# Problematic Social Media Use and Personality Traits: The Role of Fear of Missing Out Among Nursing Students

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## Abstract

**Background:** Social media use is common among nursing students and can be both helpful and harmful, with problematic use negatively affecting mental health and academic performance. **Aim of the study:** investigate the role of fear of missing out on the relation between problematic social media use (PSMU) and personality traits. **Setting:** The study was conducted in the technical institute of nursing at Zagazig University, Sharkia governorate. **Subject: Sample** A stratified sample composed of 290 nursing students. **Tools of data collection:** A self-administered questionnaire, the Social Media Disorder Scale, the Big Five Inventory, and the Fear of Missing Out Scale. **Results:** The study revealed that 46.20% of the students had a moderate level of PSMU. Also, 42.4% of students had the openness domain of personality traits. Additionally, 62.40% of students had a moderate level of fear of missing out (FOMO). PSMU showed a strong positive correlation with neuroticism but negative correlations with agreeableness and conscientiousness. Similarly, FoMO demonstrated a significant negative correlation with agreeableness and conscientiousness but a positive correlation with extraversion. Moreover, PSMU was a significant positive predictor of FOMO. **Conclusion:** FOMO is highly prevalent among nursing students with a negative effect on PSMU and certain personality traits. **Recommendations:** counseling and psychiatric interventions focusing on the responsible use of social media, time management and mitigation of FOMO among nursing students at high risk..

*Keywords: Fear of Missing Out, Nursing Students, Problematic Social Media Use, Personality Traits*

## Introduction

Nursing students undergo theoretical and practical training to prepare for professional nursing roles. Social media plays a significant role in their education, enabling collaboration, rapid communication, and continuous interaction with peers and faculty. It supports learning by providing instant feedback and accessibility beyond physical settings. However, excessive use may contribute to internet and smartphone addiction, negatively impacting sleep, self-esteem, and social well-being. Additionally, it poses risks of distraction from academic tasks and reduced educational engagement. **(Berdida and Grande, 2023).**

Social media is defined as any form of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal

messages, and other content. Social media has integrated itself into our daily lives and is fast becoming the preferred source of news, information, and communication for many individuals. This is likely because access to information is in real-time, quick, and easy; however, it is not necessarily always accurate **(AlFraih et al.,2023).**

Problematic social media use (PSMU) is characterized by excessive preoccupation with social platforms, leading to negative outcomes. It involves compulsive checking for updates, likes, and interactions, which fosters dependency. Adolescents, on average, spend about 147 minutes daily on social media, often neglecting schoolwork, physical activity, and in-person relationships. Such patterns can result in addictive behaviors, marked by anxiety during disconnection and a persistent need to stay online. Ultimately, PSMU reflects maladaptive usage that disrupts daily functioning and well-being. **(Yildirim et al., al,2024)**.

Personality traits are enduring characteristics that shape individual behavior and decision-making. The most widely recognized framework for understanding these traits is the Five-Factor Model, which includes extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. In the context of nursing students, these traits play a crucial role in academic success, clinical performance, and professional development. For example, conscientiousness enhances responsibility and adherence to protocols, agreeableness fosters teamwork and empathy, openness promotes adaptability to evidence-based practices, and extraversion supports effective communication, while lower levels of neuroticism contribute to resilience under stress. **(Antonopoulou,2023).**

Fear of Missing Out (FoMO) is closely associated with anxiety arising from concerns about exclusion or missing important experiences. It is highly prevalent among frequent social media users who are constantly exposed to others' activities. Nurses are particularly vulnerable due to their intensive engagement with digital technologies. FoMO has been linked to adverse psychological outcomes such as loneliness, depression, and heightened anxiety, alongside a strong desire for belonging. Furthermore, research indicates a significant association between FoMO severity and problematic technology use. **(Szawłoga et al., 2024).**

PSMU has become a growing concern among nursing students, as it can negatively influence academic performance, self-regulation, and psychological well-being. Research indicates that personality traits play a significant role in predicting vulnerability to PSMU, with high levels of neuroticism and extraversion often associated with greater engagement in social media, while conscientiousness and agreeableness act as protective factors. Fear of missing out mediates the relationship between personality and PSMU. Nursing students with higher neuroticism may be more susceptible to FoMO, leading to compulsive online behaviors, whereas those high in conscientiousness are better able to regulate usage and maintain focus on academic and clinical responsibilities **(Alshowkan and Shdaifat, 2025).**

Nurses play a vital role in mitigating problematic social media use and FoMO among nursing students. They provide education and counseling on the negative impacts of excessive social media use, particularly its effect on academic performance. Guidance on responsible and balanced usage is essential in fostering healthier online behaviors. Nurses can also identify signs of anxiety or stress linked to FoMO and refer students to appropriate mental health services. Moreover, they help create supportive environments that encourage open dialogue about mental health and social media pressures (**Komala et al., 2022).**

**Significance of the Study:**

In recent years the popularity of internet use, especially social websites, is on the rise. It is estimated that over 4 billion people worldwide use social media **(Pennington & Shaw, 2023).** According to using the internet in Egypt, more than half of the people use Facebook every month **(Ahmed, Aboutabl, and Galal, 2022).** In addition, a study conducted at the Faculty of Nursing, Cairo University, showed that 6.76 students were severely addicted to social media. Social media supports nursing students' education; however, excessive use may lead to distractions, poor academic performance, and negative mental health

outcomes such as stress, anxiety, and FoMO. **(Shaban et al.,2023)**

**Aim of the study:**

The aim of this study was to investigate the role of fear of missing out on the relation between (PSMU) and personality traits

**Research questions:**

- What is the level of problematic social media use among nursing students?
- What are the types of personality traits among nursing students?
- What is the level of fear of missing out among nursing students?
- Is there an association between problematic social media use, personality traits and fear of missing out among nursing students?

**Subjects and methods:**

**Research design:**

A descriptive correlational study design was used to conduct the present study.

**Study setting:**

The study was conducted in the technical institute of nursing at Zagazig University, Sharkia governorate.

**Study subjects:**

A stratified sample composed of 290 nursing students. The required number of students from each grade was calculated with the following formula: number of students in each grade / total number of students in all technical institute × calculated sample size. The study included 164 students from grade I and 126 students from grade II, according to the following criteria:

**Inclusion criteria**

- Both male and female nursing students aged 17-21 years old.
- Agree to participate in the study.
- Enrolled in the selected technical institute during the time of study.

**Exclusion criteria**

- Students who reported not using social media at all.
- Students who refused to participate in the study

**Tools for data collection:**

A self-administered questionnaire with three tools was used to collect the necessary data. The questionnaire was prepared by the researcher and included the following parts:

**Part 1(sociodemographic data):**

It involved personal characteristics of the student such as age, gender, residence, grades, and information about family education and jobs.

**Part 2(Social media use data):**

It involved characteristics and details of social media usage, such as name of social media platforms, purpose, and daily time of use.

**Tool I: Social Media Disorder Scale (SMDS).**

The 27-item Social Media Disorder Scale developed by **Van Den Eijnden et al. (2016)** measures the level of problematic social media use. This scale is composed of nine dimensions, with three sentences for each dimension. These dimensions included preoccupation (constantly thinking about social media), tolerance (needing to spend more time to achieve satisfaction), withdrawal symptoms (feeling anxious or restless when not using social media), persistence (failing to reduce usage despite wanting to), escape from negative feelings, problems with daily activities, deception (lying about time spent on social media), displacement (prioritizing social media over other activities)  and conflicts with interpersonal issues.

**Scoring system:**

This scale was based on two responses ranging from zero (no) to one (yes). First, the total mean score was computed, which was divided into three categories, (0-0.32) indicates a low score, (0.33-0.66)

indicates a moderate score and (0.67-1) indicates a high score.

**Tool II: Big Five Inventory (BFI)**

This scale was developed by **Goldberg (1993)** and is composed of 44 items and measures an individual's personality on the Big Five domains of personality, including the "openness" domain (10 items), which means creativity, intellectual curiosity, and preference for novelty; the "conscientiousness" domain (9 items), which means organization, responsibility, and dependability; the "extraversion" domain (8 items), which means sociability, assertiveness, and enthusiasm; the "agreeableness" domain (9 items), which means compassion, cooperation, and interpersonal warmth; and the "neuroticism" domain (8 items), which means emotional instability, anxiety, and moodiness.

**Scoring system:**

This scale is rated on a 5-point Likert scale, starting from (1) strongly disagree to (5) strongly agree, with reverse-scored items needing to be adjusted before summing. Then, the Scores for each trait were summed and averaged. Higher scores indicate stronger tendencies for that trait.

**Tool III: Fear of Missing Out Scale (FOMO)**

This scale was developed by **Przybylski et al. (2013)**, composed of 10 items, and designed to measure the level of fear of missing out of social media among students.

**Scoring system:**

This scale is rated on a 5-point Likert scale, starting from 1 (not at all true of me) to 5 (extremely true of me). averaging the responses of the students on all items. Therefore, the highest score indicates a greater fear of missing out. The total FOMO score ranged from low (scores 10-20) to moderate (scores 21-39) to high (scores 40-50)

**Content validity and reliability:**

Once prepared, the self-administered questionnaire with the four tools was revised by a panel of five experts from the Department of Psychiatric Nursing, who conducted content validity of all the items for relevance, clarity, comprehensiveness, and understandability. All recommended modifications have been made. The study tools were translated into Arabic, and the study tools were back-translated to ensure accuracy.

The reliability of tools was tested by measuring their internal consistency. It demonstrated a good level of reliability, with Cronbach's Alpha as the Social Media Disorder Scale (SMDS) was 0.881, the Big Five Inventory (BFI) was 0.765, and the Fear of Missing Out Scale (FOMO) was 0.861.

**Field work:**

The researchers obtained official approval and coordinated with the Technical Institute of Nursing to recruit participants. Using the snowball technique, three sections from grade I and two sections from grade II were randomly selected according to the sample size, with students divided into groups of 20–30. After explaining the study's purpose, benefits, and confidentiality, verbal informed consent was obtained, and questionnaires were administered with researchers' support. Each session took 30–45 minutes and was conducted once weekly from 12 to 1 PM. Data collection spanned about 2.5 months, from September to mid-November 2024.

**Pilot study:**

A pilot study was conducted on a sample of 29 students from the Technical Institute of Nursing, approximately 10% of the total study sample. The aim was to test the clarity and applicability of the data collection forms and estimate the time needed to fill in the forms. Participants who shared in the pilot study were excluded from the main study sample.

**Administration and ethical consideration:**

Ethical approval was obtained from the Nursing Research Ethics Committee at Zagazig University (M.DZU.NUR/225/10/6/2024). The researcher explained the study's purpose to students and obtained verbal informed consent, emphasizing voluntary participation and the right to withdraw without consequences. Confidentiality and anonymity were assured, with data used exclusively for scientific

purposes.

**Statistical analysis:**

All data were collected, tabulated, and statistically analyzed using SPSS 20.0 for Windows (SPSS Inc., Chicago, IL, USA 2011)). Quantitative data were expressed as mean ± SD and qualitative data were expressed as absolute frequencies (number) and relative frequencies (percentage). The percentages of categorical variables were compared using the chi-square test. Pearson correlation coefficient was calculated to assess the relationship between study variables; (+) sign indicates direct correlation and (-) sign indicates inverse correlation; values near 1 indicate strong correlation and values near 0 indicate weak correlation. Multiple linear regression (step-wise) was also used to predict the factors that affect total self-control, problematic social media use, personality traits, and fear of missing out scores. The Cronbach's alpha coefficient was calculated to assess the reliability of the scales through their internal consistency. A p-value < 0.05 was considered statistically significant, p-value < 0.01 was considered highly statistically significant, and p-value ≥ 0.05 was considered statistically non-significant.

**Results:**

According to **Table 1**, shows that more than half of the participant students were older than 18 years old (53.8%) with total Mean±SD=18.52± 1.61. about two thirds of students are females (67.2%), (71.0%) living in rural areas and (57.6%) were at the first year. Regarding Parental Education, more than half of mothers (58.6%) and fathers (57.6%) have intermediate education and for Parental Occupation, almost all fathers worked (93.1%) and (71.4%) of mothers did not work.

**Table (2)** reveals that most of the students had social media accounts (97.2%), WhatsApp was the most common type of social media used by the participant students (95.9) followed by Facebook and Instagram (82.8). Nearly three quarters of the participants used social media for general connections or news (74.5%). Regarding the number of hours spent on social media, nearly half of participants spent more than 4 hours on social media (45.9%).

**Figure 1** demonstrates that the highest percentage of students had a moderate level of social media use disorder (46.20%), followed by a low level (34.50%). Meanwhile, 19.30% of students had a high level of social media use disorder.

 As regards the total scores of Big Five personality traits among nursing students, **Figure 2** clarifies that the highest percentage of personality traits among students was the openness domain (42.4%), followed by agreeableness domain (32.4%), while the lowest percentage was extraversion domain (0.7%).

As regards the total score of fear of missing out among nursing students, **Figure 3** reveals that the highest percentage of students had a high level of fear of missing out (62.40%), followed by moderate level (27.60%). Meanwhile, (10%) of students had low level of fear of missing out.

**Table 3** clarifies that there was a highly statistically significant relation between problematic social media use and fear of missing out (p=0.001). It was evident that a moderate level of problematic social media use was associated with a moderate level of fear of missing out.

**Table 4** indicates that there was highly statistically significant positive correlation between problematic social media use and neuroticism (p=0.013, r =0.145) while there was highly statistically significant negative correlation with agreeableness(p=0.001, r =-0.19) and consciousness (p=0.001, r =-.410).similarly, fear of missing out had highly statistically significant negative correlation with agreeableness(p=0.001, r =-0.19)and consciousness(p=0.001, r =-0.19) but there was highly statistically significant strong positive correlation with extraversion VS introversion(p=0.001, r =0.326) .

**Table 5** displays the best fitting multiple linear regression model for problematic social media use score. It demonstrated that fear of missing out and spending hours were statistically significant independent positive predictors of problematic social media use. The model explains 36% of this score as shown by the value of R-square. Other students' sociodemographic characteristics had no significant influence on problematic social media use scores.

**Table 1: Socio-demographic characteristics of participant students (n=290).**

| Characteristics | No. | % |
|---|---|---|
| Age (in years) | | |
| ≤18 | 134 | 46.2 |
| >18 | 156 | 53.8 |
| Mean± SD | 18.52± 1.61 | |
| Gender | | |
| Male | 95 | 32.8 |
| Female | 195 | 67.2 |
| Residence | | |
| Rural | 206 | 71.0 |
| Urban | 84 | 29.0 |
| Academic year | | |
| First | 167 | 57.6 |
| Second | 123 | 42.4 |
| Father education | | |
| Illiterate | 17 | 5.9 |
| Intermediate education | 167 | 57.6 |
| High education | 106 | 36.6 |
| Mother education | | |
| Illiterate | 30 | 10.3 |
| Intermediate education | 170 | 58.6 |
| High education | 90 | 31.0 |
| Father job | | |
| Work | 270 | 93.1 |
| Not work | 20 | 6.9 |
| Mother job | | |
| Work | 83 | 28.6 |
| Not work | 207 | 71.4 |

**Table 2: Distribution of participant students according to availability and use of social media (n=290).**

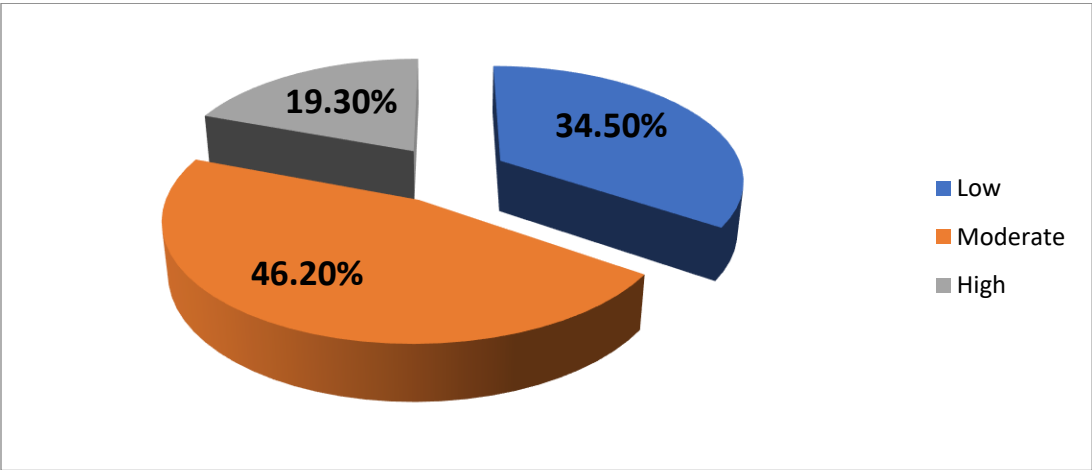| Items | No. | % |
|---|---|---|
| Having a social media account | | |
| Yes | 282 | 97.2 |
| No | 8 | 2.8 |
| Types of social media* | | |
| Face book | 240 | 82.8 |
| Messenger | 238 | 82.1 |
| WhatsApp | 278 | 95.9 |
| Instagram | 240 | 82.8 |
| another website | 10 | 3.4 |
| Reasons for social media use | | |
| Studying | 195 | 67.4 |
| Working | 39 | 13.4 |
| Other (connection – news) | 216 | 74.5 |
| Number of hours spent on social media | | |
| 2 hours | 75 | 25.9 |
| 4 hours | 82 | 28.3 |
| More | 133 | 45.9 |

*: not mutually exclusive

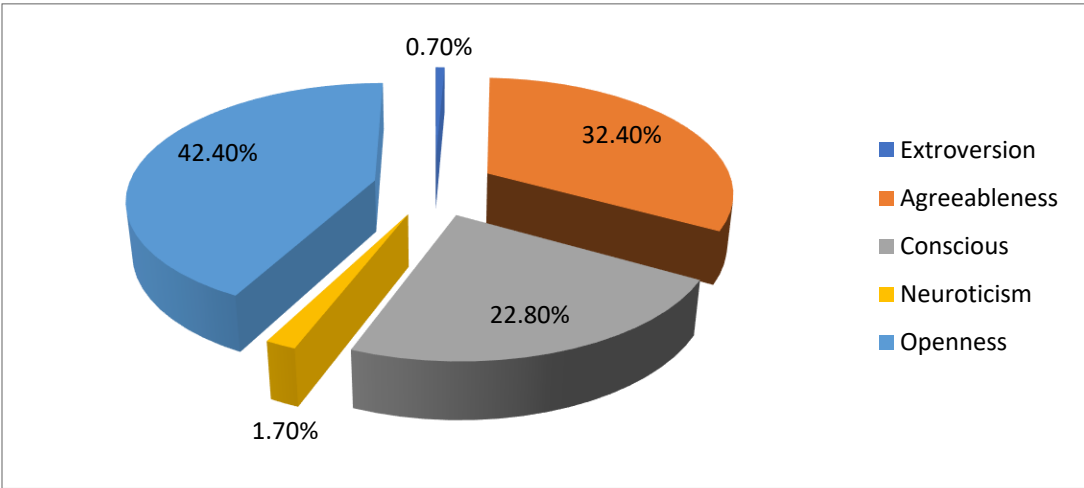**Figure 1: Total score of social media use disorder among nursing students(n=290)**



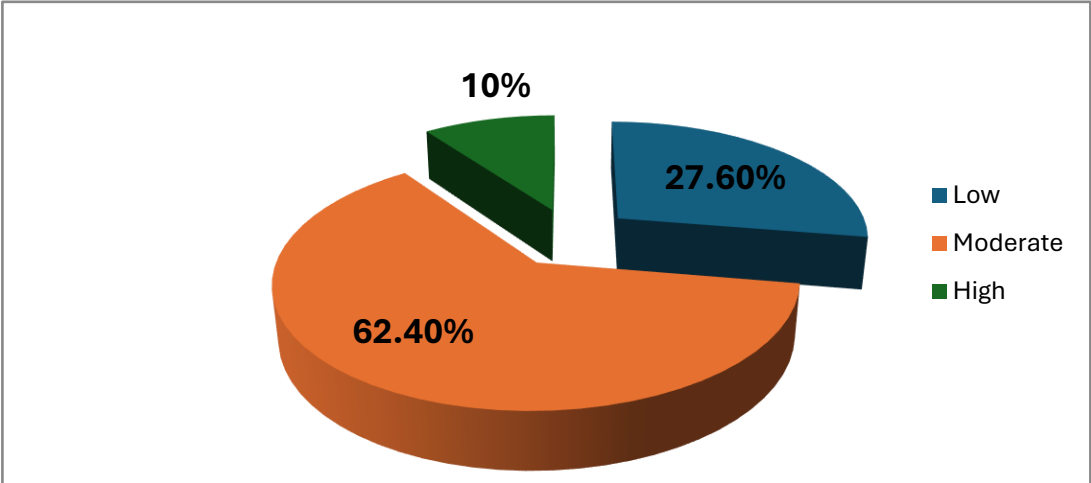**Figure 2: Total scores of the Big Five personality traits among nursing students(n=290)**



**Figure 3: Total score of fear of missing out among nursing students(n=290)**

**Table 3: Relation between total scores of fear of missing out and problematic social media use.**

| Scores | Problematic social media use | | | | | | χ 2 | p-value |
|---|---|---|---|---|---|---|---|---|
| | Low=100 | | Moderate=134 | | High=56 | | | |
| | No. | % | No. | % | No. | % | | |
| Fear of missing out | | | | | | | | |
| Low=80 | 52 | 52.0 | 22 | 16.4 | 6 | 10.7 | 59.182 | 0.001** |
| Moderate=181 | 45 | 45.0 | 100 | 74.6 | 36 | 64.3 | | |
| High=29 | 3 | 3.0 | 12 | 9.0 | 14 | 25.0 | | |

**Table 4: Correlation matrix between five domains of personality traits and other study variables.**

| | Extraversion VS. Introversion | | Agreeableness | | Conscientiousness | | Neuroticism | | Openness | |
|---|---|---|---|---|---|---|---|---|---|---|
| | r | P | r | p | r | P | r | p | r | p |
| **Problematic social media use** | 0.045 | 0.441 | -0.19 | 0.001** | -.410 | 0.001** | 0.145 | 0.013* | -0.03 | 0.593 |
| **Fear of missing out** | 0.326 | 0.001** | -0.19 | 0.001** | -.170 | 0.001** | 0.059 | 0.319 | 0.089 | 0.129 |

r: correlation coefficient, *: statistically significant ($p<0.05$), **: statistically  highly significant ($p<0.01$).

**Table 5: Step wise multiple linear regression for predicting factors which affect total score of problematic social media use.**

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | 95.0% Confidence Interval for B | |
|---|---|---|---|---|---|---|---|
| | B | Std. Error | Beta | | | Lower Bound | Upper Bound |
| (Constant) | 17.596 | 3.148 | | 5.589 | .000 | 11.399 | 23.792 |
| Fear of missing out | .273 | .034 | .399 | 8.061 | 0.001** | .206 | .340 |
| Spending hours | .923 | .392 | .115 | 2.355 | 0.019* | .151 | 1.695 |

**: statistically  highly significant ($p<0.01$), *: statistically significant ($p<0.05$).

**Discussion:**

The study aim was to investigate the role of FOMO on the relationship between PSMU and personality traits among nursing students. The study findings provide clear answers to the research questions, showing that PSMU had a positive correlation with neuroticism and a negative correlation with conscientiousness and agreeableness. Similarly, FOMO had a negative correlation with agreeableness and conscientiousness but a positive correlation with extraversion vs. introversion and nervousness. Additionally, FOMO is a positive predictor of PSMU among nursing students.

Regarding sociodemographic data, the results of the current study clarified that more than half of students were more than eighteen years old, with a total mean score of $18.52 \pm 1.61$. Also, about two-thirds of students were females living in rural areas, and more than half of students were in the first year. That's because nursing programs typically enroll students who have completed secondary education, so most nursing students are 18 years or older. Also, nursing as a profession is most commonly associated with females, and most are living in rural areas because of the geographical distribution, and many rural students often see nursing as a stable job. Additionally, most nursing programs admit a larger cohort in the first year, with numbers decreasing in higher years due to academic progression or dropouts. In the same vein, a study conducted by **Berdida and Grande (2023)** in the Philippines, **Nabil et al. (2024)** in Egypt, and **Jiayuan et al. (2025)** in China indicated that the majority of students were females, aged more than eighteen years old, in the first year, and the majority of them were living in rural areas.

The current study findings showed that more than half of the students' mothers and fathers have intermediate education. This indicated the importance of education in the Egyptian society. Also, for their parental occupation, most fathers worked, while more than two-thirds of mothers didn't work. This is fact and common in many societies, especially in rural or conservative areas, because males are expected to spend on their families while females are expected to take on domestic responsibilities such as child-rearing and household management. In agreement, a study conducted by **Hussien et al. (2020)** in Saudi Arabia found that more than half of students' mothers and fathers had intermediate education. On the other hand, a study conducted by **Jiayuan et al. (2025)** in China indicated that the educational level of mothers and fathers was high education.

Regarding availability and use of social media among nursing students, the present study results revealed that most of the students had social media accounts. This allowed them to stay connected with friends and family, collaborate academically by sharing study materials and information, access educational resources, and keep updated with news and trends. As well as serving as a source of entertainment and stress relief, it fulfills their need for self-expression and social identity and provides a sense of belonging. These findings were congruent with a study conducted by **Bacaksiz et al. (2020)** in Turkey, which found that most students had more than three social media accounts. Another study conducted by **Zhu et al. (2021)** in the United States of America found that most students had 3 to 4 social media accounts. Moreover, a study conducted by **Zhu et al. (2022)** in China found that most students had two to four WeChat accounts to cater for personal and nursing education use. Finally, a study conducted by **Tan et al. (2024)** in the United States of America found that most students had more than three social media accounts.

Moreover, the findings of the current study demonstrated that WhatsApp was the most common type of social media used by the participant students. This might be due to WhatsApp allows real-time text, voice, and video communication, making it convenient for students to stay connected with peers, teachers, and family. Students can easily form class groups, project groups, or study circles, which helps in sharing academic materials and coordinating activities. This result was in agreement with **Akalın (2022)** in Turkey, **Setyowati et al. (2023)** in Indonesia, and **Omar and Abd El-Ghany (2024)** in Egypt, who found that the most used social media account was WhatsApp. On the contrary, a study conducted by **Fauzi et al. (2021)** in Malaysia and **Toumari et al. (2023)** in Iran found that the most common social

media account used was Instagram. Additionally, a study conducted by **O'Connor et al. (2025)** in the United Kingdom found that the most used social media accounts were podcasts and Facebook.

Moreover, the findings of the present study clarified that nearly three-quarters of the participant students used social media for general connections or news. That was because these platforms provided instant and convenient communication and allowed students to stay in touch with friends, family, and classmates through messages, group chats, and online communities. Additionally, social media is a quick and accessible source of news and updates, enabling students to stay informed about current events, academic announcements, and trends in real time, all within the same platforms they use for social interaction.

This result was supported by studies performed by **Alharbi et al. (2020)** in Australia, **Bacaksiz et al. (2020)** in Turkey, **Zhu et al. (2021)** in America, and **Kohanová et al. (2025)** in Bratislava, Slovak Republic, which found that most students used social media for connection and news. Unlike a study conducted by Zhu **et al. (2022)** in China, which investigated social media usage (attitudes, motivations, mental health problems, and self-disclosure) of Chinese nursing students and found that the majority of students used social media for entertainment and information acquisition. Supporting this finding, other studies conducted by **O'Connor et al. (2022)** in the United Kingdom and **Sun et al. (2023)** in China found that most students used social media for educational purposes. Additionally, a study conducted by **Toumari et al. (2023)** in Iran and **Omar and Abd El-Ghany (2024)** in Egypt found that most students used social media for entertainment .

*As for the time spent on social media,* the current study revealed that nearly half of participants spent more than four hours on social media. It was evident that these platforms serve multiple purposes, such as maintaining social connections, following news and trends, and accessing educational resources, which encourage prolonged use. Additionally, entertainment content, interactive features, and algorithm-driven recommendations keep students engaged for longer periods. Psychological factors, such as fear of missing out (FoMO), the need for social validation, and using social media as a form of relaxation or escape from stress, also contribute to extended usage. As well, easy accessibility through smartphones further increases the time spent online. These findings were supported by studies conducted by **Bacaksiz et al. (2022)** in Turkey and **Ibrahim et al. (2024)** in Saudi Arabia, which found that the time spent on social media was more than four hours. Unlikely, studies conducted by **Zhu et al. (2022)** in China and **İlter & Ö (2022)** in Turkey found that more than half of students spent from two to four hours on social media.

*Regarding problematic social media use among nursing students,* the results of the current study revealed that nearly half of students had a moderate level of PSMU. This might be related to social media being defined as a medium used by nursing students for a variety of official teaching and learning goals. Nursing students experience high stress due to demanding coursework and clinical duties, so social media offers a quick and accessible escape, helping reduce anxiety or boredom. As a result of these factors, nursing students moderately spend more time on social media, leading to the risk of problematic social media use. This result was consistent with studies conducted by **Zaw and Azenal (2021) in** Malaysia, **Thabit et al. (2023)** in Egypt, and **Sudheesh and Gowda (2024)** in India, which concluded that nearly half of students had a moderate level of problematic social media use.Unlike this result, studies conducted by **Cai et al. (2021)** in Chinafound that the majority of students had high levels of problematic social media use. Additionally, a study conducted by **Nabil et al. (2024)** in Egypt found that the majority of students had no risk for problematic social media use

Moreover, the present study results showed that spending hours on social media was a statistically significant independent positive predictor of problematic social media use. These results were consistent with studies conducted by **Franchina et al. (2018)** in Italy, **Gori, Topino and Griffiths (2023)** in Italy and **Li et al. (2025)** in the United States, which found that fear of missing out and spending hours on social media were statistically significant independent positive predictors of problematic social media

use. Unlike these, the results were inconsistent with studies conducted by **Chloe et al. (2024)** in Australia, which found that fear of missing out and spending hours on social media were weak predictors of problematic social media use and **Elsayed (2025)** in Saudi Arabia found that fear of missing out may enhance social media use.

Regarding personality traits among nursing students, the results of the current study revealed that the highest percentage of personality traits among students was the openness domain, followed by agreeableness, while the lowest percentage was the extraversion domain. That might be due to openness being often high because the profession demands adaptability, curiosity, and creative problem-solving, followed by agreeableness due to the need for empathy, teamwork, and patient-centered care, while extraversion ranks lowest as nursing training and practice emphasize observation, listening, and calm focus over high social assertiveness. These results were consistent with studies conducted by **Mohamed et al. (2022)** in Malaysia and **Ibrahim and Elhabashy (2025)** in Egypt, which concluded that the highest percentage of personality traits among students was the openness domain, followed by the agreeableness domain, while the lowest percentage was the extraversion domain. Unlike these, the results were inconsistent with a study conducted by **Alshowkan and Shdaifat et al. (2025)** in Saudi Arabia, which found that the highest percentage of participant students had neuroticism followed by extraversion, while the lowest percentage was the agreeableness domain of personality traits.

As regards the association between PSMU and personality traits, the current study demonstrated that problematic social media use (PSMU) was highly statistically negatively correlated to agreeableness and conscientiousness domains of personality traits while positively correlated with the neuroticism domain. This means that the problematic social media use decreased with conscientiousness and agreeableness domains, while it increased with the neuroticism domain.The possible explanation for that is that agreeableness students prefer meaningful in-person connections, have lower impulsivity and competitiveness, and have better emotion regulation and empathy. Also, conscientious students are better at regulating their behavior and avoiding distractions, which makes them less likely to spend excessive and unproductive time on social media. While neurotic students tend to experience intense negative emotions like anxiety, worry, and fear. They often used social media as an escape or distraction from these feelings.

These results were consistent with studies conducted by **Liu et al. (2023)** in China, **Meynadier et al. (2024)** in Australia, and **Isbulan, Cam and Griffiths (2024)** in Turkey, which found that there was a statistically significant negative correlation between problematic social media use, agreeableness, and conscientiousness. Additionally, studies conducted by **Isbulan, Cam and Griffiths (2024)** in Turkey; **Montag and Markett (2024)** in Germany; and **Gugushvili et al. (2024) in** Estonia in Northern Europe clarified that there was a highly statistically significant positive correlation between problematic social media use and neuroticism.

Regarding fear of missing out among nursing students, the results of the current study revealed that nearly two-thirds of students had a moderate level of fear of missing out. That might be due to their daily academic and clinical demands already requiring them to stay connected, share experiences, and keep track of peers. This pushes the students to use social media regularly and become attractive to these social media websites and applications that make them at risk for severe FOMO. This result was consistent with studies conducted by **Çatıker et al. (2021)** in Turkey and **Komala, Rafiyah and Witdiawati (2022)** in Indonesia, which clarified that nearly two-thirds of students had a moderate level of FOMO. Unlike this, the result was inconsistent with studies conducted by **Kargın et al. (2020)** & **Tuna et al. (2023)** in Turkey, which found that the majority of nursing students had low level of FOMO. *Concerning the association between personality traits and FOMO*, the results of the current study revealed that extraversion vs. introversion was highly statistically significantly correlated to FOMO.

The results explained that a high level of extraversion vs. introversion was associated with an increased level of FOMO on social media among nursing students. That might be due to extroverted students being more likely to experience FOMO due to their need for social connectivity and information, while introverts may experience FOMO differently, potentially feeling the emotional impacts without the same drive for constant social interaction. This result was in the same line with studies conducted by **Moore and Craciun (2021)** in the USA and **Groenestein et al. (2024)** in Amsterdam. On the contrary, this result was inconsistent with **Rozgonjuk et al. (2021)** in Germany, which found that extraversion vs. introversion was highly statistically significantly negatively related to FOMO.

The results of the current study also revealed that agreeableness and conscientiousness were highly statistically significantly correlated to FOMO. The finding revealed that agreeableness and conscientiousness were associated with a low level of fear of missing out on social media. That was because students with higher agreeableness and conscientiousness show better self-control, emotional stability, and less need for social comparison. This result was consistent with studies conducted by **Nair et al. (2022)** in Kerala and **Anaza et al. (2024)** in the United States, which revealed that agreeableness was highly statistically significantly related to FOMO. Reversely, this result was inconsistent with a study conducted by **Zhang et al. (2024)** in China, which found agreeableness was not statistically significantly related to FOMO.

Additionally, The results of the current study revealed that neuroticism was highly statistically significant correlated to FOMO. This showed that a high level of neuroticism was associated with a high level of fear of missing out. That is because people with high neuroticism often feel anxious, insecure, and worry about being left out. Because they have difficulty controlling negative emotions and compare themselves a lot with others on social media. This result was consistent with studies conducted by **Shi et al. (2022)** in china &**Rahardjo. (2023)** in Jakarta which found that neuroticism was highly statistically significant related to FOMO.

Also, the present study results showed that FOMO was a statistically significant independent positive predictor of PSMU.These findings were consistent with studies conducted by **Çetinkaya, Kırık, and Gündüz. (2021)** in Turkey & **Zhang (2025)** in the United States, which found FOMO was a statistically significant independent positive predictor of PSMU.

**Conclusion:**

Based on the study's findings, it was concluded that nearly half of the students had a high level of PSMU. Also, nearly half of students had openness as a domain of personality traits. Additionally, two-thirds of students had a moderate level of FOMO. PSMU had a positive correlation with neuroticism and a negative correlation with conscientiousness and agreeableness. Similarly, FOMO had a negative correlation with agreeableness and conscientiousness but a positive correlation with extraversion vs. introversion and nervousness. Additionally, FOMO is a positive predictor of PSMU among nursing students.

**Recommendations**:

**Based on the findings, the study recommended:**

- Psychiatric nurses should integrate workshops and seminars for students focusing on the responsible use of social media, emphasizing time management, goal setting, and the negative consequences of excessive use.
- Educational sessions should focus on increasing awareness about FoMO, helping students critically evaluate unrealistic social media portrayals, and encouraging meaningful offline social interactions.
- Psychiatric nurses should offer extra support and guidance to students with high neuroticism to help them manage stress and improve adjustment among nursing students

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