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Associations of Socio-emotional Competency and Self-Efficacy: A Cross-sectional Study among the Undergraduate Nursing Students

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ABSTRACT

***Background**: Socio-emotional competence and self-efficacy are key psychological resources that influence how nursing students cope with academic and clinical demands. While both constructs have been individually linked to academic performance, stress management, and professional functioning, their interrelationship has been less explored among undergraduate nursing students in low- and middle-income settings. **Objective**: To determine the association between socio-emotional competence and self-efficacy among undergraduate nursing students enrolled in three nursing colleges in Peshawar, Pakistan. **Methods**: An analytical cross-sectional study was conducted from October 2024 to January 2025 among Bachelor of Science in Nursing students from semesters 2–8 at one public and two private nursing colleges. Data were collected using a self-administered questionnaire comprising sociodemographic items, the 25-item Socio-Emotional Competence Scale, and the 10-item General Self-Efficacy Scale. Scores were summarised as means and standard deviations and dichotomised into low and high categories using the sample median. Associations were examined using chi-square tests and odds ratios, and the linear relationship between continuous scores was assessed with Pearson's correlation. **Results**: Of 215 participants, 54.9% were male and 68.4% were aged 18–22 years. The mean socio-emotional competence score was 78.45 (SD 8.35) and the mean self-efficacy score was 32.49 (SD 4.14). Overall, 52.6% of students had low socio-emotional competence and 51.6% had low self-efficacy. High socio-emotional competence was significantly associated with high self-efficacy ($\chi^2 = 23.30$, $p < 0.001$; odds ratio 3.93, 95% CI 2.23–6.93). Pearson's correlation showed a moderate positive relationship between socio-emotional competence and self-efficacy ($r = 0.561$, 95% CI 0.46–0.65, $p < 0.001$). **Conclusion**: Socio-emotional competence and self-efficacy are moderately and positively associated among undergraduate nursing students, yet nearly half of students exhibit low levels of both constructs. Integrating socio-emotional skills development into nursing curricula may be a promising approach to strengthening students' confidence and preparedness for academic and clinical challenges.*

Keywords
Socio-emotional competence; self-efficacy; nursing students; cross-sectional study;.

INTRODUCTION

Self-efficacy, defined as an individual's belief in their capability to organize and execute the actions required to manage prospective situations, is a core construct in social cognitive theory and a key determinant of behavior, motivation, and persistence in the face of challenge (1,2). In educational settings, academic self-efficacy has been shown to influence goal setting, effort expenditure, resilience to setbacks, and ultimately academic performance and professional development, particularly in demanding disciplines such as medicine and nursing (2,3). For nursing students, who must rapidly acquire complex cognitive, technical, and interpersonal skills, self-efficacy is not only an academic asset but also a foundational resource for coping with clinical stressors and transitioning into professional practice. Socio-emotional competence refers to the capacity to understand and regulate one's own emotions, accurately perceive and respond to others' emotions, and establish constructive interpersonal relationships in academic, clinical, and social contexts (4). It encompasses skills such as emotional awareness, empathy, self-management, relationship management, and responsible decision-making, and is closely aligned with broader constructs such as emotional intelligence and emotional regulation (4,5). A growing body of work suggests that students with higher socio-emotional competence are better able to manage stress, communicate effectively, and maintain supportive peer and mentor relationships, which in turn favor engagement and performance in learning environments (5–7). Empirical studies in school and university populations have reported that socio-emotional competencies, including emotion regulation and social skills, are positively associated with academic self-efficacy, academic engagement, and achievement, often with self-efficacy mediating the relationship between emotional skills and performance outcomes (6–8).

In nursing education, socio-emotional competence has particular salience because nursing students must learn to provide empathetic, person-centered care while navigating emotionally charged situations such as suffering, uncertainty, and end-of-life care. Evidence from undergraduate nursing cohorts indicates that higher social-emotional competence is associated with better academic performance and learning outcomes,

supporting the notion that these skills underpin effective professional socialization (8). Emotional intelligence and related socio-emotional skills have also been linked to higher quality of nursing care, better therapeutic relationships, and safer clinical practice among qualified nurses, underscoring the relevance of these competencies along the education–practice continuum (9). At the same time, research suggests that exposure to trauma or chronic stress can undermine emotional functioning and dampen socio-emotional skills, potentially eroding resilience and increasing vulnerability to burnout in healthcare personnel (10).

Longitudinal and cross-sectional studies in adolescents and young adults have further shown that effective emotion regulation and stable socio-emotional functioning are associated with higher levels of self-efficacy and psychological adjustment, while emotional instability and poor regulation are related to lower self-efficacy and greater distress (11). In educational settings, teachers' emotional intelligence and emotion regulation capacities have been associated with more positive teacher–student relationships and better student outcomes, highlighting the importance of socio-emotional processes in learning environments more broadly (12). Within health professions education, nursing students are repeatedly described as experiencing high levels of stress during clinical placements, due to exposure to unfamiliar environments, high responsibility, interpersonal demands, and the need to integrate theory with practice in real time (13). The transition into university, relocation to hostels, separation from family supports, and adaptation to rigid academic and clinical schedules can further compound stress, uncertainty, anxiety, and emotional instability (14–16). Together, these pressures may erode both socio-emotional competence and self-efficacy if not adequately buffered by supportive learning environments and targeted skills training.

International studies have begun to explore socio-emotional competence and self-efficacy among university students and trainee teachers, reporting moderate to high levels of both constructs in some contexts, and demonstrating positive associations between them (17,18). Some work in health professions has linked clinical competence and professional functioning to self-efficacy and related psychological resources (19). However, many of these studies are situated in high-income or Western contexts and focus on teachers, general university students, or practising nurses rather than undergraduate nursing students in low- and middle-income countries. Furthermore, structural and contextual factors such as limited mental health support, large class sizes, resource constraints, and cultural norms about emotional expression may differentially shape socio-emotional development and self-efficacy among nursing students in South Asian settings.

Within Pakistan, recent work in Peshawar among nurse educators reported a significant association between socio-emotional competence and self-efficacy, suggesting that educators with stronger socio-emotional skills tend to feel more efficacious in their professional roles (20). This finding aligns with international evidence and points to the potential importance of socio-emotional competence for professional functioning in local nursing contexts. However, to date, there is a paucity of empirical research examining the relationship between socio-emotional competence and self-efficacy among undergraduate nursing students in this region. Undergraduate students differ from nurse educators in age, developmental stage, clinical responsibility, and exposure to stressors, and their socio-emotional competencies are still forming. Understanding how socio-emotional competence relates to self-efficacy in this population is therefore critical for designing educational interventions and support systems to enhance students' academic success, clinical performance, and psychological well-being.

Against this background, there is a clear knowledge gap regarding the socio-emotional and self-efficacy profiles of undergraduate nursing students in Peshawar, and the extent to which socio-emotional competence is associated with self-efficacy in this setting. Addressing this gap has practical implications for curriculum design, skills training, and student support systems in nursing colleges in Hayatabad and the wider Peshawar region. On a conceptual level, it also contributes to the emerging literature on socio-emotional determinants of self-efficacy in health professions education in low- and middle-income contexts. Therefore, this study aimed to determine the association between socio-emotional competence and self-efficacy among undergraduate nursing students enrolled in three nursing colleges in Peshawar, Pakistan. It was hypothesized that higher levels of socio-emotional competence would be positively associated with higher levels of self-efficacy in this population.

MATERIALS AND METHODS

This study employed an analytical cross-sectional design to investigate the association between socio-emotional competence and self-efficacy among undergraduate nursing students. The design was chosen to allow simultaneous measurement of both constructs and relevant demographic variables in a defined population at a single point in time, enabling estimation of prevalence and assessment of statistical associations between exposure and outcome variables. The study was conducted over a four-month period, from October 2024 to January 2025, in three nursing colleges located in Peshawar, Khyber Pakhtunkhwa, Pakistan: the Northwest College of Nursing, Pak International Nursing College, and the Institute of Nursing at Khyber Medical University. These institutions were selected because they represent a mix of private and public sector nursing education and collectively train a substantial proportion of undergraduate nursing students in the Hayatabad and Peshawar area.

The target population comprised undergraduate students enrolled in the Bachelor of Science in Nursing (BSN) programme from the second to the eighth semester at the participating colleges. Inclusion criteria were: current enrolment in BSN semesters 2–8 at one of the three institutions and willingness to provide informed consent. First-semester students were excluded because they had only recently entered the programme and were considered unlikely to have fully developed or stabilized self-efficacy beliefs and socio-emotional competencies in the context of nursing education. Students on extended leave or with documented cognitive impairments that could preclude completion of a self-administered questionnaire were also excluded. A non-probability convenience sampling strategy was used, whereby all eligible students present in classrooms or scheduled academic sessions during the data collection period were invited to participate. This pragmatic approach was adopted due to logistical constraints and variability in class schedules across institutions.

Sample size was estimated a priori using the Rao soft online sample size calculator, assuming a 95% confidence level, 5% margin of error, and a conservative response distribution to maximize the required sample. Based on the estimated population of BSN students across the three colleges, the minimum target sample size was 215 participants, which was achieved. Data collection was coordinated with institutional focal persons at each college. After obtaining administrative permissions, the research team visited each institution and approached eligible students during scheduled teaching sessions. The study aims and procedures were explained, participation was emphasized as voluntary, and students were assured that refusal would not affect their academic standing. Written informed consent was obtained from all participants prior to questionnaire administration. The anonymous, self-administered questionnaires were distributed in paper form and completed on-site under the supervision of a trained data collector, who provided clarifications on questionnaire items if required but did not influence responses. Completed questionnaires were returned to the investigator in sealed envelopes to protect confidentiality.

Data were collected using a structured questionnaire comprising three sections: sociodemographic information, the Socio-Emotional Competence Scale (SECS), and the General Self-Efficacy Scale (GSES). The sociodemographic section captured age, gender, college, and current semester of study. Socio-emotional competence was measured using a 25-item SECS, which assesses five core domains of socio-emotional functioning: self-awareness, social awareness, self-management, relationship management, and responsible decision-making. Items are summed to yield a total socio-emotional competence score, with higher scores indicating greater socio-emotional competence. In previous applications of this scale in related populations, including nurse educators in Peshawar, the SECS has demonstrated excellent internal consistency, with Cronbach's alpha values around 0.95, supporting its reliability in the local context (20). Self-efficacy was measured using the 10-item General Self-Efficacy Scale developed by Schwarzer, grounded in social cognitive theory (21). Each item is rated on a four-point response scale ("not at all true", "barely true", "moderately true", "exactly true"), and item scores are summed to give a total self-efficacy score, with higher scores reflecting stronger general self-efficacy expectations (21). The GSES has shown robust psychometric properties across diverse populations, including health professions students, with reported Cronbach's alpha values of approximately 0.88 (21).

For the present study, the English versions of both scales were used, as English is the primary language of instruction in the participating institutions. Prior to full data collection, the questionnaire was reviewed by subject experts in nursing education and psychology to ensure content relevance and clarity for undergraduate nursing students in the local context. Minor wording refinements were made where necessary to improve comprehensibility without altering the underlying constructs. During data collection, standardized instructions were given to all participants, and they were asked to respond independently, based on their typical thoughts, feelings, and behaviors in academic and clinical situations. No identifying information, such as names or roll numbers, was collected, thereby preserving anonymity and minimizing social desirability bias.

The primary variables of interest were socio-emotional competence and self-efficacy. For descriptive analyses, both SECS and GSES total scores were treated as continuous variables, and summary statistics (means, standard deviations, medians, minima, and maxima) were calculated. For categorical analyses, socio-emotional competence and self-efficacy scores were dichotomized into "low" and "high" categories using the sample median as the cut-off, consistent with previous analytic approaches for similar constructs in cross-sectional designs (20). Sociodemographic variables (age group, gender, college, and semester) were treated as categorical variables. Potential sources of bias were addressed by using standardized, validated instruments, administering questionnaires under similar conditions across institutions, and ensuring anonymity to reduce reporting bias. Although the convenience sampling approach may limit representativeness, recruitment across three institutions and multiple semesters was intended to enhance the diversity and external validity of the sample within the Peshawar context.

Data were entered and analyzed using IBM SPSS Statistics version 28 (IBM Corp., Armonk, NY, USA). Double data entry and cross-checking of a random subset of questionnaires were performed to minimize data entry errors. Descriptive statistics were used to summarize sociodemographic characteristics and scale scores. Internal consistency of the SECS and GSES in the study sample was evaluated using Cronbach's alpha. Group differences in socio-emotional competence and self-efficacy scores across demographic categories (e.g., gender, age group, semester, and college) were explored using independent-samples t-tests or one-way analysis of variance (ANOVA), as appropriate, for continuous scores, and chi-square tests for categorical high/low categories. The association between socio-emotional competence level (low vs high) and self-efficacy level (low vs high) was examined using the chi-square test of independence, with effect size estimated by the phi coefficient. To quantify the linear relationship between socio-emotional competence and self-efficacy as continuous variables, Pearson's product–moment correlation coefficient (r) was calculated, along with corresponding p-values. All statistical tests were two-tailed, and a p-value of less than 0.05 was considered statistically significant. Cases with missing data on key items of either the SECS or GSES were excluded from the relevant analyses using pairwise deletion, to maximize the use of available data while maintaining analytic validity.

Ethical approval for the study was obtained from the Ethical Review Board of the Northwest Institute of Health Sciences, Peshawar (IRB&EC/2024-HIS/0178). The study adhered to recognized ethical principles for research involving human participants, including respect for autonomy, beneficence, non-maleficence, and confidentiality. Participation was voluntary, written informed consent was obtained prior to data collection, and students were free to decline or withdraw without academic or other penalty. Completed questionnaires were stored securely, and data were analyzed and reported in aggregate form only, ensuring that no individual participant or institution could be identified from the published results.

RESULTS

A total of 215 undergraduate nursing students participated in the study. Their demographic characteristics are presented in Table 1. Slightly more than half of the sample were male (54.9%), and most participants (68.4%) were in the 18–22-year age group, with a smaller proportion aged 23–26 years (31.2%) and very few aged 27–31 years (0.5%). The majority of students were enrolled at the Institute of Nursing Sciences, Khyber Medical University (59.5%), followed by Northwest College of Nursing (26.0%) and Pak International Nursing College (14.4%). With respect to academic progression, 32.6% were in the second semester, 22.3% in the fourth semester, 20.9% in the fifth semester, and 24.2% in the eighth semester.

Descriptive statistics for socio-emotional competence and self-efficacy scores are summarized in Table 2. The mean socio-emotional competence score was 78.45 (SD 8.35), with a median of 80 and a range from 46 to 95. The mean self-efficacy score was 32.49 (SD 4.14), with a median of 33 and a range from 16 to 40. Internal consistency was excellent for the Socio-Emotional Competence Scale (Cronbach's alpha = 0.95) and good for the General Self-Efficacy Scale (Cronbach's alpha = 0.88), supporting the reliability of both instruments in this sample

Using the sample median as the cut-off, socio-emotional competence and self-efficacy were dichotomized into low and high categories (Table 3). Just over half of the participants (52.6%) had a low level of socio-emotional competence, while 47.4% had a high level. Similarly, 51.6% of the students were classified as having low self-efficacy and 48.4% as having high self-efficacy, indicating that nearly half of the cohort scored below the median on both constructs.

The association between socio-emotional competence level and self-efficacy level is presented in Table 4. Among students with low socio-emotional competence, 76 (67.3%) had low self-efficacy and 37 (32.7%) had high self-efficacy. Among those with high socio-emotional competence, 35 (34.3%) had low self-efficacy and 67 (65.7%) had high self-efficacy. The chi-square test of independence indicated a statistically significant association between socio-emotional competence level and self-efficacy level ($\chi^2 = 23.30$, df = 1, $p < 0.001$). Students with high socio-emotional competence had approximately four times higher odds of reporting high self-efficacy compared with those with low socio-emotional

competence (odds ratio 3.93; 95% confidence interval 2.23–6.93).The linear relationship between socio-emotional competence and self-efficacy, treated as continuous variables, is summarized in Table 5. Pearson's correlation coefficient demonstrated a moderate, statistically significant positive correlation ($r = 0.561$, $p < 0.001$), indicating that higher socio-emotional competence scores were associated with higher self-efficacy scores across the sample. The 95% confidence interval for the correlation coefficient ranged from 0.46 to 0.65, suggesting a reasonably precise estimate of a moderate effect size.

Table 1. Demographic characteristics of undergraduate nursing students (N = 215)

Variable	Category	n	%
Gender	Male	118	54.9
	Female	97	45.1
Age group (years)	18–22	147	68.4
	23–26	67	31.2
	27–31	1	0.5
College	Northwest College of Nursing	56	26.0
	Pak International Nursing College	31	14.4
	Institute of Nursing Sciences, KMU	128	59.5
Current semester	2nd	70	32.6
	4th	48	22.3
	5th	45	20.9
	8th	52	24.2

Table 2. Descriptive statistics and internal consistency for socio-emotional competence and self-efficacy (N = 215)

Scale	Mean	SD	Median	Min	Max	Cronbach's α
Socio-emotional competence	78.45	8.35	80	46	95	0.95
Self-efficacy	32.49	4.14	33	16	40	0.88

Table 3. Distribution of socio-emotional competence and self-efficacy levels (N = 215)

Variable	Category	n	%
Socio-emotional competence	Low level	113	52.6
	High level	102	47.4
Self-efficacy	Low level	111	51.6
	High level	104	48.4

Table 4. Association between socio-emotional competence level and self-efficacy level (N = 215)

Socio-emotional competence level	Low self-efficacy n (%)	High self-efficacy n (%)	Total n	χ^2 (df)	p-value	Odds ratio for high self-efficacy (95% CI)*
Low level (n = 113)	76 (67.3)	37 (32.7)	113			
High level (n = 102)	35 (34.3)	67 (65.7)	102	23.30 (1)	<0.001	3.93 (2.23–6.93)

Table 5. Pearson correlation between socio-emotional competence and self-efficacy (N = 215)

Variable 1	Variable 2	Pearson r	95% CI for r	p-value	N
Socio-emotional competence	Self-efficacy	0.561	0.46–0.65	<0.001	215

Overall, the results indicate that while socio-emotional competence and self-efficacy scores were, on average, within the moderate range, a substantial proportion of students scored below the median on both constructs. The strong pattern of cross-tabulated frequencies and the moderate correlation coefficient together provide convergent evidence that higher socio-emotional competence is meaningfully and positively associated with greater self-efficacy among undergraduate nursing students in this setting.

DISCUSSION

This study examined the association between socio-emotional competence and self-efficacy among undergraduate nursing students enrolled in three nursing colleges in Peshawar. The findings showed that slightly more than half of the participants had low levels of socio-emotional competence and self-efficacy when scores were dichotomized at the median. At the same time, socio-emotional competence and self-efficacy were moderately and positively correlated, and students with higher socio-emotional competence had approximately fourfold higher odds of reporting high self-efficacy than those with lower socio-emotional competence. Taken together, these results suggest that socio-emotional competence is not only suboptimal in a sizable proportion of nursing students but also plays a substantial role in shaping their beliefs about their own capabilities.

The observed association is consistent with social cognitive theory, which posits that self-efficacy beliefs are influenced by individuals' emotional states, self-regulatory capacities, and social experiences (1,15,16). Students who are better able to recognize, understand, and manage their own emotions, and to navigate interpersonal challenges constructively, are likely to experience greater mastery in academic and clinical tasks, receive more positive feedback, and develop more robust self-efficacy beliefs over time (1,3,4). The moderate correlation identified in this study suggests that socio-emotional competence and self-efficacy are closely linked but not redundant constructs; each likely contributes uniquely to how students perceive and respond to the demands of nursing education.

In the context of nursing, socio-emotional competencies such as empathy, emotional regulation, and effective communication are integral to establishing therapeutic relationships, delivering person-centered care, and ensuring patient safety (5,6,9). Evidence from other settings has shown that nursing students with stronger socio-emotional or emotional intelligence profiles tend to report better academic outcomes, engagement, and

clinical performance (5,7). Similarly, studies in nurse educators and other professional groups have indicated that higher socio-emotional competence is associated with stronger self-efficacy and more effective interpersonal functioning (17,18,20). The present findings extend this body of work by demonstrating a robust positive association between socio-emotional competence and self-efficacy in undergraduate nursing students in Peshawar, suggesting that similar mechanisms may operate across different levels of the nursing education continuum.

The relatively high proportion of students with low socio-emotional competence and low self-efficacy is noteworthy. Nursing students face unique and cumulative stressors, including exposure to suffering and death, high expectations for academic and clinical performance, and frequent transitions between classroom and clinical environments (12,13). The transition into university and, for many, relocation to hostels disrupt established support systems and expose students to new academic and social demands, which can heighten uncertainty, anxiety, and emotional instability (13,14). If these stressors are not buffered by supportive environments and skills training, they may impede the development of both socio-emotional competence and self-efficacy, and increase vulnerability to burnout, disengagement, or attrition from nursing programs (12–14).

The magnitude of the association observed in this study, with an odds ratio approaching four and a correlation coefficient in the moderate range, underscores the potential value of explicitly targeting socio-emotional competence within nursing curricula. Interventions such as structured socio-emotional skills workshops, reflective practice groups, simulation-based training with debriefings focused on emotional responses, and mentoring programs may strengthen students' ability to process emotions, manage stress, and maintain healthy interpersonal relationships in clinical settings. As students experience greater success in handling emotional and social demands, their self-efficacy beliefs regarding academic and clinical tasks may correspondingly improve, potentially leading to better learning outcomes and more confident professional identities (1,4,5,22).

The findings also have implications for faculty development and institutional culture. Nurse educators' own socio-emotional competence and emotional intelligence have been linked to higher-quality teaching, better modelling of professional behavior, and more supportive learning climates (6,11,17,20). Embedding socio-emotional learning not only at the student level but also within faculty development and organizational policies may therefore create a reinforcing environment in which socio-emotional skills and self-efficacy are cultivated collectively. For example, assessment systems that incorporate formative feedback on communication, teamwork, and emotional management, alongside technical competence, may signal the value of these domains and encourage their intentional development (5,21).

Several strengths of this study merit attention. The use of validated instruments with strong internal consistency, administration across multiple institutions, and inclusion of students from several semesters enhance the internal reliability and contextual relevance of the findings. The convergent evidence from both categorical (chi-square and odds ratio) and continuous (correlation) analyses strengthens the conclusion that socio-emotional competence and self-efficacy are positively associated. However, some limitations should be acknowledged when interpreting the results. The cross-sectional design precludes any causal inference; it is not possible to determine whether higher socio-emotional competence leads to higher self-efficacy, whether high self-efficacy facilitates the development of socio-emotional competence, or whether both are shaped by common underlying factors such as personality, prior experiences, or institutional climate. The use of a convenience sample from three colleges in a single city may limit generalizability to other regions or types of nursing programs.

Furthermore, the reliance on self-report measures raises the possibility of social desirability bias, particularly in a professional discipline in which caring and competence are highly valued. Students may over- or under-estimate their socio-emotional skills and self-efficacy relative to their actual behavior in clinical settings. Objective or multi-informant assessments, such as faculty ratings, peer assessments, or performance-based tasks, could complement self-report measures in future research. Finally, although basic demographic information was collected, the present analysis did not formally model the influence of demographic or contextual variables (e.g., age, gender, semester, or institutional characteristics) on socio-emotional competence and self-efficacy. Future studies using multivariable models could elucidate which subgroups of students are at highest risk of low socio-emotional competence and self-efficacy and thus might benefit most from targeted interventions.

Future research should explore longitudinal trajectories of socio-emotional competence and self-efficacy across the duration of nursing education and into early clinical practice, ideally beginning from programme entry. Such designs would help clarify directionality and potential mediators or moderators of the relationship between these constructs. Intervention studies are also needed to test whether structured socio-emotional learning programmers, resilience training, or mentoring initiatives can effectively enhance socio-emotional competence and self-efficacy, and whether such improvements translate into better academic performance, clinical competence, and patient-related outcomes. Mixed-methods approaches incorporating qualitative inquiry could further deepen understanding of how nursing students in Pakistan experience and make sense of socio-emotional challenges and their own efficacy beliefs within specific cultural and institutional contexts.

CONCLUSION

This study demonstrated a moderate, statistically significant positive association between socio-emotional competence and self-efficacy among undergraduate nursing students in three colleges in Peshawar. Although mean scores on both constructs were in the moderate range, nearly half of the students exhibited low socio-emotional competence and low self-efficacy, indicating substantial room for development. Students with higher socio-emotional competence were markedly more likely to report high self-efficacy, suggesting that socio-emotional skills and confidence in one's capabilities are closely intertwined in the context of nursing education. These findings highlight the importance of integrating socio-emotional learning into undergraduate nursing curricula and institutional support structures to foster both the emotional and cognitive resources required for effective learning, resilience, and high-quality patient care. Further longitudinal and interventional research is warranted to clarify causal pathways and to identify evidence-based strategies for strengthening socio-emotional competence and self-efficacy among nursing students.

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