

Exploring the linkages between social media use, self-esteem, and academic performance among nursing students in Saudi Arabia: A descriptive correlational study



Ibrahim Abdullatif Ibrahim*^{}, Mona Hamdy Mostafa Mohamed^{}, and Atallah Alenezi^{}

Department of Nursing, College of Applied Medical Sciences, Shaqra University, Saudi Arabia

Abstract

Background: The prevalence of social media influence in education makes it necessary to investigate how it might affect nursing students' academic achievement and sense of self. To our knowledge, the associations between academic performance, self-esteem, and social media usage among nursing students from Saudi Arabia remain understudied.

Objective: This study aimed to examine the relationships between academic performance, self-esteem, and the utilization of social media platforms by Saudi Arabian nursing students.

Methods: This descriptive correlational study employed a convenience sample of 220 nursing students (response rate 95.2%). An online survey with questions about demographics, students' academic performance, social media usage, and self-esteem was used for data collection from 1 March to May 2023. Pearson correlation coefficients, independent t-tests, Analysis of Variance, and hierarchical regression were used for data analysis.

Results: Social media use had an average score of 3.60 ± 0.66 , self-esteem was 2.13 ± 0.27 , and academic performance was 3.95 ± 0.58 . The students' academic performance related positively to the utilization of social media platforms ($r = 0.210$, $p < 0.01$). There were statistically positive correlations between academic purpose and social motives domains of utilizing social media and academic performance ($r = 0.304$, $p < 0.01$; $r = 0.208$, $p < 0.01$) respectively. The amount of time students spent on social media was not related to their self-esteem ($r = 0.047$, $p > 0.05$). The students' self-esteem was unrelated to their academic achievement ($r = 0.059$, $p > 0.05$).

Conclusions: Utilizing social media channels can assist nursing students in improving their academic achievement. Therefore, nursing educators and decision-makers in nursing education have the opportunity to establish collaborative learning environments by integrating social media. This approach aims to improve communication, enhance the learning experience, and ultimately improve the academic achievements of nursing students.

Keywords

Saudi Arabia; academic performance; nursing education; social media; self-esteem

*Corresponding author:


Dr. Ibrahim Abdullatif Ibrahim
 Department of Nursing, College of Applied
 Medical Sciences, Shaqra University, Saudi
 Arabia
 Email: ielhehe@su.edu.sa

Article info:

Received: 27 December 2023

Revised: 30 January 2024

Accepted: 17 February 2024

 This is an Open Access article distributed under the terms of the [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/), which allows others to remix, tweak, and build upon the work non-commercially as long as the original work is properly cited. The new creations are not necessarily licensed under the identical terms.

E-ISSN: 2477-4073 | P-ISSN: 2528-181X

Background

Today's higher education students are commonly known as "digital natives" due to their exposure to and familiarity with the rapid advancements in interactive technologies (Dwumah Manu et al., 2023). Undergraduate students demonstrate a higher propensity for social media usage compared to other demographics, with platforms like WhatsApp and Facebook being prevalent among those in the medical and paramedical fields. It has become a daily habit for undergraduates to spend more than three hours on social media, utilizing it for entertainment, staying updated with the latest news, and socializing (Bhandarkar et al., 2021; Promsri et al., 2019).

Online social networking has significantly increased within academic settings. It has proven to be a valuable tool for facilitating a range of activities, including collaborative group projects, independent study, group discussions related to

project work, individual assignment submissions, communication with instructors, and the sharing of lecture notes among undergraduate students (Isah & Ogundele, 2020; Saxena & Majumdar, 2015). According to Kind and Evans (2015), students believe that using social media platforms to engage with their peers and professors positively affects their academic achievements. They view this practice as a handy substitute for in-person interactions, particularly in the context of collaborative assignments.

Self-esteem is also crucial in shaping the academic performance and overall well-being of university students (Alamri, 2019). Self-esteem refers to a deep respect and admiration for oneself. The concept of "self" refers to the set of values, ideas, and attitudes that individuals possess toward their own identity (DMello et al., 2018). Students with high self-images frequently have confidence in their capabilities and complete their academic assignments with a sense of self-

assurance. This self-assurance can lead to enhanced motivation, perseverance, and a willingness to take on academic challenges, ultimately fostering academic progress (Fernández-Castillo et al., 2022). Recent research highlighted the significant negative association between self-esteem and psychological distress among undergraduate health-professional students. These findings suggest that students with a strong sense of self-worth and self-confidence are less likely to encounter significant psychological distress throughout their academic journey (Pasyar & Gholamzadeh, 2021).

Empirical studies suggest that social networking usage helps individuals to enhance their self-esteem. For instance, the study done by Burnasheva and Suh (2021) provides significant findings about the effect of web-based engagement on self-esteem levels, suggesting that actively engaging in social media platforms may boost self-esteem, regardless of the kind of user. These findings emphasize the potential benefits social media might provide in promoting good self-perceptions among its users. In addition, the research done by Al-Ghafri et al. (2016) reveals significant favorable associations between social networking usage and the congruence of an individual's self-image. In simple terms, individuals who regularly use social media tend to shape their perception of themselves depending on the material they encounter. The alignment of self-perception mediates the relation between social networking usage and the tendency to engage in conspicuous internet spending among digital natives.

To our knowledge, the associations between academic performance, self-esteem, and social media usage among nursing students from Saudi Arabia remain understudied. By investigating these relationships, the findings can enhance comprehension of the possible consequences of online social networking for academic outcomes, thereby informing educational institutions, nursing curriculum development, and student support programs. This study will also provide an in-depth comprehension of the challenges and opportunities nursing students in Saudi Arabia encounter. The findings can provide valuable insights for educational institutions and policymakers in Saudi Arabia to implement interventions and systems that support and address the unique needs of nursing students. Thus, our study aimed to explore the associations between academic performance, self-esteem, and the utilization of social media platforms by nursing students in Saudi Arabia.

Research Questions

The research questions included: 1) Is there a relationship between social media usage and the academic performance of nursing students? 2) Is there a relationship between the self-esteem and academic performance of nursing students? 3) Is there a relationship between social media usage and the self-esteem of nursing students?

Literature Review and Hypotheses Development

Three hypotheses were developed in this study: H1: Social media usage is positively related to nursing university students' academic performance. As a means of communication, social media can provide access to educational content, online study groups, and academic

support networks (Kovach et al., 2019). Nursing students can benefit from engaging with educational materials shared on social media platforms, participating in online discussions with peers and faculty, and connecting with professionals in their field. These interactions can enhance learning opportunities and potentially improve academic performance (Almutairi et al., 2022). Social media enables college students to exchange knowledge among their peers and participate in collaborative learning. Platforms such as forums, chat groups, and virtual study communities can promote peer-to-peer support, information exchange, and resource sharing (Sivakumar et al., 2023). This collaborative learning environment can foster a deeper comprehension of the subject matter and promote active participation in the academic discourse. Additionally, the sense of community from these interactions can provide support, encouragement, and motivation to excel academically. These positive influences can ultimately improve nursing students' academic performance (Ansari & Khan, 2020). Empirical studies indicated that social networking usage for the purpose of learning might contribute to notable advancements in the academic attainment of university students (Alamri et al., 2020; Alshuaibi et al., 2018; Habes et al., 2019; Lahiry et al., 2019).

H2: Self-esteem is related positively to the academic performance of nursing university students. Self-esteem greatly affects students' academic journey, as it has the potential to positively impact their motivation, engagement, and resilience. These factors are crucial for achieving educational success (Namaziandost et al., 2023; Zhao et al., 2021). The students with higher self-esteem levels tend to demonstrate superior academic performance. These findings highlight the significant impact of self-esteem on students' educational outcomes. When students positively perceive themselves, they tend to approach academic tasks with increased confidence and motivation. This self-assurance can lead to increased engagement, perseverance, and a greater willingness to take on challenges. These factors collectively contribute to their enhanced academic performance (Martínez Rodríguez et al., 2019; Mirzaei-Alavijeh et al., 2018; Moradi et al., 2018). Furthermore, Oducado (2021) revealed that self-esteem, combined with grit, significantly influences students' academic performance in the nursing field. Similarly, Abdulghani et al. (2020) discovered a positive association between self-confidence and academic performance among health sciences students. Their research suggests that students with high self-worth are likelier to attain higher exam grades and do extremely well academically.

H3: Social media usage is positively related to nursing university students' self-esteem. Social networking usage has become a prevalent means of communication among college students worldwide. Several studies have highlighted the beneficial impacts of digital networking on the self-worth of university students. The research conducted by Hassan and Afzal (2022) found that college students in Pakistan who engage more frequently with web-based platforms tend to have higher levels of self-worth. Similarly, Brailovskaia and Margraf (2018) found that German students who actively engaged with social media platforms exhibited higher levels of self-esteem. Moreover, a study by Zhang et al. (2023) demonstrated social networking usage enhances psychological and subjective well-being among university

students, mediated by self-worth and network support. For nursing students specifically, social media platforms offer valuable opportunities to share achievements, receive positive feedback, and connect with a supportive community of peers and professionals. These interactions can enhance self-esteem by fostering feelings of validation, belonging, and social support.

Methods

Study Design

This study utilized a descriptive correlational design, adhering to the guidelines of STROBE (Von Elm et al., 2007).

Samples/Participants

This study was conducted inside the academic environment of the university. The research comprised a non-probability and convenience sample of 220 nursing students who were accessible and willing to participate, resulting in a response rate of 95.2%. The nursing interns were excluded. The G*power software 3.1.9 was operated to estimate the required number of responders based on the following parameters (Faul et al., 2009): Effect Size (a correlation coefficient = 0.301 according to prior research by Oducado (2021), α probability of 0.05, and Power of 0.95. There needed to be at least 137 nursing students in the present study.

Instruments

Several questionnaires were used in this study: 1) Demographic questionnaire: This questionnaire included age, gender, residence, and time spent on social media daily. 2) Social networking use questionnaire: The questionnaire was first developed and validated by Gupta and Bashir (2018). This survey was used to evaluate the degree to which college students participate in social media networking and the objectives for utilizing social networking platforms. This questionnaire included four dimensions: 1) Academic (7 items), 2) Socialization (5 items), 3) Entertainment (4 items), 4) Informativeness (3 items). To rate the participants' replies, a 5-level rating scale was employed, extending from "never" (1) to "always" (5). The study reported Cronbach's alpha coefficients (α) for various constructs as follows: social networking usage ($\alpha = 0.89$), academic ($\alpha = 0.83$), socialization ($\alpha = 0.71$), entertainment ($\alpha = 0.76$), and informativeness ($\alpha = 0.81$).

3) Academic performance scale: This eight-item scale was originally developed and validated by Birchmeier et al. (2015) to assess academic performance from the participants' perspectives (e.g., I made myself ready in all my subjects). To rate the participants' responses, a five-level scale was employed, extending from "strongly disagree" (1) to "strongly agree" (5). The total scores of the items were categorized into five levels: failed performance (8), poor performance (9-16), moderate performance (17-24), good performance (25-32), and excellent performance (33-40). The α value in this research was 0.79.

4) Rosenberg self-esteem scale: Rosenberg (1965) developed and validated this scale. The present study utilized the scale to measure self-esteem among nursing students. The scale consists of 10 statements, five in positive statements and five in negative statements. The items of the

scale were rated on a 4-level rating system where 1 indicated strong disagreement, and 4 indicated strong agreement. Negative items were reverse-coded to assess the participants' self-esteem, and then total scores were aggregated and divided by the number of items within the scale. Hence, scores ≥ 2 signify low self-esteem, while scores above 2 suggest high self-esteem (healthy or normal). The α value was 0.78 in this study.

There was no need to translate the measures because all instruments were given to the study participants in English. The nursing program at this university is conducted primarily in English, ensuring that participants possess a high level of proficiency and can accurately comprehend the course materials. A preliminary investigation was conducted with a subset of 31 students to verify each assessment's clarity and cultural appropriateness when administered in English within the local context. The feedback indicated that the tools were deemed suitable and understandable without the need for translation. The reliability analysis confirmed that the instruments performed effectively, as indicated by Cronbach's alpha coefficients, like those obtained during the original validations. The utilization of the English versions facilitated a direct comparison with substantial psychometric data from prior administrations, aiding in establishing the measures as appropriately rigorous for this research. The scales utilized in this study are not subject to copyright. The scale has since been widely disseminated and frequently employed in academic research without authors obtaining direct consent each time.

Data Collection

The data collection was undertaken from 1 March to May 2023. The researchers utilized an online self-reported survey in Google form. The first page of the survey included the aim of the study, guidelines for filling out the questionnaire, and an emphasis on voluntary participation.

Data Analysis

Categorical data were described using frequency and percentage metrics, while continuous data were presented using mean and standard deviation. The independent t-test and analysis of variance (ANOVA) were employed to compare the average scores of study variables. Pearson correlation coefficient test assessed associations between continuous variables. The researchers used hierarchical regression analysis to evaluate the impact of an independent variable (utilizing social media) on the participants' academic performance, which was considered the dependent variable. In the first model, demographic parameters were included to regulate and manage their possible impact. Following that, the use of social media entered in the second model. A statistical significance at $p < 0.05$. The data analysis was conducted using SPSS 23.

Ethical Considerations

This study received ethical clearance from Shaqra University, with the reference number ERC_SU_S_202300010. Informed consent was obtained verbally confidentially, and the privacy of the responses was assured through anonymized data collection that did not require students' identification—at the same time, filling the survey acted as consent to voluntary

participation in the study. The researchers attended students' classes at the beginning of the day to explain different aspects of the study. They shared the survey link with assigned academic staff and asked them to further distribute it to students via WhatsApp groups. Mandatory completion of all survey questions was enforced to avoid missing data, a strategy supported by research for improving survey response quality.

Results

The mean age of the studied students was 20.20 years, with a standard deviation of 1.22. Over 50% of the students were female (51.8%) and lived in urban settings (60.0%). The average duration of social media use, as indicated by the surveyed students, was 6.41, with a standard deviation (SD) of 2.95. The study found no statistically significant differences in academic performance, social networking usage, and self-worth among the studied students, regardless of their demographic features (Table 1).

Table 1 Demographic characteristics and differences in the participants' social media usage, self-esteem, and academic performance

	N (%)	Social Media Usage	Self-Esteem	Academic Performance
		Mean ± SD	Mean ± SD	Mean ± SD
Age in years				
<20	72 (32.7)	3.61 ± 0.63	2.11 ± 0.25	3.92 ± 0.50
≥20	148 (67.3)	3.59 ± 0.68	2.14 ± 0.28	3.96 ± 0.62
Mean ± SD	20.20 ± 1.22			
t / p		0.14 / 0.09	0.87 / 0.39	0.48 / 0.06
Residence				
Rural	88 (40.0)	3.60 ± 0.65	2.12 ± 0.25	3.89 ± 0.60
Urban	132 (60.0)	3.59 ± 0.67	2.13 ± 0.28	3.99 ± 0.57
t / p		0.11 / 0.91	0.31 / 0.76	1.27 / 0.21
Gender				
Male	106 (48.2)	3.51 ± 0.63	2.10 ± 0.25	3.93 ± 0.57
Female	114 (51.8)	3.67 ± 0.68	2.15 ± 0.28	3.96 ± 0.59
t / p		1.78 / 0.08	1.42 / 0.16	0.35 / 0.72
Time spent on social media daily				
1-3	32 (14.5)	3.39 ± 0.49	2.13 ± 0.28	4.06 ± 0.60
4-6	101 (45.9)	3.59 ± 0.65	2.13 ± 0.28	3.93 ± 0.57
>6	87 (39.5)	3.68 ± 0.73	2.13 ± 0.26	3.93 ± 0.58
Mean ± SD	6.41 ± 2.95			
F / p		2.20 / 0.11	0.01 / 0.99	0.69 / 0.50

Note: SD (standard deviation) | t (statistical value of independent sample t-test) | F (statistical value of ANOVA)

The average scores for students' utilization of social media, self-esteem, and academic achievement were 3.60 (SD = 0.66), 2.13 (SD = 0.27), and 3.95 (SD = 0.58) respectively. Regarding social media components, the highest mean score was observed for entertainment purposes (Mean = 3.83, SD = 0.79). In contrast, the lowest average score was noticed for social purposes (Mean = 3.39; SD = 0.74), indicating lower usage for social interaction and networking (Table 2).

Table 2 Mean scores of the study variables

The Study Variables	Min	Max	Mean ± SD
1. Social media usage	2.0	5.0	3.60 ± 0.66
Academic	1.6	5.0	3.58 ± 0.79
Informativeness	1.7	5.0	3.68 ± 0.86
Social	1.6	5.0	3.39 ± 0.74
Entertainment	1.8	5.0	3.83 ± 0.79
2. Self-esteem	1.3	2.9	2.13 ± 0.27
3. Academic performance	2.1	5.0	3.95 ± 0.58

More than half of the participants (51.8%) demonstrated good academic performance, 43.2% reported excellent academic performance, and 5.0% reported moderate academic performance (Figure 1).

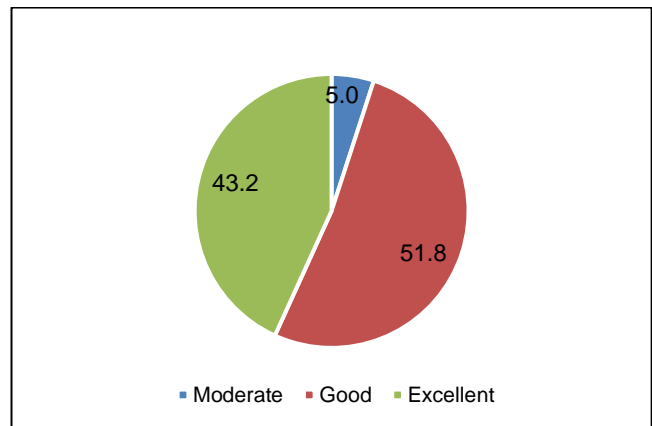


Figure 1 Levels of academic performance among the studied students

The analysis revealed a positive link between social media usage and academic performance among the participants ($r = 0.210, p < 0.01$). Furthermore, the academic performance and both academic ($r = 0.304, p < 0.01$) and social uses of social media ($r = 0.208, p < 0.01$) had a strong positive correlation. However, participants' self-esteem demonstrated no significant relationship with their social media activity ($r = 0.047, p > 0.05$). Additionally, the participants' self-esteem was not related to their academic achievement (Table 3).

Table 3 Relationships between social media usage, self-esteem, and academic performance among the studied students

Variables	1	2	3	4	5	6	7
1. Social media usage	1.00						
2. Academic	0.917**	1.00					
3. Informativeness	0.825**	0.740**	1.00				
4. Social	0.837**	0.653**	0.633**	1.00			
5. Entertainment	0.717**	0.525**	0.426**	0.496**	1.00		
6. Self-esteem	0.047	0.046	0.021	0.004	0.094	1.00	
7. Academic performance	0.210**	0.304**	0.208**	0.07	0.05	0.059	1.00

** $p < 0.01$, two-tailed test

The regression model illustrated 6.7% of the variance in participants' academic performance ($F = 3.05$, $p < 0.01$). Social

media usage had a statistically moderate positive effect on academic performance ($\beta = 0.233$, $p < 0.01$) (Table 4).

Table 4 Hierarchical regression analysis of academic performance by social media usage among the studied students

Model	Variables	Unstandardized coefficients		Standardized coefficients	t
		B	Std. error	β	
1	Age	0.173	0.261	0.045	0.663
	Gender	0.790	0.634	0.085	1.247
	Residence	0.670	0.649	0.071	1.033
	Daily social media time	0.128	0.108	0.082	1.189
2	Age	0.159	0.255	0.042	0.624
	Gender	0.080	0.619	0.009	0.129
	Residence	0.647	0.636	0.068	1.017
	Daily social media time	0.191	0.107	0.122	1.781
	Social media usage	0.086	0.025	0.233	3.42**
R ² / Adj. R ² / F		0.067 / 0.045 / 3.05**			

** $p < 0.01$, two-tailed test

Discussion

The main objective of the study was to investigate the associations between student academic performance, social networking usage, and self-esteem. The study's results revealed that slightly over two-thirds of the participants were aged 20 years or below, with an average age of 20.20 years. A significant proportion of the participants was female, and approximately two-thirds lived in urban areas. Notably, a significant proportion, accounting for over one-third of the study participants, engaged with social media platforms for more than six hours daily. On average, the students reported spending 6.41 hours engaging with social media platforms. The study did not reveal significant variations in the utilization of social media, academic achievement, or self-worth among the participants. The study findings disagreed with the investigation of Rathi et al. (2020), who reported that 66.7% of their participants were male, while the remaining 33.3% identified as female. Additionally, their study revealed that 11.7% of participants spent less than one hour each day using social media platforms. A significant proportion of respondents, approximately 28.3% of the sample, reported dedicating 1-2 hours daily to social media engagement. Furthermore, a quarter of the participants allocated 2-3 hours, 15% dedicated 3-4 hours, and a surprising 13.3% invested 4-5 hours daily in social media usage. Lastly, 20% of participants spent more than five hours daily engaging with social media platforms.

Our findings demonstrated that the participants had high academic achievement, self-esteem, and social media usage. In the same line, DMello et al. (2018) showed that half of the students in a high school located in the Dakshina Kannada district demonstrated high self-esteem, while 26% displayed

moderate levels, and the remaining 24% had low self-esteem. Similarly, Alamri (2019) found that a majority of undergraduate students at educational colleges reported high levels of engagement with social media platforms for educational purposes at King Faisal University in Saudi Arabia. Furthermore, Khumalo and Utete (2023) conducted a study on academic performance and discovered that most participants demonstrated satisfactory academic performance among the university students at the University of Technology in South Africa.

The study findings revealed that social networking usage had a positive link to the academic achievement of nursing students, supporting H1. This suggests that digital communication can serve as a platform for educational resources, collaboration, and academic support, contributing to improved academic performance. Similarly, Ahmed et al. (2020) found a positive connection between the use of social networking platforms and educational attainment among university students in Pakistan. Similarly, Alamri (2019) discovered that the Saudi students at King Faisal University had favorable attitudes towards using social media platforms for academic uses. This study also revealed that these students perceived social networking as a valuable tool that enhanced their academic attainment. According to their analysis, social media platforms facilitated efficient time management, independent knowledge acquisition, and improved collaboration among peers and educators. This investigation also aligns with the research conducted by Al Ahmad and Obeidallah (2019), who suggest that integrating Facebook and YouTube into instructional approaches can enhance educational goals and yield positive outcomes for students while studying Practical Programming Labs course at Hashemite University in Jordan.

In contrast with our results, [Bhandarkar et al. \(2021\)](#) concluded that utilizing web-based social networks and social networking had an adverse impact on academic achievement among undergraduate medical students in the 21st century. [Demirbilek and Talan \(2018\)](#) discovered that web-based social media engagement hinders the educational progress of college students from a prominent state university in the southeast region of Turkey. Furthermore, the results of [Lau \(2017\)](#) proposed that social media usage for academic purposes does not predict academic attainment among university students in Hong Kong. These contradictory findings may be due to social media usage patterns and educational systems varying across regions and countries. At the same time, utilizing social networking for non-academic purposes may engage students with platforms for a long time, ultimately negatively impacting their academic achievement. [Whelan et al. \(2020\)](#) observed the impact of online social channels on self-regulation, an essential factor in achieving optimal academic performance, and revealed that excessive engagement with social media platforms can delay students' ability to effectively regulate their behavior, thus hindering academic success.

The study findings indicated that the self-confidence of the participating students was not associated with their academic performance, which does not support H2. This finding agreed with the study by [Acosta-Gonzaga \(2023\)](#), which found that self-esteem did not significantly impact behavioral, emotional, cognitive, learning, and metacognitive engagement, as well as academic achievement of undergraduate students at a public university. Also, the investigation conducted in Khyber Pukhtankhwa, Pakistan, by [Khan et al. \(2022\)](#) revealed no link between nursing students' self-confidence and educational attainment.

These findings disagreed with [Britwum et al. \(2022\)](#), who examined self-confidence as an independent variable of students' academic attainment in the College of Education in Ghana and found that it was positively associated with academic performance. Also, the investigation of [Abdulghani et al. \(2020\)](#) reported that self-worth correlated positively with academic attainment among the students of six health science colleges at Princess Nourah bint Abdulrahman University in Saudi Arabia.

This contradictory finding may be due to other factors correlated to self-esteem, such as grit and self-directed learning readiness. For instance, the study by [Zhao et al. \(2021\)](#) conducted in the Hebei Province of China reveals that academic self-efficacy, self-confidence, and perceived social support are essential for encouraging academic involvement, ultimately enhancing adolescent academic attainment. Additionally, [Oducado \(2021\)](#) concluded that self-esteem, self-paced learning readiness, and grit significantly contribute to the educational achievement of nursing students in a higher education institution in the Philippines.

The present study revealed no association between online social networking and the self-esteem of the participants, which does not support H3. This finding is supported by the empirical investigation conducted by [Valkenburg et al. \(2021\)](#), which suggests that the majority of young individuals in the southern area of the Netherlands have negligible or no influence of social networking on their self-confidence. Similarly, [Al-Ghafri et al. \(2016\)](#) found that social networking

did not affect an individual's self-confidence. On the contrary, several investigations exploring the correlation between the utilization of social networking and self-confidence have found that individuals who devote more time engaging with social networking platforms tend to exhibit lower levels of self-confidence ([Hawi & Samaha, 2017](#); [Vogel et al., 2015](#)). This contradiction may be due to students receiving positive feedback, likes, or supportive comments on their posts or achievements on social media; it can increase their self-confidence by providing a sense of recognition and validation from their colleagues ([Chretien et al., 2015](#); [Perrella, 2017](#)).

Limitations of the Study

Firstly, employing a descriptive correlational design enables the identification of associations between social networking, self-esteem, and academic performance, yet it does not allow for causal inferences. Secondly, the findings may lack generalizability as the study was conducted within a single academic setting. Furthermore, using an online questionnaire may have hindered respondents' ability to seek clarification on challenging questions. To address these limitations, future research could adopt a longitudinal design to explore causal relationships among these variables. Replicating the study across diverse academic settings would enhance the generalizability of the findings. Additionally, qualitative studies could provide insights into the experiences and perceptions of nursing students regarding social media use, self-esteem, and academic performance.

Implications of the Study

Nursing educators and decision-makers in nursing education have the opportunity to establish collaborative learning environments by integrating social media. This approach aims to improve communication, enhance the learning experience, and ultimately boost the academic achievements of nursing students. Also, nursing staff can use social media for educational purposes, such as sharing evidence-based practices, facilitating communication, and fostering collaboration among healthcare teams. Policies and guidelines should be developed to ensure responsible and ethical use of social media platforms. These guidelines should outline the best practice for healthcare professionals when engaging with social media, ensuring patient privacy and confidentiality. Furthermore, healthcare organizations should provide training and education on social media literacy and its potential effect on mental health for healthcare professionals.

Conclusion

This study highlights the potential benefits of integrating social media into nursing education to improve academic performance. However, limitations exist, such as the inability to establish causality and possible lack of generalizability. Future research should employ longitudinal designs and diverse settings to address these limitations. Leveraging social media can enhance communication, learning experiences, and collaboration among nursing students and healthcare professionals. It is crucial to develop policies for responsible social media use, ensuring patient privacy, and providing education on its effects on mental health. Overall, while promising, further research and careful implementation are

needed to harness the benefits of social media fully in nursing education.

Declaration of Conflicting Interest

The authors declared there is no conflict of interest in this study.

Funding

This study was funded by the Deanship of Scientific Research at Shaqra University through the project number (SU-ANN-2023054).

Acknowledgment

The authors extend their appreciation to the Deanship of Scientific Research at Shaqra University for funding this research work.

Authors' Contributions

All authors contributed equal and significant contributions to this study, including substantial involvement in the conception or design of the work, analysis or interpretation of data, drafting of the work, and final approval of the version to be published.

Authors' Biographies

Dr. Ibrahim Abdullatif Ibrahim is an Assistant Professor of Nursing Administration in the Nursing Department at the College of Applied Medical Sciences, Shaqra University. He is experienced in developing and delivering high-quality courses in nursing administration conducting and publishing research in nursing leadership and education.

Dr. Mona Hamdy Mostafa Mohamed is an Assistant Professor of Mental Health Nursing in the Nursing Department at the College of Applied Medical Sciences, Shaqra University. He is experienced in teaching and conducting research related to mental health nursing context.

Dr. Atallah Alenezi is an Associate Professor of Mental Health Nursing in the Nursing Department at the College of Applied Medical Sciences, Shaqra University. He is experienced in teaching and research related to mental health nursing context.

Data Availability

The datasets are available from the corresponding author upon reasonable request.

Declaration of Use of AI in Scientific Writing

Nothing to declare.

References

- Abdulghani, A. H., Almelhem, M., Basmah, G., Alhumud, A., Alotaibi, R., Wali, A., & Abdulghani, H. M. (2020). Does self-esteem lead to high achievement of the science college's students? A study from the six health science colleges. *Saudi Journal of Biological Sciences*, 27(2), 636-642. <https://doi.org/10.1016/j.sjbs.2019.11.026>
- Acosta-Gonzaga, E. (2023). The effects of self-esteem and academic engagement on university students' performance. *Behavioral Sciences*, 13(4), 348. <https://doi.org/10.3390/bs13040348>
- Ahmed, R. R., Salman, F., Malik, S. A., Streimikiene, D., Soomro, R. H., & Pahi, M. H. (2020). Smartphone use and academic performance of university students: A mediation and moderation analysis. *Sustainability*, 12(1), 439. <https://doi.org/10.3390/su12010439>
- Al Ahmad, A., & Obeidallah, R. (2019). The impact of social networks on students' academic achievement in practical programming labs. *International Journal of Advanced Computer Science and Applications*, 10(11), 56-61.
- Al-Ghafri, R. K., Al-Badi, A. H., & Al-Ghafri, K. (2016). Users' activities on social media as indicators of self-esteem: A case study in Oman. *Journal of Internet Social Networking & Virtual Communities*, 1, e747714. <http://dx.doi.org/10.5171/2016.747714>
- Alamri, M. M. (2019). Undergraduate students' perceptions toward social media usage and academic performance: A study from Saudi Arabia. *International Journal of Emerging Technologies in Learning (Online)*, 14(3), 61-79.
- Alamri, M. M., Almaiah, M. A., & Al-Rahmi, W. M. (2020). Social media applications affecting students' academic performance: A model developed for sustainability in higher education. *Sustainability*, 12(16), 6471. <https://doi.org/10.3390/su12166471>
- Almutairi, M., Simpson, A., Khan, E., & Dickinson, T. (2022). The value of social media use in improving nursing students' engagement: A systematic review. *Nurse Education in Practice*, 64, 103455. <https://doi.org/10.1016/j.nepr.2022.103455>
- Alshuaibi, M. S. I., Alshuaibi, A. S. I., Shamsudin, F. M., & Arshad, D. A. (2018). Use of social media, student engagement, and academic performance of business students in Malaysia. *International Journal of Educational Management*, 32(4), 625-640. <https://doi.org/10.1108/IJEM-08-2016-0182>
- Ansari, J. A. N., & Khan, N. A. (2020). Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learning Environments*, 7, 9. <https://doi.org/10.1186/s40561-020-00118-7>
- Bhandarkar, A. M., Pandey, A. K., Nayak, R., Pujary, K., & Kumar, A. (2021). Impact of social media on the academic performance of undergraduate medical students. *Medical Journal Armed Forces India*, 77, S37-S41. <https://doi.org/10.1016/j.mjafi.2020.10.021>
- Birchmeier, C., Grattan, E., Hornbacher, S., & McGregory, C. (2015). *Academic Performance Questionnaire*. https://www.academia.edu/57347883/_PDF_Academic_Performance_Questionnaire
- Brailovskaia, J., & Margraf, J. (2018). What does media use reveal about personality and mental health? An exploratory investigation among German students. *PLoS One*, 13(1), e0191810. <https://doi.org/10.1371/journal.pone.0191810>
- Britwum, F., Obed Amoah, S., Acheampong, H. Y., & Adjei, E. (2022). Self-esteem as a predictor of students' academic achievement in the colleges of education. *International Journal of Learning and Teaching*, 14(1), 43-54.
- Burnasheva, R., & Suh, Y. G. (2021). The influence of social media usage, self-image congruity and self-esteem on conspicuous online consumption among millennials. *Asia Pacific Journal of Marketing and Logistics*, 33(5), 1255-1269. <https://doi.org/10.1108/APJML-03-2020-0180>
- Chretien, K. C., Tuck, M. G., Simon, M., Singh, L. O., & Kind, T. (2015). A digital ethnography of medical students who use Twitter for professional development. *Journal of General Internal Medicine*, 30, 1673-1680. <https://doi.org/10.1007/s11606-015-3345-z>
- Demirbilek, M., & Talan, T. (2018). The effect of social media multitasking on classroom performance. *Active Learning in Higher Education*, 19(2), 117-129. <https://doi.org/10.1177/1469787417721382>
- DMello, L., Monteiro, M., & Pinto, N. (2018). A study on the self esteem and academic performance among the students. *International Journal of Health Sciences and Pharmacy (IJHSP)*, 2(1), 1-7. <https://doi.org/10.47992/ijhsp.2581.6411.0021>
- Dwumah Manu, B., Ying, F., Oduro, D., Antwi, J., & Yakubu Adjuk, R. (2023). The impact of social media use on student engagement and acculturative stress among international students in China. *PLoS One*, 18(4), e0284185. <https://doi.org/10.1371/journal.pone.0284185>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fernández-Castillo, A., Chacón-López, H., & Fernández-Prados, M. J. (2022). Self-esteem and resilience in students of teaching: Evolution associated with academic progress. *Education Research International*, 2022, 4854332. <https://doi.org/10.1155/2022/4854332>
- Gupta, S., & Bashir, L. (2018). Social networking usage questionnaire: Development and validation in an Indian higher education context. *Turkish Online Journal of Distance Education*, 19(4), 214-227. <https://doi.org/10.17718/tojde.471918>
- Habes, M., Salloum, S. A., Alghizzawi, M., & Mhamdi, C. (2019). The relation between social media and students' academic performance in Jordan: YouTube perspective. *International Conference on Advanced Intelligent Systems and Informatics*.
- Hassan, K., & Afzal, S. (2022). Social-media usage, self-esteem and self-concept in young adults. *International Journal of Business and Economic Affairs*, 7(1), 1-9. <https://doi.org/10.24088/IJBEA-2022-71001>
- Hawi, N. S., & Samaha, M. (2017). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576-586. <https://doi.org/10.1177/0894439316660340>

- Isah, A., & Ogundele, O. R. (2020). Exploring the use of social media as tools for information sharing among undergraduates of university of ilorin. In A. Tella (Ed.), *Handbook of Research on Digital Devices for Inclusivity and Engagement in Libraries* (pp. 297-306). IGI Global. <https://doi.org/https://doi.org/10.4018/978-1-5225-9034-7.ch015>
- Khan, S., Anwar, N., Khan, I., Ullah, S., Suliman, M., & Sultan, A. (2022). Self-esteem and its impact on academic performance among undergraduate nursing students of Khyber Pukhtankhwa Pakistan: A correlational study. *Pakistan Journal of Health Sciences*, 3(5), 204-207. <https://doi.org/10.54393/pjhs.v3i05.232>
- Khumalo, M., & Utete, R. (2023). Factors that influence academic performance of students: An empirical study. *The Seybold Report*, 18(106), 1710-1722.
- Kind, T., & Evans, Y. (2015). Social media for lifelong learning. *International Review of Psychiatry*, 27(2), 124-132. <https://doi.org/10.3109/09540261.2014.990421>
- Kovach, V., Deinega, I., Iatsyshyn, A., Kovalenko, V., & Buriachok, V. (2019). Electronic social networks as supporting means of educational process in higher education institutions. International Workshop on Conflict Management in Global Information Networks (CMiGIN 2019), Lahiry, S., Choudhury, S., Chatterjee, S., & Hazra, A. (2019). Impact of social media on academic performance and interpersonal relation: A cross-sectional study among students at a tertiary medical center in East India. *Journal of Education and Health Promotion*, 8, 73. https://doi.org/10.4103%2Fjehp.jehp_365_18
- Lau, W. W. F. (2017). Effects of social media usage and social media multitasking on the academic performance of university students. *Computers in Human Behavior*, 68, 286-291. <https://doi.org/10.1016/j.chb.2016.11.043>
- Martínez Rodríguez, R. A., Alvarez Xochihua, O., Victoria, O. D. M., Arámburo, A. J., & Fraga, J. Á. G. (2019). Use of machine learning to measure the influence of behavioral and personality factors on academic performance of higher education students. *IEEE Latin America Transactions*, 17(04), 633-641.
- Mirzaei-Alavijeh, M., Rahimi, H., Matin, B. K., & Jalilian, F. (2018). Self-esteem and academic achievement among students of Kermanshah university of medical sciences. *Educational Research in Medical Sciences*, 7(1), e79919. <https://doi.org/10.5812/erms.79919>
- Moradi, D., Karami, M., Ghanei Gheshlagh, R., Nemati, M., & Dehvan, F. (2018). Evaluation of the relationship between self-esteem and academic success in nursing students of Kurdistan university of medical sciences, Sanandaj, Iran in 2018. *Scientific Journal of Nursing, Midwifery and Paramedical Faculty*, 4(2), 71-78.
- Namaziandost, E., Heydarnejad, T., & Azizi, Z. (2023). To be a language learner or not to be? The interplay among academic resilience, critical thinking, academic emotion regulation, academic self-esteem, and academic demotivation. *Current Psychology*, 42, 17147-17162. <https://doi.org/10.1007/s12144-023-04676-0>
- Oducado, R. M. (2021). Academic performance and the role of self-directed learning, self-esteem, and grit among nursing students. *Jendela Nursing Journal*, 5(1), 1-9. <https://doi.org/10.31983/jnj.v5i1.6634>
- Pasyar, N., & Gholamzadeh, S. (2021). The role of self-esteem and field of study in predicting mental health of undergraduate health-professional students. *Qom University of Medical Sciences Journal*, 15(6), 394-403. <https://doi.org/10.32598/qums.15.6.2087.2>
- Perrella, A. (2017). Room for improvement: Palliating the ego in feedback-resistant medical students. *Medical Teacher*, 39(5), 555-557. <https://doi.org/10.1080/0142159X.2016.1254757>
- Promsri, C., Chaigusin, S., & Tupmongkol, T. (2019). Social media usage behaviors: Evidence of college students from a selected university in Thailand. *Cross Current International Journal of Economics, Management and Media Studies*, 1(5), 108-113. <https://doi.org/10.36344/CCIEMMS.2019.v01i05.002>
- Rathi, U., KJ, D. J., & Jose, J. M. (2020). Exploring the relationship between social media usage and academic performances. *International Journal of Indian Psychology*, 8(4), 1218-1229.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. New Jersey: Princeton University Press.
- Saxena, A., & Majumdar, P. (2015). Use of Facebook in higher education: An extension of classroom learning. *IMS Manthan (The Journal of Innovations)*, 10(1), 1-22.
- Sivakumar, A., Jayasingh, S., & Shaik, S. (2023). Social media influence on students' knowledge sharing and learning: An empirical study. *Education Sciences*, 13(7), 745. <https://doi.org/10.3390/educsci13070745>
- Valkenburg, P., Beyens, I., Pouwels, J. L., van Driel, I. I., & Keijsers, L. (2021). Social media use and adolescents' self-esteem: Heading for a person-specific media effects paradigm. *Journal of Communication*, 71(1), 56-78. <https://doi.org/10.1093/joc/jqaa039>
- Vogel, E. A., Rose, J. P., Okdie, B. M., Eckles, K., & Franz, B. (2015). Who compares and despairs? The effect of social comparison orientation on social media use and its outcomes. *Personality and Individual Differences*, 86, 249-256. <https://doi.org/10.1016/j.paid.2015.06.026>
- Von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., & Vandenbroucke, J. P. (2007). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. *The Lancet*, 370(9596), 1453-1457. [https://doi.org/10.1016/S0140-6736\(07\)61602-X](https://doi.org/10.1016/S0140-6736(07)61602-X)
- Whelan, E., Islam, A. K. M. N., & Brooks, S. (2020). Applying the SOBC paradigm to explain how social media overload affects academic performance. *Computers & Education*, 143, 103692. <https://doi.org/10.1016/j.compedu.2019.103692>
- Zhang, C. a., Tang, L., & Liu, Z. (2023). How social media usage affects psychological and subjective well-being: Testing a moderated mediation model. *BMC Psychology*, 11(1), 286. <https://doi.org/10.1186/s40359-023-01311-2>
- Zhao, Y., Zheng, Z., Pan, C., & Zhou, L. (2021). Self-esteem and academic engagement among adolescents: A moderated mediation model. *Frontiers in Psychology*, 12, 690828. <https://doi.org/10.3389/fpsyg.2021.690828>

Cite this article as: Ibrahim, I. A., Mohamed, M. H. M., & Alenezi, A. (2024). Exploring the linkages between social media use, self-esteem, and academic performance among nursing students in Saudi Arabia: A descriptive correlational study. *Belitung Nursing Journal*, 10(2), 152-159. <https://doi.org/10.33546/bnj.3188>