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A descriptive study of anxiety levels and coping skills among university nursing students in Saudi Arabia


Mira Naguib Abdelrazek^{1,2} , Fahed Saleh M Alsiwar³, Alhassan Ibrahim Mahdi Al Rabie⁴, Ali Yahya Ali Mohfar⁵, Hamad Hassan Al Marqan⁶, Fares Rwaf Alanazi⁷, Tariq Aziz Alanazi⁸, Suleiman Salem Saleh Laswar⁹

Author information

^{1,3-9} Department of Nursing, College of Pharmacy, Nursing and Applied Sciences, Riyadh Elm University, Saudi Arabia

² Department of Psychiatric and Mental Health Nursing, Faculty of Nursing, Alexandria University, Egypt

 mira.elfar@riyadh.edu.sa

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Abstract

Social interaction anxiety is a prevalent and impactful form of anxiety. The condition is characterized by intense fear or distress in social situations where individuals anticipate negative evaluation or judgment by others. University students are vulnerable to social interaction anxiety due to new social and academic demands, such as public speaking, group participation, and interactions with faculty and peers. Moreover, these challenges are often heightened by transitions to unfamiliar environments that creating stressors then impair communication, engagement, and academic performance. However, there is a lack of studies addressing these issues among nursing students in Saudi Arabia. Therefore, this study aimed to explore the social interaction anxiety levels and coping skills among students at Riyadh Elm University, Saudi Arabia. The study used a descriptive design and employed purposive sampling to recruit 405 students who met the inclusion criteria. The sample size was determined based on an expected frequency of 50%, a confidence coefficient of 99%, and an acceptable error of 1%. Data were collected using the Social Interaction Anxiety Scale (SIAS) and Brief COPE Inventory. Descriptive statistics, Pearson correlation, independent t-test, and one-way ANOVA were used for data analysis. Ethical clearance was obtained prior to the study. The results showed that most participants (83.46%) exhibited low levels of social interaction anxiety, while 15.56% reported moderate levels. Female students reported higher levels of social anxiety than male students. The most common coping strategies were avoidance, altering consciousness, and seeking support, with seeking support being the most prominent. These findings highlight the need for community nurses to develop intervention strategies to address psychological problems among nursing students.

Keywords: Anxiety levels, coping skills, nursing students, research among students, social interaction anxiety

Introduction

Social interaction anxiety is a significant issue for nursing students that might affect academic performance, personal relationships, and overall health (Seshabela et al., 2024). Looking at the theory, social interaction anxiety refers to the significant discomfort or fear experienced by individuals during social interactions or when anticipating social situation (Alomari et al., 2022). Among students, this manifests as worry about negative evaluation by peers, faculty, or authority figures that leading to avoidance of social engagement and participation in academic activities (Spaggiari et al., 2024). Globally, the prevalence of moderate to severe stress among nursing students ranges from 25% to 60%, particularly during clinical training and examination periods (Dias et al., 2024). Studies worldwide report high rates of stress and anxiety in nursing students. For example, a study in Europe found high academic-related stress and varying adaptive coping mechanisms (Antoniadou et al., 2024). In China, students similarly use both problem-focused (planning, seeking support) and emotion-focused (avoidance, disengagement) strategies to cope (Luo & Mohammed, 2023). In United Arab Emirates, such cultural and systemic factors influencing of using a coping among students (Alalalmeh et al., 2024). Recent studies in Saudi Arabia found that 60-70% of nursing students experience moderate to high stress levels, mainly due to academic workload, frequent assessments, and clinical placements (Alharbi & Alanazi, 2025). Saudi nursing students face unique stressors, including cultural expectations, societal perceptions of nursing, and language barriers (e.g. English), in addition to intense coursework and clinical demands (Alharbi, 2025; Dias et al., 2024; Alatawi et al.,

2020). Effective anxiety management strategies are key to successfully handling social interactions (Jang & Lee, 2025). Nursing students face increased social stress when managing schoolwork and interacting with peers (Aryuwat et al., 2024).

Identifying students' coping strategies is important for their emotional well-being (Aljaffer et al., 2025). Individuals with heightened anxiety often adopt avoidance behaviors to reduce distress (Hofmann & Hay, 2018). However, students with anxiety may also employ constructive coping mechanisms, such as problem-solving or seeking social support (Antoniadou et al., 2024; Luo & Mohammed, 2023). Anxiety among faculty students can impact their future career trajectories (Dalmış et al., 2023). Study highlighted the prevalence and effects of anxiety in the academic setting (Talapko et al., 2021). Research found that 26.68% of faculty members experienced anxiety during the study process (Sharma et al., 2023). A study at Isfahan University of Medical Sciences found that factors like delayed payments and lengthy research proposal approval processes contributed to faculty anxiety (Mohammed et al., 2021; Ashrafi-Rizi et al., 2014). Saudi educational policies emphasize the importance of managing stress among nursing students through integrated mental health support and curriculum reforms. The Ministry of Education and Ministry of Health recommend counseling services, stress management workshops, and resilience training within nursing programs to promote student well-being. Recent reviews suggest moderate effectiveness, especially when programs are tailored to specific student needs and are accessible (Alharbi & Alanazi, 2025; Dias et al., 2024; Alatawi et al., 2020). Although several nursing studies have completely explored general anxiety and coping in nursing students, few have specifically examined the relationship between social interaction anxiety and coping strategies.

The aforementioned studies above address several gaps in the existing literature concerning the mental health of nursing students in Saudi Arabia. Nevertheless, there's a global recognition of high anxiety levels among nursing students' specific data from Saudi Arabia remains limited. Although social interaction anxiety is recognized as a significant concern, research specific to Saudi Arabia is still evolving. Much of this research generalizes across cultures that rarely considering the unique cultural and educational aspects. Deeply rooted societal and gender norms about the nursing profession, further affect how Saudi students experience and express social interaction anxiety. Unlike some global cohorts, Saudi students also encounter anxiety when engaging with faculty, authority figures, or mixed-gender groups. For this reason, addressing social interaction anxiety is vital for designing effective solution to prevent future impact of anxiety. Therefore, this study offered an anxiety prevalence and the specific coping strategies adopted by Saudi nursing students. The research has significant implications for both the students and the broader healthcare system. Generally speaking, identifying the specific sources and levels of anxiety can help developing support programs, counseling services, and curriculum adjustments to mitigate these stressors. This will prepare future nurses with the emotional fortitude necessary to navigate the demanding healthcare environment. Investing in the mental health of nursing students translates into a more competent, resilient, and compassionate nursing workforce. Finally, our findings reinforce the global need to address social interaction anxiety in nursing education.

Method

The study employed a descriptive, observational, and correlational design to achieve its objectives at Riyadh Elm University, Saudi Arabia. The design aims to describe the characteristics of a population or phenomenon and simultaneously examine the associations between two or more variables within that group (Aggarwal & Ranganathan, 2019). The population of this study is all active nursing students in Riyadh Elm University, Saudi Arabia. The inclusion criteria are male or female, active nursing students, and agree to participate in the study. Meanwhile the exclusion criteria are Students who are not actively pursuing their studies, or who declined to participate. The sample size calculation used the Epi Info program version 7. Considering an expected frequency of 50%, a 99% confidence coefficient, and an acceptable error of 1%, the program estimated a minimum required sample size of 400 students from a total university population of approximately 600. A total of 405 students were included as represented ensure adequate amount for potential non-responses.

The researchers employed two instruments to assess outcomes which is consistent with the study's objectives. Both instruments were adapted to an online format for the purpose of this research. Online forms facilitated broad accessibility and efficient outreach to nursing students at Riyadh Elm University. The Social Interaction Anxiety Scale (SIAS) was used for social interaction anxiety assessment (Mattick & Clarke, 1998). The SIAS contains 20 items assessing different aspects of social anxiety such as speaking with authority figures, making eye contact, and engaging in group conversations, each rated on a 5-point Likert scale. The instrument aimed to identify individuals who struggle with interpersonal interactions and provide a standardized method for assessing the severity of anxiety (Zsido et al., 2021). Several authors already used SIAS in their research (Zsido et al., 2021; Dugyala & Poyrazli, 2021). Participants indicated

their agreement with each statement on a 5-point Likert scale. The scale ranged from "Not at all characteristic or true of me" to "Extremely characteristic or true of me". Sample items include statements such as "I get nervous if I have to speak with someone in authority (teacher, boss, etc.)" and "I have difficulty making eye contact with others." The SIAS divides the full score range (0–80) into three equal segments, with thresholds categorized as low (≤ 26.67), moderate (26.68–53.33), and high (≥ 53.34). Higher scores indicated greater social interaction anxiety and vice versa. The SIAS has demonstrated excellent psychometric properties, with high reliability and validity, as evidenced by a Cronbach's alpha > 0.90 and test-retest reliability of $r = 0.92$ (Zsido et al., 2021).

The Brief COPE Inventory as self-report questionnaire was used to measure a wide range of coping strategies used by individuals in their response to stress (Carver, 1997). This inventory consists of 28 items that assess 14 distinct coping mechanisms, including both problem- and emotion-focused strategies. On a scale of 1 (not at all) to 4 (a lot), the participants rated each item to indicate how frequently they employed each coping mechanism. The coping techniques that measured are self-distraction, active coping, denial, substance abuse, emotional and instrumental support, behavioral disengagement, venting, positive reframing, planning, humor, acceptance, religion, and self-blame were among. Several researchers used this instrument for their studies (Antoniadou et al., 2024; Dias et al., 2024; Aljaffer et al., 2025). For the Brief COPE scoring range of 27–108, the cut-offs are categorized as low (≤ 54), moderate (55–81), and high (≥ 82). Several researchers used the Brief COPE for their studies (Antoniadou et al., 2024; Dias et al., 2024; Aljaffer et al., 2025). The tool has been validated representing Cronbach's alpha values of 0.70–0.90, which indicate good structural validity. Reliability was also tested, with Cronbach's alpha coefficients showing high internal consistency (0.750) (Antoniadou et al., 2024).

Data was collected online using online form started from March 2025 to May 2025. However, before starting data collection, the researchers confirmed all necessary documents and approval letters were obtained. They then attended a meeting with their supervisors to discuss the process. Once approved, participants were asked to provide informed consent, after which they were administered the link to complete the questionnaire. A 1-week timeframe was provided for completion. Participation was restricted to students with official university email addresses, which prevented duplicate entries and ensured that only eligible respondents could participate. To enhance data quality, the survey included attention-check items designed to identify inattentive or random responses. Anonymity and confidentiality were strictly maintained, with no identifying information collected and all responses stored securely. This approach facilitated honest participation and produced reliable, representative data for analysis.

Upon the completion of data collection, a rigorous process of data management was initiated. All collected data were checked for completeness and accuracy, coded, and then securely entered into IBM SPSS Statistics software, version 25. To provide a clear overview of the study's participants, descriptive statistics were employed that offering a comprehensive profile of the demographic and relevant characteristics of the cohort. The findings were illustrated through the strategic use of frequency tables and cross-tabulations, which effectively presented the distribution and relationships of categorical variables. For quantitative data, key summary measures such as mean, standard deviation (SD), and percentage were calculated to succinctly represent central tendencies and dispersion. For the purpose of hypothesis testing and to explore the relationships between variables, a suite of appropriate inferential statistical analyses was performed. This included Pearson correlation to assess linear relationships between continuous variables, the independent samples t-test for comparing means between two independent groups, and One-way Analysis of Variance (ANOVA) for comparing means across three or more independent groups. Throughout all statistical computations, a p-value of less than or equal to 0.05 was established as the threshold for determining statistical significance. The ethical integrity of the study was paramount and upheld throughout every stage. Prior to any data collection, full ethical approval was diligently obtained from Riyadh Elm University, Saudi Arabia (No: FUGRP/2025/428/1260/1146). Furthermore, a comprehensive informed consent process was undertaken with all prospective participants. Each individual was provided with detailed and easily understandable information regarding the study's precise goals, the nature of their involvement, and the procedures for data handling. Participants were unequivocally guaranteed complete confidentiality and anonymity for all their responses. To further respect participant autonomy, it was clearly communicated that participation was entirely voluntary. Additionally, individuals were informed that they retained the absolute right to withdraw from the study at any point without penalty or prejudice.

Results

The study documented that the majority of participants were female (76.5%), with males representing the lowest percentage (23.5%). Among the student cohorts, fourth-year students constituted the highest percentage (35.6%), while fifth-year students accounted for the lowest (6.9%) (**Table 1**). The table provides the majority of students (83.46%) report

low levels of social interaction anxiety, with only a small minority experiencing moderate (15.56%) or high (0.99%) anxiety. This suggests that social anxiety may not be a significant concern for most students. In contrast, coping strategies are predominantly used at moderate levels across the board. For instance, the majority of students fall into the moderate category for approach coping (61.48%), avoidance coping (74.57%), altering consciousness (58.02%), seeking support (55.80%), and the overall Brief COPE score (79.51%) (**Table 2**).

The table shows that the coping variables show significant positive correlations with each other. Approach coping is moderately and correlated with avoidance coping ($r=0.199, p<0.001$), altering consciousness ($r=0.262, p<0.001$), seeking support ($r=0.533, p<0.001$), and is very strongly correlated with the Brief COPE total score ($r=0.819, p<0.001$). Avoidance coping also shows significant positive correlations with altering consciousness ($r=0.343, p<0.001$), seeking support ($r=0.157, p<0.05$), and the Brief COPE score ($r=0.591, p<0.001$). Similarly, altering consciousness is significantly correlated with seeking support ($r=0.268, p<0.001$) and the Brief COPE score ($r=0.586, p<0.001$). Seeking support is strongly correlated with the Brief COPE score as well ($r=0.711, p<0.001$). Overall, these findings indicate that while social interaction anxiety is largely independent of coping styles in this group, the different coping strategies are interrelated, with students who tend to use one type of coping also likely to use others. The strong associations among coping subscales and with the overall Brief COPE score suggest that coping behaviors tend to cluster that reflecting a general tendency toward active coping among university students (**Table 3**).

The table shows that females reported higher social interaction anxiety (mean=17.33, SD=12.62) compared to males (mean=13.33, SD=11.03), with this difference being significant ($p<0.05$). However, there were no significant sex differences in approach coping ($p>0.05$) or avoidance coping ($p>0.05$), indicating that both males and females use these coping strategies at similar levels. When examining academic year, there were no significant differences in social interaction anxiety, approach coping, or avoidance coping ($p>0.05$). This suggests that students' levels of anxiety and their use of coping strategies do not change as they progress through university. The table also presented that there are no significant differences between males and females in any of these coping domains such as altering consciousness, seeking support, or Brief COPE ($p>0.05$). Although females have higher mean scores across all three variables, these differences are not meaningful. Similarly, when comparing across academic years, no significant differences are observed for altering consciousness, seeking support, or Brief COPE ($p>0.05$). This indicates that the use of these coping strategies remains stable regardless of students' sex or their year in university. Overall, the findings suggest that both gender and academic progression have minimal impact on students' tendencies to use altering consciousness, seek support, or employ overall coping strategies (**Table 4**).

Table 1. Demographic characteristics of participants.

Variables	Frequency (n)	Percentage (%)
Sex		
Male	95	23.5
Female	310	76.5
Cohort*		
First	92	22.7
Second	30	7.4
Third	46	11.4
Fourth	144	35.6
Fifth	28	6.9
Sixth	65	16

*Cohort=academic years.

Discussion

The findings documented evidence of how individuals with social interaction anxiety employ different coping mechanisms, with particular attention to approach, avoidance, altering consciousness, and seeking support strategies. This is consistent with a review of various coping strategies used by nursing students in clinical practice (Loureiro et al., 2024). However, the sociodemographic data revealed a significant gender imbalance, with 76.5% of the participants being female. This skewed distribution may limit the generalizability as gender differences in social anxiety and coping strategies. Research indicates that women are more likely to report higher levels of psychological distress and social anxiety than are men (Hyde, 2014; Viertiö et al., 2021). This difference is attributed to socialization processes that

encourage women to be more expressive about their emotions and seek social support more frequently than men (Mommersteeg et al., 2024). In this study, the distribution across academic years showed that the majority of the participants were in their 4th year. This concentration may reflect the specific stressors and coping mechanisms relevant to this stage of their academic journey (Al-Dubai et al., 2011). Fourth-year students often face significant academic pressure, including preparing for final exams, completing major projects or theses, and planning for post-graduation careers (Suud & Na'imah, 2023). These stressors can exacerbate social anxiety and influence the choice of coping strategy. For instance, students in their final years may be more likely to use problem-focused coping strategies to manage academic responsibilities, though also experiencing increased social anxiety due to impending transitions (Dugyala & Poyrazli, 2021). Community and mental health nurses should provide psychoeducation, screening, intervention, and refer students to counseling (Kenwright et al., 2024). Meanwhile, families may offer social support, encouragement, and foster coping skill development to prevent all the psychological disorder (Yang et al., 2022). The academic year distribution also depicted varying levels of social anxiety and coping strategies across different stages of college life. First-year students may experience higher levels of social anxiety due to the uncertainty and unfamiliarity of their new environment that leading to feelings of nervousness and self-consciousness. Consequently, this could lead to increased dependence on avoidance coping strategies, such as evading social situations or denying problems. In contrast, last-year students may develop more coping mechanisms, but still face stressors about academic and professional futures (Oktara et al., 2024). Teachers can create supportive classroom climates, facilitate open discussion, mentor students, and guide them to reduce stress.

Table 2. Description of coping strategies.

Variables	Mean±SD	Mean %	n (low)	% (low)	n (mod.)*	% (mod.)*	n (high)	% (high)
SIAS	16.39±12.37	20.48	338	83.46	63	15.56	4	0.99
Approach coping	21.31±4.74	59.18	110	27.16	249	61.48	46	11.36
Avoidance coping	21.04±3.25	58.44	96	23.70	302	74.57	7	1.73
Altering consciousness	9.35±2.25	58.44	136	33.58	235	58.02	34	8.40
Seeking support	11.80±2.88	58.98	136	33.58	226	55.80	43	10.62
Brief COPE	63.49±9.17	58.79	72	17.78	322	79.51	11	2.72

*mod.=moderate; n(low/mod. /high)=number of participants in each level; %(low/mod. /high)=percentage of sample in each level.

Table 3. Correlation matrix between variables.

Variables	SIAS	Approach coping	Avoidance coping	Altering consciousness	Seeking support	Brief COPE
SIAS	1					
Approach coping	r=0.030 p=0.548	1				
Avoidance coping	r=-0.036 p=0.469	r=0.199 p=0.000**	1			
Altering consciousness	r=0.019 p=0.701	r=0.262 p=0.000**	r=0.343 p=0.000**	1		
Seeking support	r=0.049 p=0.329	r=0.533 p=0.000**	r=0.157 p=0.002**	r=0.268 p=0.000**	1	
Brief COPE	r=0.023 p=0.649	r=0.819 p=0.000**	r=0.591 p=0.000**	r=0.586 p=0.000**	r=0.711 p=0.000**	1

r= Pearson correlation coefficient; p= p-value; ** Correlation is significant at the 0.01 level.

In the study, SIAS highlighted several key areas of anxiety among participants. Items such as "I get nervous if I have to speak with someone in authority" and "I become tense if I have to talk about myself or my feelings" had notable mean scores that indicating common social anxiety. These findings are consistent with existing literature that identifies fear of authority figures and self-disclosure as significant components of social anxiety (Leary, 1983; Sigarlaki & Nurvinkania, 2022). The anxiety associated with speaking to authority figures can be intense as these interactions involve a risk of

negative evaluation or criticism exacerbating feelings of inadequacy and fear of judgment (Merino et al., 2024). In addition, the anxiety associated with self-disclosure is indicative of a more general fear of being vulnerable and exposed (Avny & Alon, 2025). People with social anxiety often fret that sharing personal details might result in negative judgments or rejection (Israelashvili et al., 2024). These particular fears are essential for comprehending the overall experience of social anxiety, as they pinpoint the scenarios most likely to provoke anxious reactions. However, the high mean score for the item "I find it easy to make friends my own age" suggests a potential ceiling effect, where participants score at the higher end of the scale. A ceiling effect occurs when a number of participants score near the top of the scale that limiting ability to detect differences among them (Zsido et al., 2021). This can skew the results and limit the variability required for comprehensive analysis. In the context of social anxiety research, a ceiling effect might indicate that the scale is not sensitive enough to capture the full range of anxiety experiences particularly among those who are less anxious or socially adept. Mental health researchers need to evaluate student needs, assess interventions, validate instruments, and disseminate effective strategies for reducing student anxiety and improving coping

Table 4. Comparison of sex and cohort with coping strategies.

Variables	SIAS	Approach coping	Avoidance coping	Altering consciousness	Seeking support	Brief COPE
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Sex						
Male	13.33±11.03	20.86±5.13	21.00±3.30	9.00±2.35	11.40±2.73	62.26±9.11
Female	17.33±12.62	21.44±4.61	21.05±3.24	9.46±2.21	11.92±2.92	63.87±9.17
<i>p</i>	0.006*	0.298*	0.892*	0.082*	0.127*	0.136*
Cohort						
First	14.72±12.15	21.38±4.80	20.99±3.12	9.36±2.29	11.78±2.95	63.51±8.75
Second	20.63±13.23	20.17±4.80	20.67±3.24	8.97±2.39	12.13±3.05	61.93±9.47
Third	13.59±10.15	21.35±4.07	20.85±3.10	9.02±2.12	11.52±2.72	62.74±7.32
Fourth	17.55±12.56	21.85±4.95	20.98±3.44	9.56±2.13	11.91±2.91	64.29±9.95
Fifth	16.32±9.12	21.86±5.45	21.46±2.17	9.14±2.19	12.64±3.08	65.11±9.27
Sixth	16.23±13.95	20.26±4.11	21.37±3.54	9.38±2.49	11.23±2.65	62.25±8.96
<i>p</i>	0.114**	0.207**	0.881**	0.655**	0.310**	0.503**

*Independent samples t-test; **one-way ANOVA.

The Brief COPE analysis revealed that participants used both approach and avoidance coping strategies that highlighting the complexity of coping behaviors. The high mean scores for approach coping items, such as "I've been turning to work or other activities to take my mind off things," suggest that participants engage in problem-solving and distraction techniques. These strategies are considered effective coping mechanisms because they help individuals manage stress by redirecting their focus and energy towards productive activities (Carver, 1997; Lavoie-Tremblay et al., 2022). Engaging in work or other activities can provide a sense of accomplishment and control which can mitigate feelings of anxiety (Pressman et al., 2009). Strategies addressing challenges are beneficial for the patients to deal with social anxiety. For instance, reaching out for social support, engaging in social activities, Open-minded towards others. Furthermore, problem-solving entails pinpointing and tackling the underlying causes of stress leading to effective resolutions and a decrease in anxiety (Rustham et al., 2025). These approaches can assist individuals in building resilience and promoting self-control over difficulties. On the other hand, the positive correlation between social interaction anxiety and avoidance coping indicates that individuals experiencing higher levels of anxiety are more inclined to adopt avoidance strategies. Avoidance coping entails attempts to dodge or escape situations that trigger anxiety, rather than facing them head-on (Allen, 2021). Although avoidance offer short-term relief, it can intensify stress and anxiety over time by hindering individuals from finding the causes of anxiety (Holahan et al., 2005; Wang et al., 2024). Nevertheless, the weak correlation indicates that although a relationship exists between social anxiety and avoidance coping, its strength is limited. This implies that other factors not examined in this study might influence avoidance behaviors.

Avoidance coping mechanisms like denial, substance use, and behavioral disengagement are linked to negative outcomes. These approaches can hamper individuals from tackling the root causes of their anxiety that resulting in

accumulated unresolved stress (Holahan et al., 2005). For instance, resorting to substances lead to addiction, behavioral disengagement cause missed opportunities and stagnation in patients' life. It is important to note that such maladaptive strategies can perpetuate a harmful cycle (Cortez et al., 2023). The dual reliance on both adaptive and maladaptive strategies emphasized the nature of coping behaviors to social anxiety. This finding indicates that although individuals acknowledge the advantages of adaptive coping mechanisms, they might also employ maladaptive strategies when experiencing overwhelming stress or an inability to cope effectively. Mental health nurses should perform health assessments, run stress management workshops, counseling and reflective practice sessions, and refer at-risk students for specialized care. The study documented a correlation and an understanding of how social interaction anxiety relates to coping strategies. The finding indicates that individuals experiencing higher levels of anxiety are more inclined to adopt these strategies. This result is consistent with research demonstrating that social anxiety influences coping behaviors then utilize social or emotional support to manage anxiety (Aldao et al., 2010).

The positive correlation between social interaction anxiety and the pursuit of support highlights an important trend. It suggests that individuals experiencing higher levels of social anxiety are more likely to seek out social or emotional support from others (Hur et al., 2020). The behavior can be seen as a coping strategy, where individuals reduce anxiety by depending on the emotional and practical help from social circles. Seeking support can offer reassurance, lessen feelings of loneliness, and provide practical advice for handling anxiety-inducing situations (Acoba, 2024). The result corroborates findings from existing research underscoring the importance of social support in mitigating the anxiety and stress (Johnson-Esparza et al., 2021). The study also presented that various factors may lead individuals with social anxiety in daily interactions. For example, personality characteristics (e.g. neuroticism and lack of self-confidence) have been linked to a higher likelihood of employing avoidance coping (Skinner et al., 2003). Moreover, previous encounters with social rejection or failure can strengthen avoidance behaviors as people might afraid of experiencing similar negative situations again (Hofmann, 2007). The way people choose to cope by avoiding problems can also be shaped by their environment (Veisi et al., 2024). The correlation revealed the intricate nature of coping behaviors in individuals with social anxiety. Even though seeking support is a beneficial and adaptive coping method, an over-reliance on avoidant coping can prove harmful and counterproductive. This contrast highlights the importance of interventions that encourage adaptive coping strategies and decrease reliance on maladaptive ones. Cognitive behavioral therapy (CBT) has proven effective in assisting individuals with social anxiety and developing adaptive coping skills (Curtiss et al., 2021; Bhattacharya et al., 2023). This study provides an in-depth analysis of social interaction anxiety and coping among Saudi nursing students that complementing global literature. High sample size and detailed cohort data strengthen generalizability within the region. However, limitations appeared to be self-report bias, cross-sectional design precluding causality, limited to one institution, and the overrepresentation of female limits the extent to which the conclusions can be generalized.

Conclusion

The study presented a connection between social interaction, anxiety, and coping strategies. The positive correlations between social anxiety and both seeking support and avoidance coping underscore the nature of coping behaviors in nursing students. Though seeking support can be advantageous, relying on avoidant coping may be harmful for students. They must address the issue and seek the best possible solution. Understanding these relationships can inform the development of interventions that helping students with social anxiety and reducing their reliance on maladaptive ones. Nursing lecturer and mental health nurses should collaborate to prevent and solve the anxiety or stress among students. Future studies should consider additional factors that might influence coping behaviors to provide a more comprehensive understanding of social anxiety and coping mechanisms in Saudi Arabia.

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AI statements

This study and manuscript were prepared without the use of generative artificial intelligence tools. All concepts and ideas were conceived and developed by the authors.

Author's declaration

Each author contributed to the research design, data collection, and manuscript preparation. This version of publication was approved by all authors.

Availability of data and materials

The datasets are available from the author upon request.

Competing interests

No conflicts of interest are identified by the researchers.

Ethical clearance

The study adhered to the principles outlined in the Declaration of Helsinki (2008). The research procedures were comprehensively reviewed and approved by the Research Ethics Committee of Riyadh Elm University, Saudi Arabia (No: FUGRP/2025/428/1260/1146).

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Publishers and journal's note

Although the study employed an observational design, the findings highlighted important points regarding psychological concerns and facts experienced by nursing students. This awareness should serve as a trigger for health authorities and educators to give closer attention to these issues in Saudi Arabia.

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Authors' insight

Key points

- The study focuses on measuring and describing the prevalence and intensity of anxiety symptoms experienced by nursing students in Saudi Arabia.
- The finding presents coping mechanisms and strategies nursing students use to manage anxiety in their academic and clinical environments.
- The research is specific to Saudi Arabia that aiming to highlight educational or environmental factors influencing anxiety and coping among nursing students in this region.

Emerging nursing avenues

- What are the most common levels and types of anxiety experienced and solved by university nursing students in Saudi Arabia?
- Which coping skills are predominantly used by Saudi nursing students to handle anxiety in their nursing study journey?
- How do belief or educational factors in Saudi Arabia impact the anxiety levels and coping strategies of nursing students?

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