social media use impact the academic performance of nursing students? By identifying patterns of use that are associated with either better or worse academic outcomes, the findings are intended to help nursing educators and institutions design strategies that encourage productive social media use while minimizing its potential to distract from study and well-being.

### Literature Review

Alhusban and other researchers found out in 2022 that using media in a bad way can affect how well university students do in school. They looked at 277 students from Jordan, the United Arab Emirates and Saudi Arabia. The students filled out a survey on the internet from April to June 2020. The study found that 20 percent of the students did not do well in school. It made it hard for them to wake up for classes and tests. Social media use at night was a thing among these students and it seemed to get in the way of their school work. Hill and their team (2024) looked into how social media, TikTok affected the grades of 306 college students at a university in the southern part of the United States. The research discovered a important negative link between using social media and GPA ( $r = -.16, p < .001$ ). At the time the amount of time spent on homework did not have a significant connection with GPA. TikTok was the most common platform used (39.5%) especially by girls. This shows the relationship between using social media and grades. Shahzad et al. (2024) explored the combined effects of artificial intelligence and social media use on academic performance and mental well-being among 401 Chinese university students using partial least squares structural equation modeling. Contrary to much of the existing literature, the study found that both AI and social media use had a positive influence on mental health and academic achievement, highlighting the potential benefits of responsible technology use in education. Hussain and Ahmed (2024) studied the relationship between social media use and depression among 120 nursing students at Jinnah College of Nursing, Karachi. Through Beck's Depression Inventory, it was found that 44.2% of respondents had symptoms of depression of moderate to severe degree of severity, and there was a statistically significant correlation ( $p < .05$ ) between the time spent using social media and scores for depression; the majority of respondents reported that they spend 0–4 hours daily on social networking sites. Another area related to sleep quality and student performance is the effect of lack of sleep on academic performance. Thus, the study conducted by Suardiaz-Muro et al. (2023), involving 640 Spanish university students, showed that better sleep quality is positively correlated with the perception of academic performance, since 61.3% of participants believed that getting enough sleep helped to succeed academically. Tanveer et al. (2023) found among 41 nursing students from CMH Institute of Nursing that 87.8% of respondents stated that 12-hour shifts at the workplace affect negatively their attention, and only 24.4% of students get 7–8 hours of sleep per day despite average GPA equal to 3.44 (SD = 0.21). This line of investigation has been studied by Benjamin et al. (2024)

among nursing students in Saudi Arabia. Fauzi et al. (2021) conducted research on the level of social media addiction among 141 nursing students in Malaysia, reporting high levels of mean addiction scores with 86.40 (SD = 13.78). Instagram (31.2%), Twitter (27.0%) and YouTube (18.4%) were the most commonly used platforms for the studied sample. David et al. (2024) investigated mental disorders, social media addiction and academic performance among 90 Romanian nursing students, and found out that students with minor depressive symptoms had significantly higher academic achievements than those who had moderate and severe symptoms ( $p = .001$ ), whereas no statistically significant differences were detected in social media addiction scores across demographics. In turn, Chowdhury (2024) explored the prevalence of problematic social media use in a sample of 247 university students from Bangladesh and found that 54.2% spent one to eight hours per day using social media and had negative impact on their studies and concentration. In addition, Jamil et al. (2020) indicated that excessive use of social media among university students is associated with procrastination and less study hours, and Lahiry et al. (2019), investigating medical students in East India, stated that social media use not only affects academic performance but also interpersonal relationships. In a study conducted by Malak et al. (2022) among 510 university students, they discovered that there is a direct negative impact of social media addiction on academic achievement and an indirect one mediated through stress and anxiety, supporting the notion of addressing psychological impacts of social media use on academic achievement. Setyowati et al. (2023) specifically examined nursing students and discovered that there was a significant correlation between social media addiction and poor sleep quality, as highlighted in previous research concerning sleep issues related to social media usage. In a study conducted by Bhandarkar et al. (2021) among undergraduate medical students, it was established that a majority of them felt that social media had impacted their study time adversely; however, a number of them used social media in a constructive manner. Recent studies have looked into informational and social aspects of platform usage. Ibrahim et al. (2024) revealed that there was an interconnection between social media usage, self-esteem and academic performance of the nursing students in Saudi Arabia. Students with high self-esteem reported that they used social media more moderately compared to those who had problems with their self-image. Acharya (2024) provided a case study on students' views on social media academic effects. Many students were aware of the distracting nature of this resource but still found it hard to control their usage of it. Muliadi et al. (2024) studied the way students shared information through social media and identified social capital and trust as key determinants of this process. Similar to this study, Muliadi et al. (2024) showed that many students used social media to keep themselves informed about the academic activities. In general, based on the reviewed studies, the effect of social media usage on academic performance of students is not negative and obvious, because it is strongly influenced by a number of factors like the kind of social media, its purpose and pattern of usage. The current research fills the gap in the existing literature since it addresses the issue among nursing students in Pakistan. Moreover, very few of the reviewed studies focus on nursing students specifically in the context of private colleges in Pakistan, and even fewer of them use both an addiction scale and an academic performance variable in a study design. This is important due to the fact that nursing courses include not only typical stresses associated with university education but also other burdens such as clinic practice.

Therefore, time spent on non-academic social networking activities might affect not only academic performance but also clinic preparation. The current study seeks to fill the gap by using the SMAS-SF alongside self-reported GPA among private nursing college students in Lahore.

### **Methodology Research Design and Setting**

The researcher used a descriptive cross-sectional design because it enables the measurement of the three variables social media usage, level of addiction, and academic achievement in one time frame. It is, therefore, ideal in conducting an exploratory study of the relationship between these three factors. This research was conducted among undergraduate nursing students in private nursing colleges in Lahore, Pakistan.

### **Sample Size and Sampling Technique**

The sample size was calculated based on the Taro Yamane approach:  $n = N / [1 + N(e)^2]$  where  $N=145$  is the total population while  $e=0.05$  is the margin of error with 95% confidence level. It came to be that the minimum number of samples required is 106.39 which was rounded up to 107 individuals. Purposive sampling method was adopted, with the samples being selected based on their year in college and social media use.

### **Inclusion and Exclusion Criteria**

The participants eligible for this study were those nursing students pursuing their degrees in private institutions who were ready to participate, capable of understanding English in writing and had at least two social media accounts. The nursing students on addiction withdrawal treatment program and those having psychotic symptoms were excluded from the study to avoid any bias due to the existing clinical conditions.

### **Instruments**

The data collection was conducted through an adapted self-administered questionnaire that had two parts. Part A, based on the Social-Media and Academic Performance of Students (SMAAPOS; Osharive, 2015) instrument, gathered demographic information, social media platform exposure, amount of time spends per day on social media use and academic activities, and one question regarding their perception about the impact on GPA. Part B, based on the Social Media Addiction Scale – Student Form (SMAS-SF; Cengiz, 2018) instrument, evaluated social media addiction via 29 items divided into four factors: virtual tolerance (5 items related to the necessity of increasing use for feeling satisfied), virtual communication (9 items related to the preference of online communication over personal), virtual problems (9 items related to the problems such as neglecting responsibilities and having physical discomfort), and virtual information (6 items related to the social media usage to stay updated). Each item was answered on a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree), providing total scores between 29 and 145, with higher score being associated with higher addiction level.

### **Data Collection Procedure**

The data were collected from nursing students enrolled at the private colleges in Lahore. Before collecting any data, the permission of the principal of the concerned college was sought. The respondents were informed about the objectives of the research study and subsequently asked to sign a written consent form. After obtaining the written consent, the questionnaire was administered to them.

### **Ethical Considerations**

The study followed all the ethical principles during the conduct of the research. The subjects were informed about the voluntary nature of the research and their freedom to terminate the process at any point without any repercussions. All the data was treated confidentially and exclusively used for the purpose of research. Before conducting the experiment, approval from the institutional ethical review committee was obtained.

### **Validity and Reliability**

The two instruments employed in this study were modified versions of existing valid instruments. The SMAAPOS scale (Osharive, 2015) has been used in previous studies on the association between social media use and student academic performance, while the SMAS-SF (Cengiz, 2018) has shown satisfactory psychometric properties in previous uses, such as the one carried out by Fauzi et al. (2021) using a Malaysian nursing student sample where a similar mean addiction score was found. Face and content validity of the modified instrument were evaluated before its administration.

### **Statistical Analysis**

Data analysis was conducted using IBM SPSS Statistics 26. Quantitative data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation and then presented using tables and charts. The Chi-square test of independence was used to analyze the relationship between social media usage level and GPA category which are categorical in nature, with significance set at  $p < .05$ .

## **Results**

### **Demographic Characteristics**

Of the 107 nursing students who participated, 56.1% ( $n = 60$ ) were male and 43.9% ( $n = 47$ ) were female. Most participants (69.2%) were aged 21-25 years, while 30.8% were aged 16-20 years. Regarding level of study, 63 students (58.9%) were in their 3rd-4th semester, 24 (22.4%) in their 5th-6th semester, and 20 (18.7%) in their 7th-8th semester (Table 1, Figures 1 and 2).

Table 1: Demographic Characteristics of Participants (N = 107)

| Variable       | Category         | N  | %    |
|----------------|------------------|----|------|
| Sex            | Male             | 60 | 56.1 |
|                | Female           | 47 | 43.9 |
| Age            | 16-20 years      | 33 | 30.8 |
|                | 21-25 years      | 74 | 69.2 |
| Level of study | 3rd-4th semester | 63 | 58.9 |
|                | 5th-6th semester | 24 | 22.4 |
|                | 7th-8th semester | 20 | 18.7 |

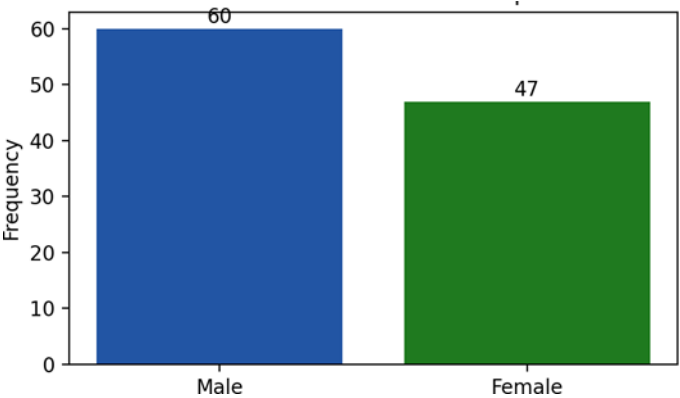


Figure 1: Gender Distribution of Participants.

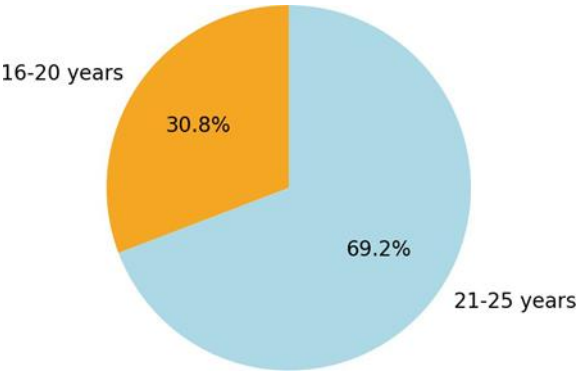


Figure 2: Age Distribution of Participants.

### Social Media Engagement and Behavior

From among the 29 questions asked regarding the Social Media Addiction Scale, certain behavioural patterns came out as consistent for most individuals. Majority of respondents indicated an eagerness to use social media; about 54.2% agreed or strongly agreed that they are eager to go online, while 58.9% were always trying to access the internet irrespective of where

they are to be able to stay connected. The pattern with morning activities was however more mixed, as 36.4% of people indicated that one of the first things that they do once they wake up is to access social media, while 46.7% disagreed. Use of the site with emotional and escapist characteristics was also evident. Over three-fifths (61.7%) of the respondents agreed that social media is a way of escaping from the real world, while almost a third (30.8%) said that without social media, life would not make sense although the biggest chunk (32.7%) was neutral on this question. About 72.9% of respondents indicated that they want to spend time on social media whenever they are alone while almost half (49.6%) found it to be captivating. As far as social preferences go, 61.7% of participants did not prefer using social media while being surrounded by people in real life, and 71.0% preferred real-life friends over the ones from social media. The same way, 58.0% of participants felt that they communicated better face to face rather than via social media, although the smaller amount of people (39.3%) did not feel represented in their social media representation fairly evenly divided between those who do (32.7%). Communication preferences of participants were also quite varied with 40.1% preferring communication through social media, but 79.5% of them stayed active there to be up to date about classes and homework. As far as academic and functional consequences of using social media, 42.1% of participants confessed neglecting their homework due to time spent on social media, while 41.2% did not do it. An overwhelming majority (60.7%) indicated a decrease in productivity because of social media usage, and 41.9% admitted experiencing physical issues such as pain in eyes, headaches, or exhaustion caused by their social media activities. It is reassuring that most of the subjects showed some basic self-awareness during their time on social media: 64.5% reported noticing hunger or thirst while using social media, and 66.4% refrained from using social media while walking so as to remain aware. Social media conflict associated with the family members was not very common since 54.2% disagreed that the frequent use of social media led to conflicts with family members and 44.8% claimed that they would abandon social media use if their family did not approve. Moreover, it is worthy of note that there was a significant number (29.9%) who stated that they would not abandon social media despite the family disapproval. All in all, only 51.4% of students admitted feeling unhappy when not using social media and only 47.6% did not feel bad about lowering the amount of time spent using social media. This means that, although the engagement in social media was rather high, it cannot be considered compulsive for the total sample of participants. The information seeking motive was one of the consistent motives throughout the whole questionnaire. Besides 79.5% of people who remained active due to the updates on course topics, 77.6% of participants stated that they used social media to receive the latest news, 51.4% of people used social media to be aware of group shares and 37.4% remained active because of staying informed about family and close people.



**Figure 3. Frequency Distribution of Time Spent on Social Media.**

Participants averaged 4.83 hours per day on social media ( $SD = 3.77$ , range = 0 – 20 hours), most of which fell between two and five hours per day, as depicted in Figure 3. In the Social Media Addiction Scale, the mean score obtained was 86.40 ( $SD = 13.78$ ) with a scale range of 145. The means of the subscales scored highest for virtual communication ( $M = 25.23$ ,  $SD = 5.18$ ) and virtual problems ( $M = 23.13$ ,  $SD = 5.52$ ), then for virtual information ( $M = 20.69$ ,  $SD = 3.84$ ) and virtual tolerance ( $M = 17.35$ ,  $SD = 3.60$ ). It could be inferred that the dimension of social media addiction was more related to virtual communication and its corresponding problems. (Table 2).

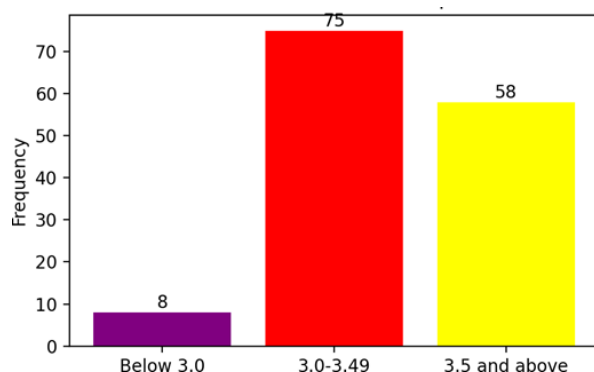
**Table 2: Subscale Scores for Social Media Addiction (SMAS-SF)**

| Subscale              | Items | Mean  | SD   |
|-----------------------|-------|-------|------|
| Virtual Tolerance     | 5     | 17.35 | 3.60 |
| Virtual Communication | 9     | 25.23 | 5.18 |
| Virtual Problems      | 9     | 23.13 | 5.52 |
| Virtual Information   | 6     | 20.69 | 3.84 |

**Academic Performance** The range of the GPA scores of the participants was between 2.5 to 4.0. The greatest number of the participants (53.2%) had a GPA score of 3.0–3.49, while 41.1% of them had a GPA of 3.5 or higher. (Table 3, Figure 4).

**Table 3: Distribution of GPA (N = 107)**

| GPA Category  | N  | %    |
|---------------|----|------|
| Below 3.0     | 8  | 5.7  |
| 3.0–3.49      | 75 | 53.2 |
| 3.5 and above | 58 | 41.1 |



**Figure 4. GPA Distribution of Participants.**

**Item-Level Findings on the Social Media Addiction Scale** As illustrated in Table 5, the percentage of response agreement for each of the 29 items of the Social Media Addiction Scale – Student Form by each sub-dimension is presented. This detailed analysis at the item level gives a more detailed view of the behaviors and attitudes that have been measured at the subscale level above.

**Table 5: Percentage Agreement (Agree + Strongly Agree) for SMAS-SF Items by Sub-Dimension**

| #  | Item                                                   | % Agree/ Strongly Agree |
|----|--------------------------------------------------------|-------------------------|
| 1  | Eager to go on social media                            | 54.2                    |
| 2  | Looks for internet connectivity everywhere             | 58.9                    |
| 3  | Social media is first thing done upon waking           | 36.4                    |
| 4  | Sees social media as an escape from reality            | 61.7                    |
| 5  | Life without social media would be meaningless         | 30.8                    |
| 6  | Prefers social media even when others are around       | 19.7                    |
| 7  | Prefers online friendships to real-life friendships    | 17.7                    |
| 8  | Expresses self better on social media                  | 24.3                    |
| 9  | Feels authentic self is shown on social media          | 32.7                    |
| 10 | Prefers communicating via social media                 | 40.1                    |
| 11 | Cannot give up social media despite family disapproval | 29.9                    |
| 12 | Wants to use social media when alone                   | 72.9                    |
| 13 | Prefers virtual communication to going out             | 29.9                    |
| 14 | Social media activities dominate daily life            | 46.7                    |
| 15 | Neglects homework due to social media                  | 42.1                    |
| 16 | Feels bad when forced to reduce usage                  | 36.4                    |
| 17 | Feels unhappy when not on social media                 | 29.0                    |
| 18 | Being on social media is exciting                      | 57.0                    |
| 19 | Frequent use causes conflict with family               | 22.4                    |
| 20 | Finds the world of social media captivating            | 49.6                    |
| 21 | Does not notice hunger/thirst while online             | 23.3                    |
| 22 | Notices diminished productivity due to social media    | 60.7                    |

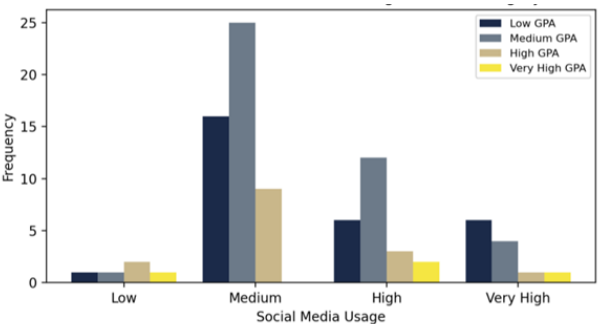
|    |                                                      |      |
|----|------------------------------------------------------|------|
| 23 | Has physical problems due to social media use        | 42.1 |
| 24 | Uses social media while walking to stay informed     | 22.4 |
| 25 | Uses social media to keep informed generally         | 77.6 |
| 26 | Surfs social media to see group shares               | 51.4 |
| 27 | Spends more time online for special announcements    | 39.3 |
| 28 | Stays on social media for course-related information | 79.5 |
| 29 | Stays active to keep informed about family/kin       | 37.4 |

The findings based on the individual items again reflect the trends identified within the subscales: the items indicating information searching behaviors (especially items 25 and 28) have demonstrated the highest degree of consensus within the whole scale, whereas those indicating compulsive or antisocial behaviors (items 6, 7 and 19, for example) have revealed relatively low consensus rates. It can be concluded that despite the fact that social networking takes a lot of time of the participants' lives, more serious indicators of behavioral addiction have been found only among some of the respondents, except for the item related to productivity (item 22).

**Association Between Social Media Usage and GPA** Chi-square analysis was conducted for the relationship between overall extent of social media usage (low, medium, high, very high) and GPA (low, medium, high, very high). There was no statistical significance for the outcome,  $\chi^2(9, N = 107) = 11.65, p = .223$ , implying no overall significant relationship between the time invested in social media activities and GPA (Table 4, Figure 5). Nevertheless, descriptive analysis showed that those students who indicated a higher level of usage of specific social networks, especially Instagram and WhatsApp, were inclined to belong to lower GPA groups, while academic social media usage was not related to low GPA.

**Table 4: Contingency Table: Social Media Usage Level by GPA Category**

| Social Media Usage | Low GPA | Medium GPA | High GPA | Very High GPA |
|--------------------|---------|------------|----------|---------------|
| Low                | 1       | 1          | 2        | 1             |
| Medium             | 16      | 25         | 9        | 0             |
| High               | 6       | 12         | 3        | 2             |
| Very High          | 6       | 4          | 1        | 1             |



**Figure 5. Cluster Bar Chart: Social media Usage vs GPA Category.**

In general, the results obtained show that the time allocated for social media use, by itself, is not an effective predictor of GPA among nursing students. On the contrary, the type of platform as well as the reason for social media use (whether academic or otherwise), seems to be more important for GPA correlation. The consistency of these findings with respect to the multidimensional character of the subscales of the SMAS-SF questionnaire is evident.

## Discussion

This research provides significant information about the relationship between the social media usage by nursing students and their academic performance (Hill et al., 2024). Although social media usage as a whole did not have any significant impact on GPA, however, specific platform usage demonstrated interesting patterns: high usage of non-academic social media such as Instagram and WhatsApp had an impact on low academic performance while academically-oriented usage of social media had either neutral or even positive influence (Shahzad et al., 2024). This is similar to findings of Alhusban et al. (2022) that demonstrated the negative impact of problematic, but not frequent, social media usage on academic performance and Hill et al. (2024) that discovered the weak negative relationship between general social media usage and GPA. The high rate of students that use social media to know about the course activities (79.5%) demonstrates the fact that many nursing students are already utilizing social media for their academic purposes, which is supported by Shahzad et al. (2024) and Muliadi et al. (2024). However, at the same time, the substantial proportion that confessed to neglecting their homework due to social media (42.1%), as well as those who indicated decreased productivity (60.7%), corroborate the worries expressed by Chowdhury (2024), Jamil et al. (2020), and Malak et al. (2022) about the distraction and stressful capacity of excess usage. The rather high social media addiction mean score ( $M = 86.40$ ,  $SD = 13.78$ ) observed in this investigation is very similar to what Fauzi et al. (2021) obtained for nursing students from Malaysia. It is also notable that the virtual communication and virtual problems subscales are prominent in the current sample, reinforcing the notion that connection-seeking behaviors, rather than information consumption, are the key factors behind the problematic social media usage in this sample, as found by Hussain and Ahmed (2024), who discovered a significant association between social media usage and depression in Pakistani nursing students, as well as Setyowati et al. (2023), who linked social media addiction with poor sleep in nursing students. The fact that most individuals in the sample retained awareness of basic physiological needs (such as hunger) during social media usage and that most individuals do not use social media while walking means that there were addictive trends in this sample but they have not reached the same extreme levels of behavior that were seen in some other samples. This is largely similar to the finding by David et al. (2024) that social media addiction in itself does not have much variation among the demographic groups, where psychological stress and not addiction was a significant predictor of academic performance. Likewise, Bhandarkar et al. (2021) reported that many medical students, although aware of the fact that social media could be distracting, still use social media in an effective way for learning from peers; a dichotomy evident in the current sample where the use of social media is done both for academic purposes and leisure. This indicates that the effect of social media use on the academic performance of students is complex and depends on the nature of the medium itself, its

intended purpose, and the extent of use, rather than just the duration. This would help the nursing students in using the connective power of social media without affecting their academic performance negatively.

However, these results may be contextualized in relation to the wider debate surrounding digital literacy in health-profession education as well. Indeed, as Acharya (2024) argued, most students are, more or less, aware that using social media negatively impacts their studies; however, simply being aware of this problem is apparently not enough to actually make changes in behavior, which is clearly demonstrated by the results of the current study where a large proportion of students stated that their productivity declined. This mismatch between awareness and behavior is not unusual in the literature on self-regulation, and therefore, it appears that interventions aimed at nursing students should go beyond just awareness campaigns and actually target attention and time management practices.

Lastly, the results of this study should be seen in context of wider changes in the field of nursing education. With the emergence of health care systems that depend on practitioners who can effectively use their digital literacy to navigate through the online space, construct their professional identity, and communicate with patients, it is essential for the nursing curriculum to influence the ways in which students interact with social networks not as an extracurricular distraction that needs to be regulated, but as a skill they need to develop. In such perspective, the current research results not only contribute to the existing academic discussions of the subject, but also provide important insights into the future practice of nursing professionals.

### **Implications and Recommendations**

The results have numerous practical implications for nursing education. Firstly, educational institutions need to develop appropriate awareness campaigns and workshops, which would help students realize the possible effects that the misuse of social media might have on their academic performance and mental health. Secondly, students should be encouraged to utilize social media positively by means of joining academic forums, study groups, and collaboration with peers via digital platforms, taking into account the significant percentage of students who use social media to receive course-related information. Thirdly, since platform-specific use of social media and not general online time was the most correlated with GPA, institutional interventions might be more helpful when dealing with ways students use certain platforms. Finally, since the higher addiction scores were found on the subscales of virtual communication and virtual problems, the counselling and student support services provided by nursing colleges might find it useful to screen students for possible addiction to social media usage in the context of their overall well-being considering the connections between social media addiction and poor sleep and psychological problems in other groups of nursing students (Setyowati et al., 2023; Hussain & Ahmed, 2024).

Further still, the integration of social media use within the curriculum could be considered, through such mechanisms as the creation of class-based study groups or discussion forums, as a way of harnessing the interest students already have in these types of tools and directing it towards academic success. In terms of the larger picture, the above implications point towards an

attitude change: instead of considering social media as something to contain, nursing colleges could benefit from viewing it as a skill set unto itself, one which directly relates to information literacy, professional communication, and self-regulation. Integrating brief, no-fuss evaluations of digital wellness during orientation or mentorship processes could provide instructors with opportunities to spot the students who show early warning signs of social media addiction, including high scores on the virtual communication and virtual problems factors.

### **Limitations and Future Research**

There are several weaknesses associated with the current study. First, the limited sample size (N=107) taken from private nursing colleges located in one city reduces the applicability of the results to other regions and to public nursing colleges. Secondly, due to the cross-sectional nature of the research design, no causation between social media utilization and performance in nursing courses can be concluded since there is a likelihood that poor academic performance contributes to greater engagement in social media activities. Thirdly, self-reporting is used to measure social media utilization as well as the GPA of nursing students. This increases the likelihood of response bias. Further, this study failed to statistically distinguish the influence of each individual social platform on GPA as a descriptive comparison was conducted. Future studies must conduct themselves using a larger sample of participants from different geographic locations including both public and private schools; the use of objective app data about the amount of time spent on social media instead of only relying on self-report data; and use a longitudinal study design in order to be able to show the causation and consistency of the relationship between the use of social media and academic achievement. More accurate discrimination of academic versus non-academic use of social media on particular social media platforms, and examining possible mediators such as sleep quality, stress, and self-esteem (as proposed by Setyowati et al., 2023, and Ibrahim et al., 2024) would further enhance our understanding.

### **Conclusion**

From the findings of this study, it has been discovered that the influence of social media usage on the academic performance of the students enrolled in nursing is complex and depends greatly on its utilization. Although there was no significant correlation between the total amount of social media usage and the GPA, the increased usage of certain non-academic social media sites correlated with poor academic performance, while the usage of social media for academic purposes did not have any effect. It has also been found that social media addiction, in particular, the one associated with virtual communication, is relatively high in this sample.

Institutions of nursing need to facilitate the process of developing a balanced approach towards social media usage by the students.

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