EXPLORING THE RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND ACADEMIC PERFORMANCE OF NURSING STUDENTS

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Abstract

Background: *Social media integration into the life cycle occurs at a fast pace, which has a considerable impact on the academic context, especially nursing students. With networking benefits, the availability of information resources, and company presence, the social networks have negative effects by distracting and causing organizational time management and increased levels of academic performance to decline. The present study aims to assess the level of social media addiction of nursing students and its relation to the academic performance of the students, to implement corrective measures.*

Aim: *The study aimed to explore the relationship between social media addiction and the academic performance of nursing students.*

Methods: *A quantitative, cross-sectional study was conducted among 232 nursing students in Swat, using self-administered questionnaires. Participants were selected through convenience sampling, and data were analyzed using descriptive and inferential statistics. Chi-square tests were employed to assess the associations between demographic variables and social media usage patterns.*

Results: *According to the study, 94% of the respondents said social media addiction was undesirable for their academic performance. Other platforms used include WhatsApp, and Twitter as important in group learning and subject collaboration, while the excessive use of social media was said to endanger study time, performance and clinical practice. The gender, age, the marital status and year of study were statistically significant determinants of social media usage. Hypothesis 3 was also supported; the non-academic activities detected on SNS were more frequent among male students and younger students, although older students exhibited diminished interest.*

Conclusion: *Social media's dual role as a learning tool and a source of distraction highlights the need for effective management strategies. Educators should focus on promoting responsible usage and providing support to students, enabling them to balance their academic responsibilities with social media activities.*

INTRODUCTION

Social media addiction has, however, displaced the otherwise normal ways of doing things in today's society, including learning in academic institutions. (1) Social media addiction is a term used to describe a

scenario where people spend much of their time on social networks such as Facebook, Instagram and Twitter, for example, most of the time without attending to other activities. (2). Especially for nursing students, where social media is used for communication as well as a distraction. Aspects such as students' grades, their competence in clinical assessment, and their interaction with the learning process are analyzed as indicators of academic performance here. The learning correlation between social media use and academic achievement is very important because it affects concentration, time organization, and learning outcomes among students in a high-stress profession, for example, nursing. (3).

Prevalence is the aspect of the extent to which a certain condition is common in a certain population at a given time. (4) The rate at which social media addiction is increasing among university students is so high all over the world and the figures of 15 to 36 % are being reported in higher learning institutions. (5) Students of nursing are especially susceptible to the pressures of the clinical practice, overwhelming study time, and their psychosocial development. (6) Studies carried out in other nations also reveal that excessive use of social media can be strongly related to bad academic performance, low concentration, and sleep deprivation. The prevalence is high which means that there is an urgent need to study its implications in nursing education. (7)

Social media is meant to be interactive, addictive and entertaining, usually, by means of notifications, likes and shares. These aspects add to the increasing screen time and could slow down the time spent on academic tasks. (8) Students of nursing who have a high volume of academic and clinical work might struggle to find the balance when the constant use of social media interferes with the study time. This imbalance may undermine theoretical knowledge, as well as acquisition of the necessary clinical skills. (9)

Social media addiction has not only academic effects, but also mental health and well-being. They have been associated with excessive use leading to high levels of stress, anxiety, low self esteem, and fatigue among students. (10) Nighttime use also causes sleep deprivation which worsens attention, memory and decision-making skills, which are crucial to nursing practice. The inability to focus in training on patient care is a significant issue on future professional competency since it leads to poor clinical performance. (11)

The interrelationship between social media addiction and academic performance of nursing students is important to understand to develop preventive and corrective measures. A significant role can be played by nursing institutions in terms of awareness, guidelines that can be applied to healthy usage, and time management support to students. (12) By mitigating the dangers and enhancing the beneficial educational value of social media, universities can be assured that students are successful in their studies without causing the traumatic impact of being overly dependent. (13)

Methodology

The study was carried out in three nursing colleges located in District Swat, Khyber Pakhtunkhwa: Nightingale Nursing College at Charbagh Swat, Upper Swat Nursing College Swat, and Fatima Nursing College at Charbagh Swat. These institutions were selected due to their academic standards in nursing education and accessibility, which allowed smooth data collection. Students from various academic years were included to ensure that the findings reflected a broad spectrum of nursing students, making the results applicable to the wider nursing student population in the region. The research adopted a quantitative cross-sectional design to evaluate the negative impacts of social media use on nursing students' academic performance. This design allowed the researcher to collect data at a single point in time, providing a snapshot of the effects of social media on study hours, clinical practice, and academic outcomes. The sample size was calculated using the Raosoft formula, resulting in 232 participants, which ensured reliability of results at a 95% confidence level and a 5% margin of error. The study utilized convenience sampling, which made it possible to recruit participants who were willing and available to respond, thus facilitating data collection. Inclusion criteria required that participants be enrolled in nursing programs, actively use social media, and provide consent, while students from non-nursing programs or those unable to participate due to health reasons were excluded. Data were collected through self-administered, paper-based questionnaires adapted from previous validated studies. These instruments

captured demographic details, patterns of social media use, perceptions, and experiences of its impact on academic and clinical performance. The responses provided insight into students' knowledge, attitudes, and practices concerning social media. Data were analyzed using SPSS version 22, employing descriptive statistics such as means, standard deviations, and graphical presentations. Correlation analysis was also performed to explore the relationship between social media usage and academic outcomes. This approach ensured reliable inferences about the role of social media in nursing education and provided a basis for recommending future interventions.

Results and Analysis

The study sample consisted predominantly of male students (87%), with females making up 13%. Most participants were 18–22 years old (76%), and the majority were unmarried (83%). In terms of academic year, the largest groups were from the 2nd and 4th years (35% each), followed by 1st year (17%) and 3rd year (14%). [Table 1]

Table 1: Demographic Characteristics of participants

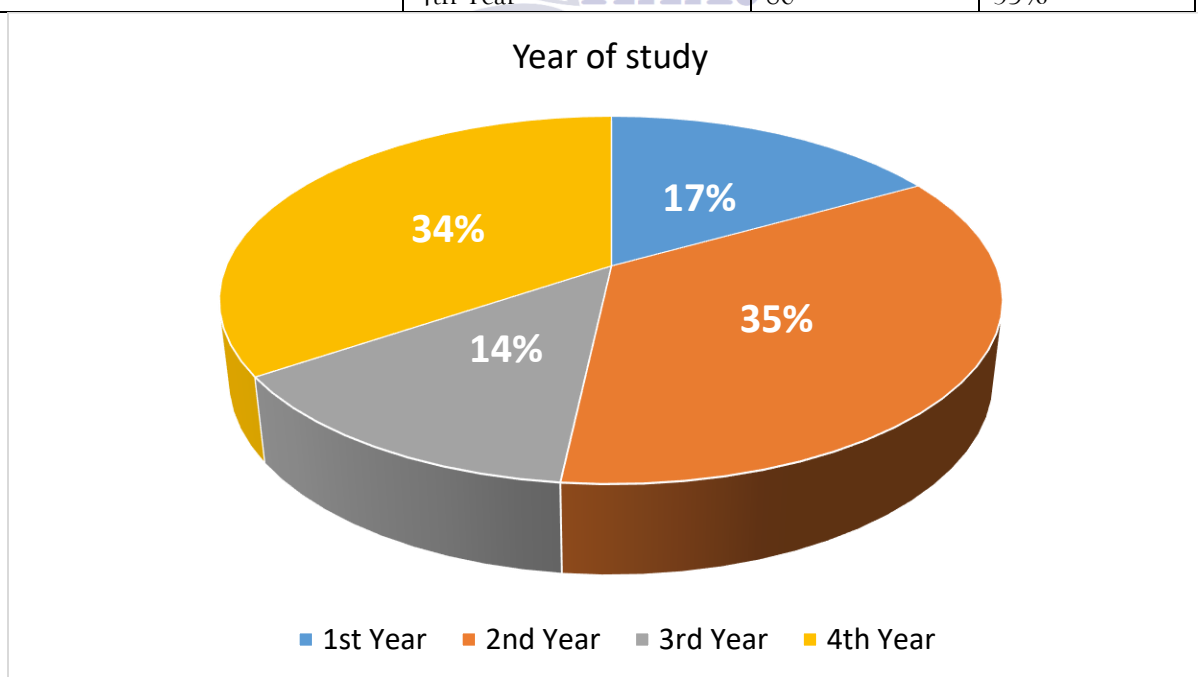| Variables	Category	Frequency (n)	Percentage (%)
Gender	Male	202	87%
	Female	30	13%
Age	18-22	176	76%
	23-27	51	22%
	28-32	5	2%
Marital Status	Married	39	17%
	Unmarried	193	83%
Year of Study	1st Year	39	17%
	2nd Year	81	35%
	3rd Year	32	14%
	4th Year	80	35%

Figure 4: Year of study of the study participants

The above Figure depicts the number of nursing students according to the year of study. The biggest number of participants was in the 2nd and 4th years, with 35% of participants in the total sample. Out of all respondents, the 1st years account for 17% and 14% are the 3rd years. This is believed to be a fairly gendered distribution from several phases of the nursing course.

The findings indicate that most students (94%) believe social media addiction negatively affects academics, with many spending more time online than studying. WhatsApp (80%) and Twitter (63%) are seen as useful for learning, and Wikipedia and blogs are widely used for academic support (80–85%). Gender and age influence usage, with males favoring non-academic use and 76% noting age impacts habits. Overall, while social media has educational value, excessive use hinders study time and performance. [Table 2]

Table 2: Key Findings of the Study on Social Media and Academic Performance

Observation	Main Finding	Percentage (%)
Academic impact	Students strongly agree that social media addiction harms academics	94
Study vs. social media time	Students report spending more time on social media than on books	84
Twitter use	Students find Twitter discussions helpful for academic performance	63
WhatsApp use	Students see WhatsApp as useful for knowledge sharing	80
Wikipedia & blogs	Students consider Wikipedia and blogs relevant for research/class learning	80–85
Gender differences	Students believe gender affects use of social media (males more for non-academics)	80
Age influence	Students agree age impacts social media usage	76
Boredom with age	Students state social media becomes less interesting as they grow older	80
Younger generation	Students believe younger users are most active on social media	94

The chi-square analysis revealed significant associations between demographics and social media use among nursing students. Gender was strongly linked with addiction, WhatsApp knowledge sharing, and differences in networking ($p < 0.005$), while age correlated with distraction, declining interest, and higher activity among younger users. Marital status influenced perceptions of grades and blogging sites, whereas the year of study significantly affected views on Facebook's negative impact and Twitter's academic benefits. These findings highlight how demographic factors shape both the usage patterns and perceived academic impact of social media. [Table 3]

Table 3: Chi-Square Test Results for Association Between Demographics and Survey Items

Demographic Variable	Survey Item	Chi-Square Value (χ^2)	p-Value	Significance
Gender	Addiction to social networks affects academics	12.4	0.001	Significant
	Use of WhatsApp for knowledge sharing	8.7	0.004	Significant
	Males use social networking for non-academic purposes	15.2	0.001	Highly Significant
	Female students foster social connections	9.8	0.002	Significant
Age	Social media distracts from studies	7.1	0.013	Significant
	Social media becomes boring with age	18.5	0.000	Highly Significant

	Younger generation are the most active users	20.2	0.000	Highly Significant
Marital Status	No improvement in grades due to social networking	5.3	0.022	Significant
	Blogging sites complement classroom learning	6.9	0.009	Significant
Year of Study	Unlimited Facebook access negatively affects academics	10.3	0.001	Significant
	Academic discussions on Twitter improve performance	4.8	0.028	Significant

Discussion

The study contributes to the understanding of demographic factors and related social media trends about nursing students, and gives understanding of different aspects. For example, gender, age, marital status and year of study, that may affect their academic behaviors and interaction with social media. The gender distribution in the study shows a preponderance of males (87%) while this is in tandem with an increase in the population of female candidates by most universities or colleges enrolling nursing students. Such a skewed gender distribution in the sample may be due to geographical or institutional differences, and these differences might consist of other factors, such as cultural and educational backgrounds, program availability, etc. (16).

The study revealed that the majority of the respondents (76%) are within the ages of 18–22 years, which is typical of the university student population. (17). On the other hand, the results showed that social media platforms have different usage concerning knowledge sharing, with older students (18,19) using academic-oriented SM more frequently. The lower percentage (22 %) of 23-27-year-olds represents a younger group; it means that the participants' attitudes toward social media, as well as students' perception of such platforms, might be different. The young generation which prefers the use of WhatsApp and Twitter makes it clear that they see social media as relevant in classroom work and in other activities. (20).

Another demographical factor tested in this study was marital status, with 83% of the participants unmarried. This finding is in line with other research that shows that students who are in their junior classes, single, and young, spend more time using social media, and are more likely to interact with scholarly content online. On the other hand, the level of academic related use of social media is relatively low among married students because of their domestic responsibility and definite timetable. (21,22). The results from the study may indicate that unmarried nursing students who encompass the largest percentage may have a more permissive attitude towards the use of SNS for academic and social related purposes. This trend also conforms with awareness that social media are useful in promoting peer relay and academic connections, especially in distance learning systems. (23).

As revealed by the Chi-Square analysis of the results, there is significance based on the level of study showing that a year of study plays an important role in involving students in social media related activities. According to the study, in terms of year of study, 35% of participants were in the 2nd and 4th year while the remainder 30% were in years 1st and 3rd years. (24). Such distribution enables an essential comprehension of the multifaceted role of social media in the lives of students at various levels of learning. It has been found that second year students use social media more for academic content, like group projects and sharing knowledge, in contrast to first year students, because the latter have had some exposure to the academic system. On the other hand, students in their first and third years, as identified in this study, may not yet have developed sophisticated use of social media in academic activities due to their inexperience or, at most, advantages rudimentary appreciation of the advantages of the tool as found in students in their second, fourth and postgraduate levels. (25).

According to the results of this study, the participants agreed that social media addiction interferes with academics, 94% of them strongly agreed. This is in consonance with other studies that conclude that usage of excessive social media contributed to the poor performance in class by wasting time. (26).that links excessive social media used to lower academic performance due to the time spent online and the distraction it causes. (27). Whereas social media are used in enhancing the academic sector, this research evidence indicates that a greater percentage of respondents (80%) agreed that over language on social related sites such as Facebook affects academic performance. This tallies with the arguments made before that while social media may help in sharing of knowledge and work; they act as a double-edged weapon whenever learners cannot manage it well. It may be inferred from the finding that more scheduled motivational programs for students and time-use planning approaches may be required to neutralize the impact of social media dependency on academic achievement. (28)

Altogether, the results of the study reveal the relationships between demographic variables including gender, age, marital status, and the year of study, on the one hand, and nursing students' use of social media, course-related behaviors on the other hand. The extent of association of these parameters of social media use with these demographic variables correlates with other studies, which identified age, and marital status to be factors affecting social media use, while gender differences are noticeable in the use of social media for purposes other than academic. At the same time, this research reveals specific tendencies in this sample, where greater asymmetry between males and females and the younger age of respondents are prominent. These differences should be studied in more detail to understand the general effects of social media use on nursing education and to develop effective interventions that would enhance the impact of social media use for academic performance. (29).

Conclusion

Therefore, this research paper gives a comprehensive insight into the population characteristics and trends in the use of social media by nursing students, as well as using that information to investigate how certain factors, especially social media usage, affects performance in class. The study shows that social media affect the academic activities of nursing students in a huge way, and most of the participants acknowledged the fact that while social media have advantages that could positively impact the academic performance of they also have a negative impact that could negatively influence the academic performance of the learners. On one hand, messages, like WhatsApp, and social networks, such as Twitter, are regarded as useful instruments for sharing knowledge and discussions in the academic community, on the other hand, there is a patent understanding of the problem of using Social media to harm the performance of the academic process.

Recommendations

Based on the findings of this study, the following recommendations are made:

1. **Develop Social Media Management Programs:** It's also important that educational institutions organize programs or workshops that would enable students to understand how to go about their social media use. These programs should cover such issues as time management in relation to the students' tasks and how one should avoid social networking sites and concentrate on class work.

2. **Encourage the Academic Use of Social Media:** Even if social media itself present a certain amount of source of distraction, it also presents a large amount of educational opportunity. Schools should engage the student on the use of social media platforms such as WhatsApp and in academic dialogues, learning and group projects. Students might use social media in the course of their studies by having their faculty incorporate social tools into the curriculum in a bid to expand knowledge and increase learning achievements.

3. **Provide Support for Male and Younger Students:** Since male students and the youngest people (18-22) actively use social media more actively, institutions should facilitate these audiences and provide applicable support and recommendations. This support may include intervening in abuses such as the use of social media and making students aware of their danger of adversely affecting academic work.

4. **Monitor the Impact of Social Media on Academic Performance:** It is recommended that education sectors follow up the result of the use of social networking sites on the outcomes of learning institutions. Discussing exactly the results of similar surveys or studies such as presented in this paper, it is possible to find out that regular carrying out of such surveys or studies can be useful in the investigation of the dynamics of the development of these processes and in the identification of directions for their improvement.

5. **Promote Peer Support Networks:** In addition to that, to increase the academic advantage of the usage of social media, new gates of groups such as student support groups or study groups, forums, etc. can be formed on social networks. Such networks can be useful to create a context in which students can post academic questions and participate in a discussion, sharing documents and asking for assistance from other learners.

6. **Tailor Strategies for Different Demographics:** Because marital status, age, and year of study affected the use of social media, recommendations should be made for these categories. For example, while students in their senior years and those in later years of study may require particular caution with regard to general guidelines for using social media for academic purposes, other students and especially the young and the unmarried may require particular caution, especially in regard to balancing their academic coursework and time on social media.

7. **Promote Awareness of the Risks of Social Media Addiction:** Students should be informed on the dangers of socially networked site dependency as it is essential for personal and virtual worlds' general well-being. Universities and colleges should come up with awareness creation programs-warning compounding students of the likely dangers of being on social media most of the time-such as reduced study time, poor scores, and possible negative health effects.

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