Association Between Social Media Addiction and Academic Achievement in Undergraduate Nursing Students.

Sohni¹, Dr. Naheed Akhtar², Haseen Jamal^{3,} Dr. Shah Hussain⁴

¹Nursing Officer, Saidu Teaching Hospital, Saidu Sharif, Swat. Corresponding Author. Email: <u>sohnimsn@gmail.com</u>

² Principal/ Assistant Professor Sina Institute of Nursing & Allied Health Science. Email: <u>ayeshanidi@gmail.com</u>

³ Staff Nurse, Sabah Al Ahmad Urology Centre, Kuwait Email: <u>hassen.jamal143@gmail.com</u>

⁴ Principal/ Assistant Professor – Zalan College of Nursing swat. Email: <u>shahpicu@gmail.com</u>

DOI: https://doi.org/10.63163/jpehss.v3i2.270

Abstract

Background: Social media integration into the life cycle occurs quickly, which has a considerable impact on the academic context, especially for nursing students. With networking benefits, the availability of information resources, and company presence, the social networks have adverse effects by distracting and causing organizational time management and increased academic performance to decline. The present study aims to assess the level of social media addiction of nursing students and its relation to the educational 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 assessed 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 necessary in group learning and subject collaboration. In contrast, the excessive use of social media was said to endanger study time, performance, and clinical practice. Gender, age, 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 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 supporting students, enabling them to balance their academic responsibilities with social media activities.

Keywords: Social media addiction, academic performance, nursing students

Introduction

Social media addiction has, however, displaced the otherwise standard ways of doing things in today's society, including learning in academic institutions. 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, without attending to other activities. (1)

Especially for nursing students, where social media is used for communication and can be a distraction. (2). students' grades, competence in clinical assessment, and interaction with the learning process are analyzed as indicators of academic performance here. The learning correlation between social media use and academic achievement is significant because it affects concentration, time organization, and learning outcomes among students in a high-stress profession, for example, nursing. (3).

The ensuing challenges of physical tasks such as lifting patients, combined with didactic instruction, necessitates students learning actively and concentrating. (4). Nursing students are also presumed to juggle the achievement aspirations inherent in academic work with the skills' development requirements of practical experience outside classrooms in healthcare facilities. (5). But, due to social media dependency, they may fail to execute these responsibilities. (6). Social networking addicted students are most likely to spend numerous hours on such sites with possible consequences of low studying hours, poor grades, and unsatisfactory clinical experience. Such distractions hinder vital academic content knowledge and the acquisition of pertinent clinical expertise as the overall course performance is compromised. (7).

According to studies, social media addiction has resulted in poor academic performance. This is because students spend a lot of time on social media. Hence, they have less time for studying, focusing, and participating in class and lecture discussions. (8). Social media are purposefully interactive as they send notifications, likes, shares, and other features that assure never-ending interaction. The bright, different colors and various communication opportunities may pose a challenge to the nursing students, as nursing students have a tight academic and clinical timetable, whereas having these features may act as a toolbox that distracts them from effective and efficient learning. (9). Thus, they may fail to achieve good grades, submit finished assignments on time, and have difficulties in clinical training since decision-making and attention are critical during practice. (10).

However, social media also have an opportunity to educate nursing students in the following ways. These applications enable students' networking, access to learning resources, and grouping in study groups. (11). Nursing students taking heavy course loads often pass on notes, discuss complex topics, or keep abreast with recent literature and news through social sites. Nonetheless, social media have the disadvantage of consuming students' time rather than focusing on books and classwork. (12). Social life comes first. It is, therefore, for this reason that this conflict of the educational utility of social media and the way it disrupts it makes it a nuanced problem for nursing students. (13).

Another variable contributing to the degree of addiction of nursing students to social media is their stage of development. Especially for most students, it is an age of active pursuit of establishing their social caste. This then makes social media attractive. (14). It is a fast and efficient communication method, sharing and advertising self-worth and wisdom acquired through schooling. Such interactions may be ideal in seeking support, but at the same time, pose a risk of diverting learners from their studies. The need to create an online image and be part of online platforms may also lead to a waste of time intended for research or practice. (15). According to several nursing students and other scholars, for instance, it is established that excessive utilization of social media creates sleep inadequacy that inversely affects poor scholastic performances. (16) Spending too much time using social networking, particularly during nighttime, is one of the possible grounds for sleep deficiency, and the body is supposed to rest during that time. (17). Deficiencies related to sleep have been known to reduce attention and negatively hamper achievements concerning such sensitive factors in learning. Suppose it is within Nursing Education and at the clinical and lecture sessions. In that case, this attention is of the utmost importance, as sleeping impedes nursing performance and assimilating such knowledge (18).

It is also an addiction that impacts nursing students' mental health, where they develop anxiety and stress. (19). Increased experience with harmful material online, social comparison, and unrealistic representations of other people's lives cause pessimistic emotions. Such effects cause low self-esteem, demotivate the students, and contribute to fatigue or burnout. The nature of stress faced by such nursing students may overshadow their education duties, making their performance even poorer and clinical development slower. (20).

Methodology

The research occurred at Zalan College of Nursing, Upper Swat Nursing College, and Fatima Nursing College Charbagh, located within District Swat in Khyber Pakhtunkhwa. The chosen institutions maintained high standards in education and provided easy access that facilitated the smooth collection of research data. The research design used a cross-sectional quantitative data analysis to determine how nursing students perform academically as their social media addiction increases. The researcher collected data through this approach at one time that provided immediate information about students' social media patterns and academic performance. The chosen sample size resulted from calculations done on the ROASOFT calculator to guarantee 95% confidence and 5% margin of error for 232 participants, thus ensuring valid statistics. The researcher used convenient sampling techniques to identify participants because this approach allowed him to include ready and accessible respondents. The study selection criteria required the participation of nursing students enrolled in specified colleges who actively used social media platforms and agreed to consent. Individuals enrolled in subjects other than nursing education, those who were inactive in social media, and those whose health conditions limited participation were not eligible to join the study.

Data Collection Procedure

The study self-administered questionnaires from the nursing students to capture their level of knowledge and understanding as well as their behavior and perception of the effects of social media on their academia. The questionnaires utilized in this study were developed from prior studies and were created as paper-based to facilitate completion. The study's rationale was to capture natural responses to the surveys that reflected students' experiences, attitudes, and practice of using social media. This approach ensured that the data collected indicated how people perceived the phenomenon under study. Thus, it helped explain the effects of social media usage on students' performance in nursing college.

Data analysis procedure

The data collected from the survey questionnaire was then analyzed using SPSS (version 22). Means and standard deviations were determined to examine the participants' demographic data and the frequency and duration of their social media use. To explain the results, a graphical analysis was conducted using histograms or graphs, depending on the data type. Descriptive statistics, including correlation analysis, were adopted to compare the nursing students' social media usage and academic performance.

In data analysis, missing values were also looked for. Depending on the proportion of missing responses in the study and the type of missing data, decisions were made whether to use imputation or remove the case in question. This research was used to make inferences about the effect of social media on the performance of nursing students and offered a basis for intervention in nursing education programs.

Analysis and Result

Demographic Characteristics of Participants

Through the demographic information from the survey, a total of 232 nursing students were identified, with 87% of the students being male and 13% being female. These studies show that most participants (76%) are in the age bracket 18-22, while 22 % of participants are aged 23-27, and only 2% are aged 28-32. Marital status shows that most respondents are unmarried (83%) compared to those who are married (17%). (Table 1)

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%	

Table 1: Demographic Characteristics of Participants

Figure 1: Gender of Participants

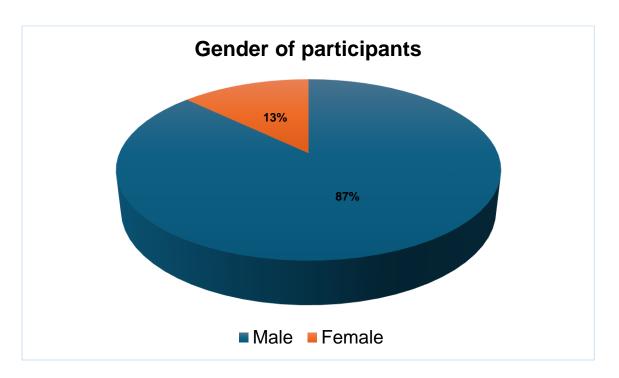


Figure 1 shows 87 percent of the participants are male, while 13 percent are female. This suggests that the respondents in the survey were mainly male, which could represent the population under study or be more likely than that particular sample for this research.

Results of Survey Items

The study's findings include the following main observations: The mega-observation from the study is that a large percentage of students (94%) strongly agree that social media addiction is academically detrimental. Also, 84% confirmed that their time on social media networks exceeds the time spent on their books. Meanwhile, 63% of the respondents see Twitter discussions as a helpful feature of social media for enhancing academic performance, and 80% see WhatsApp as helpful for knowledge sharing. (Table 2)

Table 2: Results of Survey Items

S.N	Survey Items	SA	Α	SD	D
	·	(%)	(%)	(%)	(%)
01	Addiction to social networks affects academics	94%	25%	3%	3%
02	Online social networks distract from studies	69%	25%	3%	3%
03	Hours spent online cannot compare to reading hours	43%	41%	8%	8%
04	No improvement in grades since using social networking	30%	33%	25%	12%
05	Unlimited Facebook access negatively affects academic performance	46%	36%	17%	10%
06	Academic discussions on Twitter improve performance	35%	28%	25%	12%
07	Use of WhatsApp for knowledge sharing	41%	39%	10%	10%
08	Sole reliance on Wikipedia for assignments	50%	30%	10%	10%
09	Use of Wikipedia Improves Grades	25%	69%	3%	3%
10	Yahoo forums reduce understanding	25%	38%	20%	17%
11	Blogging sites complement classroom learning	52%	33%	8%	7%
12	Stopping social media will not improve performance	30%	28%	23%	19%
13	Male and female students use social media differently	43%	37%	9%	11%
14	Female students use social media to foster social connections	45%	29%	13%	13%
15	Gender determines the level of social media usage	41%	29%	13%	17%
16	Males use social networking more effectively for non-academic purposes	25%	69%	3%	3%
17	Age impacts social media usage	43%	33%	12%	12%
18	Social media becomes boring with age	50%	30%	10%	10%
19	Social media is irrelevant to the older generation	43%	25%	12%	20%
20	The younger generation is the most active users of social media	25%	69%	3%	3%

Association Between Demographics and Survey Items

The Chi-Square test identified associations of demographic variables with certain survey items relating to the use of social media and students' performance. Gender was also found to have an asterisk * significant relationship with addiction to social networks p = 0.001, use of WhatsApp for sharing knowledge p = 0.004, and differences in social networking p = 0.001. There was a moderate correlation between age and the perception of social media as a source of distraction (p=0.013). In contrast, users' interest level decreased with age (p= 0.000), and the younger generation was more active in social media (p= 0.000).

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

		1	0.001	
	Males use social networking	15.2	0.001	Highly
	for non-academic purposes			Significant
	Female students foster social	9.8	0.002	Significant
	connections			-
Age	Social media distracts from	7.1	0.013	Significant
	studies			
	Social media becomes boring	18.5	0.000	Highly
	with age			Significant
	The younger generation are	20.2	0.000	Highly
	the most active users			Significant
Marital Status	No improvement in grades	5.3	0.022	Significant
	due to social networking			_
	Blogging sites complement	6.9	0.009	Significant
	classroom learning			_
Year of Study	Unlimited Facebook access	10.3	0.001	Significant
-	negatively affects academics			_
	Academic discussions on	4.8	0.028	Significant
	Twitter improve			_
	performance			

Discussion

The study contributes to the understanding of demographic factors and related social media trends about nursing students and gives a sense of different aspects. For example, gender, age, marital status, and year of study may affect their academic behaviors and interaction with social media. (21). 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 and program availability (22).

The study revealed that most respondents (76%) are 18–22 years old, typical of the university student population. (13). Conversely, the results showed that social media platforms have different usage concerning knowledge sharing, with older students (23-27) using academic-oriented SM more frequently. (24). The lower percentage (22%) of 23-27-year-olds represents a younger group; it means that the participants' attitudes toward social media and students' perception of such platforms might differ. The young generation, which prefers WhatsApp and Twitter, sees social media as relevant in classroom work and other activities. (25).

Another demographical factor tested in this study was marital status, with 83% of the participants being 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 responsibilities and definite timetables. (25). The results from the study may indicate that unmarried nursing students, who comprise the most significant percentage, may have a more permissive attitude towards using SNS for academic and social purposes. This trend also conforms with the awareness that social media helps promote peer-to-peer and academic connections, especially in distance learning systems. (26).

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 a vital role in involving students in social media-related activities. (27). According to the study, in terms of year of study, 35% of participants were in the 2nd and 4th year while the remaining 30% were in the 1st and third years. (28). Such distribution enables an essential comprehension of the multifaceted role of social media in students' lives at various levels of learning. (29). 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 benefits of the tool as found in students in their second, fourth and postgraduate levels. (30).

According to the results of this study, the participants agreed that social media addiction interferes with academics; 94% of them strongly agreed. This aligns with other studies that conclude that excessive social media usage contributes to poor performance in class by wasting time. (31, 32). Excessive social media use is linked to lower academic performance due to the time spent online and the distraction it causes. (33). Whereas social media enhances the academic sector, this research evidence indicates that a more significant percentage of respondents (80%) agreed that using language on social-related sites such as Facebook affects academic performance. (34) This tallies the previous arguments that while social media may help share knowledge and work, they act as a double-edged weapon whenever learners cannot manage them 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. (35).

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 and course-related behaviors on the other hand. (38). 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 as factors affecting social media use. At the same time, gender differences are noticeable when using social media for purposes other than academic. At the same time, this research reveals specific tendencies in this sample, where more significant asymmetry between males and females and the younger age of respondents are prominent. (37). 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 on academic performance. (38).

Conclusion

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, mainly social media usage, affect performance in class. The study shows that social media affect the academic activities of nursing students hugely, and most of the participants acknowledged that while social media have advantages that could positively impact academic performance, they also have a negative impact that could negatively influence academic performance. On one hand, messages, like WhatsApp, and social networks, such as Twitter, are regarded as valuable 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 educational process.

Recommendations

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

- 1. **Develop Social Media Management Programs:** Educational institutions should also organize programs or workshops that enable students to understand how to use social media. These programs should cover issues such as time management about the students' tasks and how to avoid social networking sites and concentrate on class work.
- 2. Encourage the Academic Use of Social Media: Although social media itself can be a source of distraction, it also offers many educational opportunities. Schools should

engage students in academic dialogues, learning, and group projects on social media platforms like WhatsApp.

- 3. Support Male and Younger Students: Since male students and the youngest people (18-22) 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 using social media and making students aware of the 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 using social networking sites on the outcomes of learning institutions. Discussing precisely the results of similar surveys or studies such as those presented in this paper, it is possible to find out that regularly carrying out such surveys or studies can be helpful in the investigation of the dynamics of the development of these processes and identify directions for their improvement.
- 5. **Promote Peer Support Networks:** To increase the academic advantage of social media usage, new groups such as student support groups, study groups, forums, etc., can be formed on social networks. Such networks can be helpful in creating a context in which students can post academic questions and participate in a discussion, share documents, and ask 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 about general guidelines for using social media for academic purposes, other students and especially the young and the unmarried may require specific caution, especially regarding balancing their academic coursework and time on social media.
- 7. **Promote Awareness of the Risks of Social Media Addiction:** Students should be informed about the dangers of socially networked site dependency, as it is essential for personal and virtual worlds' general well-being. Universities and colleges should develop awareness-creation programs that warn students of the likely dangers of being on social media most of the time, such as reduced study time, poor scores, and possible adverse health effects.

Limitations

- Sample Size and Generalizability: The participants were 232 nursing students, which may not be a good sample for the general population of students or students pursuing other fields of study. Therefore, the findings cannot be extrapolated to all nursing students or students from other regions of the country or different campuses.
- Gender Imbalance: The study also involved many male participants with only a few female participants, attracting 87% of male participants and only 13% of female participants. This might be a slight threat since male students are more dominant in the sample while female students form a smaller proportion in this study.
- Self-Reported Data: A limitation of this type of data collection is that self-reported surveys are often affected by response biases, such as social desirability or response biases. The participants may have inflated the actual academic behaviors assessed or the use of social media, or may not have grasped, understood, or responded to questions asked in a manner reflective of the intended meaning.
- Cross-Sectional Design: The study adopted a cross-sectional research design that estimated social media usage and academic performance over a specific period. This opens another challenge of making conclusions about cause-and-effect relationships or even trends associated with social media use and its impact on performance.

- Geographic Limitation: This study was carried out in Swat, and therefore, the generalization of the findings was limited to Swat's geographical location and may not be generalized to other geographical locations, which are culturally, socially, and educationally different from Swat. The nature and scope of social media usage and academic contexts may vary across regions and affect results in other contexts.
- Focus on Only Nursing Students: The study was confined to nursing students, indicating that the experience and behavior of student nurses may be very different from those of other health care disciplines or even education program, load, and expectations for students and their education might vary, affecting how social media affects students in different categories.
- Lack of Longitudinal Data: At some points, the study was cross-sectional; that is, it did not track the students' social media usage and the effect on their academic performance at different periods. In some cases, it would be interesting to have longitudinal data to understand better how students change their social media use or how it impacts their tests and overall grades across several years of learning.
- Limited Scope of Social Media Platforms: The study mainly targeted social network sites, such as Facebook and WhatsApp, and social information sites, such as Wikipedia. However, other forms of SNSs commonly used by students, including Instagram, TikTok, and YouTube, which may exert significant influence on students' academic and social lives, were not captured, which may be the rationale behind some of the findings.
- Potential Cultural Bias: Differences in the culture of Swat, where the study was made, may affect students' attitudes toward social media. The study of social media behaviors was rooted in cultural expectations and students' perceptions of social media. Hence, the study's findings cannot be generalized to other cultural communities that may have different perceptions of social media use.

References:

- Kuss DJ, Griffiths MD. Social networking sites and addiction: Ten lessons learned. International journal of environmental research and public health. 2017 Mar;14(3):311.
- Abbas J, Aman J, Nurunnabi M, Bano S. The impact of social media on learning behavior for sustainable education: Evidence of students from selected universities in Pakistan. Sustainability. 2019 Mar 20;11(6):1683.
- Johnston LM. Support brings success: a longitudinal narrative study articulating student nurses' transition from further education to higher education and graduation.
- Anyimah BA. Coping with academic work and nursing motherhood in Akenten Appiah Menkah University of skills, training and entrepreneurial development (AAMUSTED), Kumasi.
- Fong CJ, Kim Y, Davis CW, Hoang T, Kim YW. A meta-analysis on critical thinking and community college student achievement. Thinking Skills and Creativity. 2017 Dec 1;26:71-83.
- Young-Brice A, Johnson BK, McCormack MG, Peña M, Leiberg J, Dreifuerst KT. Grit as a Predictor of Academic Success Among Associate Degree Nursing Students. Nursing Education Perspectives. 2023 Nov 1;44(6):359-64.
- Kolhar M, Kazi RN, Alameen A. Effect of social media use on learning, social interactions, and sleep duration among university students. Saudi journal of biological sciences. 2021 Apr 1;28(4):2216-22.
- Masood A, Luqman A, Feng Y, Ali A. Adverse consequences of excessive social networking site use on academic performance: Explaining underlying mechanism from stress perspective. Computers in human behavior. 2020 Dec 1;113:106476.

- Azizi SM, Soroush A, Khatony A. The relationship between social networking addiction and academic performance in Iranian students of medical sciences: a cross-sectional study. BMC psychology. 2019 Dec;7:1-8.
- Kwon SJ, Kim Y, Kwak Y. Difficulties faced by university students with self-reported symptoms of attention-deficit hyperactivity disorder: a qualitative study. Child and adolescent psychiatry and mental health. 2018 Dec;12:1-8.
- Alotaibi MS, Fox M, Coman R, Ratan ZA, Hosseinzadeh H. Smartphone addiction prevalence and its association on academic performance, physical health, and mental well-being among university students in Umm Al-Qura University (UQU), Saudi Arabia. International journal of environmental research and public health. 2022 Mar 21;19(6):3710.
- Abbasi GA, Jagaveeran M, Goh YN, Tariq B. The impact of type of content use on smartphone addiction and academic performance: Physical activity as moderator. Technology in Society. 2021 Feb 1;64:101521.
- Nikbin D, Iranmanesh M, Foroughi B. Personality traits, psychological well-being, Facebook addiction, health and performance: Testing their relationships. Behaviour & Information Technology. 2021 May 19;40(7):706-22.
- Carbonell X, Panova T. A critical consideration of social networking sites' addiction potential. Addiction Research & Theory. 2017 Jan 2;25(1):48-57.
- Kim SJ, Marsch LA, Hancock JT, Das AK. Scaling up research on drug abuse and addiction through social media big data. Journal of medical Internet research. 2017 Oct 31;19(10):e353.
- Kasperiuniene J, Zydziunaite V. A systematic literature review on professional identity construction in social media. Sage Open. 2019 Feb;9(1):2158244019828847.
- Scott N, Goode D. The use of social media (some) as a learning tool in healthcare education: An integrative review of the literature. Nurse Education Today. 2020 Apr 1;87:104357.
- Giroux CM, Moreau KA. Nursing students' use of social media in their learning: a case study of a Canadian School of Nursing. BMC nursing. 2022 Jul 22;21(1):195.
- Günay U, Kılınç G. The transfer of theoretical knowledge to clinical practice by nursing students and the difficulties they experience: A qualitative study. Nurse education today. 2018 Jun 1;65:81-6.
- Weeks KW, Coben D, O'neill D, Jones A, Weeks A, Brown M, Pontin D. Developing and integrating nursing competence through authentic technology-enhanced clinical simulation education: Pedagogies for reconceptualising the theory-practice gap. Nurse education in practice. 2019 May 1;37:29-38.
- Koukourikos K, Tsaloglidou A, Kourkouta L, Papathanasiou IV, Iliadis C, Fratzana A, Panagiotou A. Simulation in clinical nursing education. Acta Informatica Medica. 2021 Mar;29(1):15.
- Bacaksiz FE, Eskici GT, Seren AK. "From my Facebook profile": What do nursing students share on Timeline, Photos, Friends, and About sections?. Nurse education today. 2020 Mar 1;86:104326.
- Saura JR, Palacios-Marqués D, Iturricha-Fernández A. Ethical design in social media: Assessing the main performance measurements of user online behavior modification. Journal of Business Research. 2021 May 1;129:271-81.
- Sheldon P, Antony MG, Sykes B. Predictors of problematic social media use: Personality and life-position indicators. Psychological Reports. 2021 Jun;124(3):1110-33.
- HAN Y. SOCIAL MEDIA ADDICTION, FATIGUE AND THE EFFECTS ON YOUNG ADULTS'ACADEMIC PERFORMANCE CHINA. Quantum Journal of Social Sciences and Humanities. 2024 Oct 30;5(5):70-80.
- Vialle SJ, Machin T, Abel S. Better than scrolling: Digital detox in the search for the ideal self. Psychology of Popular Media. 2023 Aug 31.

- Balk YA, Englert C. Recovery self-regulation in sport: Theory, research, and practice. International Journal of Sports Science & Coaching. 2020 Apr;15(2):273-81.
- Wang MT, Kiuru N, Degol JL, Salmela-Aro K. Friends, academic achievement, and school engagement during adolescence: A social network approach to peer influence and selection effects. Learning and Instruction. 2018 Dec 1;58:148-60.
- Chang CT, Tu CS, Hajiyev J. Integrating academic type of social media activity with perceived academic performance: A role of task-related and non-task-related compulsive Internet use. Computers & Education. 2019 Oct 1;139:157-72.
- Balakrishnan V, Teoh KK, Pourshafie T, Liew TK. Social media and their use in learning: A comparative analysis between Australia and Malaysia from the learners' perspectives. Australasian Journal of Educational Technology. 2017 Apr 17;33(1).
- Wong CW, Kwok CS, Narain A, Gulati M, Mihalidou AS, Wu P, Alasnag M, Myint PK, Mamas MA. Marital status and risk of cardiovascular diseases: a systematic review and metaanalysis. Heart. 2018 Dec 1;104(23):1937-48.
- Pieh C, Budimir S, Delgadillo J, Barkham M, Fontaine JR, Probst T. Mental health during COVID-19 lockdown in the United Kingdom. Psychosomatic medicine. 2021 May 1;83(4):328-37.
- Pierce M, Hope H, Ford T, Hatch S, Hotopf M, John A, Kontopantelis E, Webb R, Wessely S, McManus S, Abel KM. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. The Lancet Psychiatry. 2020 Oct 1;7(10):883-92.
- Auerbach RP, Mortier P, Bruffaerts R, Alonso J, Benjet C, Cuijpers P, Demyttenaere K, Ebert DD, Green JG, Hasking P, Murray E. WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. Journal of abnormal psychology. 2018 Oct;127(7):623.
- Hou Y, Xiong D, Jiang T, Song L, Wang Q. Social media addiction: Its impact, mediation, and intervention. Cyberpsychology: Journal of psychosocial research on cyberspace. 2019 Feb 21;13(1).
- Giunchiglia F, Zeni M, Gobbi E, Bignotti E, Bison I. Mobile social media usage and academic performance. Computers in Human Behavior. 2018 May 1;82:177-85.
- Campos-Castillo C, Laestadius LI. Racial and ethnic digital divides in posting COVID-19 content on social media among US adults: secondary survey analysis. Journal of medical Internet research. 2020 Jul 3;22(7):e20472.