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Article

Family Support, Values Education, and Mental Health in Vocational Nursing Students: A Collaborative Model

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Abstract: Objective: This study investigates the current mental health status of vocational nursing students and examines the influence of family support on their psychological well-being. It further explores viable pathways for integrating values education with mental health support within a collaborative education framework. Methods: A cross-sectional survey design was employed. Using cluster sampling, 291 nursing students from a vocational undergraduate college in Hainan Province, China, were recruited as participants. Data were collected through a general information questionnaire, the Single-Item Scale of Family Support, the Patient Health Questionnaire-9 (PHQ-9), the Generalized Anxiety Disorder Scale (GAD-7), the Perceived Stress Scale (PSS), and the Nursing Professional Identity Scale. Statistical analyses included descriptive statistics, independent-samples t-tests, one-way analysis of variance (ANOVA), Pearson correlation analysis, and linear regression analysis. Results: The mean PHQ-9 depression score was 6.12 ± 6.30, the GAD-7 anxiety score was 4.24 ± 5.08, the perceived stress score was 9.66 ± 4.99, and the professional identity score was 16.87 ± 5.72. Statistically significant differences ($P < 0.01$) were observed in depression, anxiety, perceived stress, and professional identity scores across different levels of family support. Linear regression analysis revealed that family support negatively predicted perceived stress, anxiety, and depression levels, while positively predicting professional identity. Conclusion: Family support serves as a critical protective factor for the mental health of vocational nursing students. Given the inherent stratification in family support, institutional education must assume a compensatory role. A collaborative education system integrating home-school cooperation, value-oriented guidance, and psychological counseling should be established to bridge psychological resource gaps and promote the coordinated development of mental health and professional competence.

Keywords: nursing students; family support; mental health; values education; collaborative education

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1. Theoretical Foundation

1.1. Theories Related to Family Support

Family support constitutes a core component of an individual's social support system, and its protective role in mental health has been substantiated across multiple disciplinary perspectives. Family systems theory conceptualizes the family as a closely interconnected system that furnishes emotional support, practical resources, and value-oriented guidance among members, thereby directly shaping psychological adaptation capacity; psychological development during adolescence and young adulthood is particularly sensitive to the stability and quality of familial support. The social support buffer model further indicates that family support operates through dual pathways—exerting direct effects in alleviating negative emotional states and functioning as a buffering mechanism that attenuates the adverse impact of stressful life events on mental health, thus moderating the relationship between perceived stress and psychological distress [1].

Ecological systems theory situates individual development within a multi-layered environmental framework, wherein the family forms the innermost microsystem, while schools, communities, and other institutions constitute broader contextual layers such as

the mesosystem [2]. This perspective underscores that disparities in the availability and quality of support within the familial microsystem may be partially offset by structured educational interventions delivered through the school-based mesosystem. Such compensatory mechanisms help mitigate developmental gaps arising from suboptimal family support, thereby establishing a theoretical foundation for collaborative, family-informed educational practices.

1.2. Theory of Collaborative Education through Values Education and Mental Health Education

In the context of this study, 'values education' refers to the core components of ideological and political education as implemented in Chinese vocational education settings, including professional ethics cultivation, life education, and civic responsibility development. Ideological and political education and mental health education constitute two foundational elements of the higher education student development system [3]. Although their emphases differ, their overarching aims are closely aligned. Ideological and political education focuses on value formation; through instruction on ideals and convictions, professional ethics development, and life education, it supports students in establishing a coherent value framework and professional identity, offering internal spiritual resources to navigate developmental challenges. Mental health education emphasizes emotional well-being and psychological growth. Through psychological screening, counseling services, and stress management training, it equips students with effective emotional coping strategies and strengthens psychological resilience.

Existing research confirms that ideological and political education and mental health education share congruent educational objectives, demonstrate complementary use of educational resources, and can be effectively integrated. Mental health education alone addresses immediate emotional concerns but, without deeper value orientation, may fall short in cultivating enduring psychological safeguards. Ideological and political education alone emphasizes macro-level value transmission yet, by overlooking individual emotional variability, may limit its practical impact [4]. Their coordinated implementation establishes a dual-layered support structure—'value orientation plus emotional support'—thereby addressing the root causes of students' mental health needs.

1.3. Psychological and Humanistic Characteristics Required for the Training of Professional Undergraduate Nursing Talent

Vocational undergraduate nursing is a distinctive major at the undergraduate level of modern vocational education. Unlike academic undergraduate programs, which emphasize theory and research, and higher vocational programs, which focus on foundational practical skills, it pursues the dual educational objectives of developing high-level clinical practical skills and nursing humanistic literacy. The vocational nature of the nursing profession means that nursing students must face emotionally demanding situations—such as illness, end-of-life care, and complex interpersonal dynamics—both during their academic years and in their future careers. Psychological resilience, professional identity, and the capacity to deliver compassionate, person-centered care are core components of job competence [5].

Research findings indicate that nursing students experience elevated levels of psychological stress compared with peers in other disciplines, and challenges such as diminished empathic responsiveness and fatigue are especially evident during clinical practice [6]. Relying solely on individual psychological support services is insufficient to sustainably address the emotional demands inherent in professional training. The student body of professional bachelor's degree nursing programs is diverse, with notable differences in familial support structures. Some students with limited familial support may lack readily available coping strategies and are more likely to encounter adjustment difficulties. Therefore, nursing education must move beyond dependence on informal family-based support and instead be anchored in institutionally coordinated, curriculum-integrated approaches that combine ideological and moral education with structured mental wellness promotion, establishing a comprehensive psychological support framework spanning the entire training period.

2. Study Participants and Research Methods

2.1. Study Population

A cluster sampling method was used to recruit current nursing students enrolled in a vocational undergraduate program in Hainan Province. Inclusion criteria required participants to be full-time undergraduate nursing students who provided informed consent and voluntarily agreed to participate, and who were able to independently complete the questionnaire [7].

Exclusion criteria included students on leave of absence who were not physically present on campus, as well as questionnaires deemed invalid due to completion times under 60 seconds or uniform response patterns across all items. A total of 291 questionnaires were distributed, and all 291 were valid and retained for analysis, yielding a 100% valid response rate [8].

2.2. Survey Instrument

2.2.1. Demographic Questionnaire

This self-designed questionnaire comprised five items: gender, grade level, current internship status, only-child status, and perceived level of family support. Family support was measured using a 5-point self-report scale with the following response options: very low, low, moderate, high, and very high, enabling a rapid assessment of students' perceived overall family support [9].

2.2.2. Patient Health Questionnaire-9 (PHQ-9)

This widely used psychological screening instrument consists of 9 items, each rated on a four-point scale from 0 to 3, yielding a total score between 0 and 27; higher scores reflect greater severity of depressive symptoms. The instrument is commonly applied among nursing students in China and has demonstrated strong internal consistency and measurement validity [10]. In this study, the Cronbach's α coefficient was 0.942.

2.2.3. Generalized Anxiety Scale (GAD-7)

The Generalized Anxiety Screening Scale was used [4]. It consists of 7 items, each rated on a four-point scale from 0 to 3, yielding a total score ranging from 0 to 21; higher scores indicate greater severity of anxiety-related symptoms. This instrument demonstrates strong psychometric properties and is appropriate for rapid assessment of anxiety-related symptomatology among young students. In this study, the Cronbach's α coefficient for this scale was 0.948.

2.2.4. Perceived Stress Scale (PSS)

The simplified version of the Perceived Stress Scale (PSS) was used. It consists of 5 items, each rated on a six-point scale from 0 to 5, yielding a total score ranging from 0 to 25; higher scores indicate greater perceived stress [11]. This scale has demonstrated good reliability and validity in Chinese student populations. In this study, the Cronbach's α coefficient was 0.947.

2.2.5. Nursing Professional Identity Scale

A simplified version of the Nursing Professional Identity Scale was developed based on existing literature. It comprises 5 items rated on a five-point scale ranging from 1 to 5, yielding a total score between 5 and 25; higher scores reflect stronger nursing professional identity among students. In this study, the Cronbach's α coefficient was 0.967, indicating excellent internal consistency [12].

2.3. Statistical Methods

Data analysis was performed using SPSS 26.0 statistical software. Quantitative data conforming to a normal distribution were presented as mean ± standard deviation ($\bar{x}$ ± s). Two-group comparisons employed the independent samples t-test, whereas multiple-group comparisons used one-way analysis of variance (ANOVA). Categorical data were reported as frequencies and proportions. Variable associations were evaluated using Pearson's correlation analysis [13]. Linear regression analysis was applied to assess the

predictive effect of family support on each outcome indicator. Statistical significance was defined as $P < 0.05$.

2.4. Ethical Considerations

This study employed a cross-sectional questionnaire survey with no invasive procedures. The research purpose and data confidentiality protocol were explicitly outlined on the first page of the questionnaire. Participation was voluntary, and respondents retained the right to discontinue involvement at any stage, in alignment with internationally recognized ethical standards for human subjects research.

3. Survey Results

3.1. General Demographic Characteristics of the Study Participants

Among the 291 vocational nursing students, 203 were female (69.76%) and 88 were male (30.24%); by academic year: 182 were freshmen (62.54%), 48 were sophomores (16.50%), 37 were juniors (12.72%), and 24 (8.25%) were in their fourth year; 89 students (30.58%) were only children, while 202 (69.42%) were not; 11 students (3.78%) were currently engaged in clinical practice, whereas 280 (96.22%) had not yet commenced clinical practice; self-assessed family support was rated as very low by 9 students (3.09%), low by 11 (3.78%), moderate by 123 (42.27%), high by 46 (15.81%), and very high by 102 (35.05%).

3.2. Current Status of Nursing Students' Mental Health, Perceived Stress, and Professional Identity

Table 1 presents the overall psychological well-being and professional identity scores for nursing students in the vocational bachelor's program. The mean total score on the PHQ-9 scale was (6.12 ± 6.30) points, indicating mild symptom levels; the mean total score on the GAD-7 scale was (4.24 ± 5.08) points, reflecting low to moderate symptom levels; the mean perceived stress score was (9.66 ± 4.99) points; and the mean professional identity score was (16.87 ± 5.72) points [9].

Table 1. Scores on Various Scales for Undergraduate Nursing Students ($\bar{x}$ ± S, Points)

Indicator	Sample Size	Mean	Standard Deviation	Minimum	Maximum
PHQ-9 Depression	291	6.12	6.30	0	27
GAD-7 Anxiety	291	4.24	5.08	0	21
Perceived Stress	291	9.66	4.99	5	25
Professional Identity	291	16.87	5.72	5	25

3.3. Differences in Scores Across Demographic Variables

Independent samples t-tests revealed no statistically significant differences in scores for emotional distress, psychological strain, perceived stress, and professional identity across gender, only-child status, or internship completion status ($P > 0.05$). One-way analysis of variance (ANOVA) similarly showed no statistically significant differences in these indicators across academic year levels ($P > 0.05$). Therefore, the examined demographic variables did not exert a significant influence on the psychological well-being of this cohort [12].

3.4. Differences in Scores Across Different Levels of Family Support

The results of the one-way ANOVA indicated statistically significant differences in the scores for depressive symptoms, anxiety symptoms, perceived stress, and professional identity among nursing students across varying levels of family support ($P < 0.01$). As the level of family support decreased, the nursing students' scores for depressive symptoms, anxiety symptoms, and perceived stress increased, while their professional identity scores declined, demonstrating a clear gradient pattern, as presented in Table 2 and Table 3.

Table 2. Comparison of Scores on Various Indicators among Nursing Students with Different Levels of Family Support ($\bar{x} \pm S$, Points)

Level of Family Support	n	PHQ-9 Depression	GAD-7 Anxiety	Perceived Stress	Professional Identity
Very low	9	13.22 ± 7.51	10.11 ± 6.04	18.78 ± 5.70	13.33 ± 6.36
Lower	11	10.73 ± 7.06	7.55 ± 5.32	12.36 ± 5.36	13.00 ± 5.10
General	123	6.41 ± 6.21	4.41 ± 5.07	9.08 ± 4.80	15.60 ± 5.65
Higher	46	5.70 ± 6.14	4.02 ± 5.03	10.22 ± 5.23	17.07 ± 5.54
Very high	102	4.79 ± 5.83	3.23 ± 4.53	8.60 ± 4.61	18.43 ± 5.31
F-value		4.287	3.952	5.126	4.573
P-value		0.002	0.004	<0.001	0.001

Table 3. Linear Regression Analysis of Family Support on Various Indicators

Dependent Variable	Independent Variable	B-value	Standard error	β value	t-value	P-value	R^2
PHQ-9 Depression	Family Support	-2.104	0.415	-0.298	-5.070	<0.001	0.089
GAD-7 Anxiety	Family Support	-1.568	0.334	-0.276	-4.695	<0.001	0.076
Perceived Stress	Family Support	-1.651	0.307	-0.312	-5.378	<0.001	0.097
Professional Identity	Family Support	1.972	0.347	0.325	5.683	<0.001	0.106

Note: One-way ANOVA was used for group comparisons.

3.5. Correlation Analysis among Variables

Pearson correlation analysis revealed that family support level exhibited significant negative associations with perceived stress ($r = -0.312$, $P < 0.01$), psychological distress indicators ($r = -0.276$, $P < 0.01$), and low mood symptoms ($r = -0.298$, $P < 0.01$), and a significant positive association with professional identity ($r = 0.325$, $P < 0.01$); perceived stress showed significant positive associations with psychological distress indicators ($r = 0.724$, $P < 0.01$) and low mood symptoms ($r = 0.751$, $P < 0.01$), and a significant negative association with professional identity ($r = -0.412$, $P < 0.01$).

3.6. Regression Analysis of Family Support on Mental Health and Perceived Stress

Linear regression analyses were conducted with the level of family support as the independent variable and psychological distress, emotional strain, perceived stress, and professional identity as dependent variables, respectively; the results are shown in Table 3. Family support significantly and negatively predicted psychological distress ($\beta = -0.298$, $P < 0.001$), emotional strain ($\beta = -0.276$, $P < 0.001$), and perceived stress ($\beta = -0.312$, $P < 0.001$), and significantly positively predicted professional identity ($\beta = 0.325$, $P < 0.001$). It is therefore an important factor influencing nursing students' psychological well-being and professional development [14].

4. Educational Shortcomings in Addressing Family Support Disparities

4.1. Family Support Is a Core Protective Factor for the Mental Health of Vocational Nursing Students

The results of this study show that the level of family support is significantly associated with lower levels of psychological distress and higher professional identity among vocational nursing students. Family support can independently predict students' mental well-being and degree of professional identity, supporting the relevance of the social support buffer model in this population. These findings align with broader empirical evidence indicating that emotional support from family serves as a primary external resource for young learners navigating academic and professional adaptation challenges, and that robust family support helps mitigate adverse psychological responses to stressors.

Further analysis considering the specific characteristics of the nursing profession reveals that nursing students are exposed to numerous teaching scenarios involving illness and death during their academic studies, and during clinical internships, they must directly confront patients' suffering and the complexities of interprofessional and patient communication [15]. High levels of family support provide students with a stable emotional foundation, helping them process the challenging emotions arising from professional experiences and sustain a coherent sense of professional identity. Students with limited family support lack this foundational emotional resource; when facing comparable academic and clinical demands, they exhibit heightened vulnerability to psychological strain and may experience diminished commitment to the nursing profession.

4.2. Differences in Family Support Levels Reflect Imbalances in the Student Growth Support System

In the sample of this study, students in the "very low" and "low" family support groups accounted for 6.87% of the total. This group exhibited significantly elevated psychological distress and emotional strain scores compared with those in the "average" and "high" family support groups; their perceived stress scores were nearly twice those of the high family support group; and their professional identity scores were notably lower [16]. These findings indicate significant variation in family support resources among nursing students; some receive markedly limited psychological support from their families, and their developmental support systems display structural disparities.

Since family support is an external factor beyond individual control, educational institutions cannot directly influence students' family-of-origin environments; however, they can provide complementary support through well-structured academic and pastoral systems. In the absence of targeted institutional measures, students with low family support may experience prolonged deficits in psychological resources, which may adversely affect their mental wellbeing, academic progress, and professional formation—and consequently constrain the overall effectiveness of nursing education. Currently, mental health initiatives at most nursing institutions remain primarily reactive, focusing on addressing emerging concerns rather than implementing a stratified support framework aligned with varying levels of family support, thereby limiting their capacity to mitigate resource inequities [2, 7].

4.3. Insufficient Synergy between Ideological and Political Education and Mental Health Education Is the Core Manifestation of the Lack of Institutional Support

In the current educational systems of vocational undergraduate nursing institutions, ideological and political education and mental health education generally operate independently; the lack of synergy between the two constitutes a central factor limiting the institutional support system's capacity to fulfill its compensatory role. On the one hand, ideological and political education emphasizes macro-level value guidance—such as professional ethics and the meaning of life—and relies predominantly on theoretical instruction, with limited attention to individual emotional variation and psychological needs, thus offering insufficient targeted emotional support to students experiencing low family support; on the other hand, mental health education centers on emotional counseling and timely assistance, is often delivered episodically through dedicated counseling services, and remains largely disconnected from the broader professional curriculum [12]. Without grounding in value orientation, it has limited capacity to foster enduring psychological resilience.

This structural disconnection impedes the formation of an integrated support framework that unifies value orientation with emotional support, thereby undermining the system's ability to compensate for familial shortcomings and deliver holistic protection. For nursing students with low family support—who receive neither consistent emotional sustenance at home nor systematic psychological reinforcement within the academic environment—the convergence of these gaps heightens vulnerability to mental health challenges. Consequently, deepening coordination between ideological and

political education and mental health education to establish a unified, curriculum-embedded educational approach is essential to mitigating disparities in familial support and advancing the overall psychological well-being of nursing students.

5. Pathways for Collaborative Ideological and Political Education and Mental Health Education from the Perspective of Family Support

5.1. Establishing a Mechanism for Home-School Collaborative Education

In response to disparities in family support, the first step is to establish a home-school collaboration mechanism to bridge the two major support systems—family and school. First, regular communication channels between home and school should be established, with counselors and subject teachers providing parents with periodic feedback on students' academic progress, psychological well-being, and career development, thereby guiding parents to prioritize students' psychological needs and enhance the quality of family support; second, family education guidance should be delivered through online lectures, parent handbooks, and other accessible formats, covering topics such as the professional characteristics of nursing, patterns of adolescent psychological development, and effective parent-child communication strategies, enabling parents to apply evidence-informed support approaches; third, a joint support mechanism for at-risk students should be implemented. For students experiencing low family support and elevated psychological risk, counselors, mental health professionals, academic faculty, and parents should collaboratively formulate individualized support plans to strengthen coordinated educational efforts between home and school.

5.2. Strengthening the Value-Oriented Guidance and Emotional Support Functions of Ideological and Political Education

Expand the educational dimensions of ideological and political education by integrating emotional support functions on the foundation of value guidance. First, deepen the teaching of nursing professional ethos and life education through the incorporation of exemplary humanitarian practices—including historical contributions to nursing, frontline experiences during public health emergencies, and compassionate care models in end-of-life contexts—into ideological and political courses and course-integrated ideological education. This fosters robust professional commitment and strengthens value-based resilience against occupational psychological stress; second, embed content on emotional awareness and stress regulation within ideological and political instruction, synergizing psychological development principles with values cultivation to improve students' capacity for mental self-regulation; third, implement differentiated ideological and political guidance, prioritizing role model learning and personalized growth support for students facing limited familial resources or underdeveloped professional identity, thereby increasing pedagogical relevance, affective resonance, and the inherent psychological protective function of such education.

5.3. Improving the Comprehensive Mental Health Education Support System

Establish a mental health education support system spanning the full educational journey—from enrollment through on-campus studies, practical training, and internships—to enable timely psychological support. First, strengthen universal psychological screening for new students; concurrently assess family support capacity and mental well-being during enrollment, create individualized psychological records for students with limited family support, and deliver early preventive guidance. Second, embed mental health education throughout the professional curriculum, integrating stress adaptation training into high-intensity learning contexts such as nursing skills practice and clinical placements to equip students with effective emotional coping strategies in professional environments [8, 14]. Third, enrich experiential mental health activities—including group-based support sessions, mindfulness practice, and narrative reflection workshops—to foster empathy and psychological resilience among nursing students. Fourth, optimize pathways for accessing psychological services to ensure

prompt, specialized assistance for students facing significant emotional challenges, thereby reinforcing foundational psychological safety.

5.4. Building a Multi-Stakeholder Collaborative Education Community

Integrate multiple educational stakeholders both on and off campus to form a synergistic educational force. Drawing on the concept of building multidisciplinary educational teams, establish a team comprising nursing faculty, ideological and political education instructors, full-time mental health educators, student counselors, and clinical instructors. This team will regularly conduct joint lesson planning and teaching seminars to bridge the integration between value-oriented guidance and psychological support. At the institutional level, establish a four-tiered coordination mechanism involving "the college---counselors---faculty members---the Mental Health Center" to facilitate timely identification and supportive response to students' psychological concerns; at the off-campus level, collaborate with clinical internship sites to establish collaborative education standards, incorporating humanistic care education and psychological support during internships into clinical teaching requirements to ensure continuity in student development throughout the internship phase. Through multi-stakeholder collaboration, build an all-encompassing, all-process, and all-dimensional education framework.

5.5. Improving Long-Term Support Mechanisms for Collaborative Education

Long-term safeguards are implemented across three dimensions—systems, resources, and evaluation—to ensure the effective implementation and outcomes of collaborative education [13]. First, organizational systems are enhanced by establishing a dedicated working group for integrating ideological and political education with mental health education, clarifying interdepartmental responsibilities, and developing standardized operational guidelines. Second, resource support is reinforced through dedicated funding allocations to advance faculty professional development, curriculum innovation, and mental health initiatives, alongside the construction of a digital education platform to enable seamless home-school information exchange and real-time monitoring of students' psychological well-being. Third, a diversified evaluation framework is introduced, incorporating students' mental health status, career identity formation, and capacity for humanistic care into the talent development quality assessment system; evaluating collaborative education effectiveness dynamically; refining educational strategies iteratively; and establishing a closed-loop mechanism for continuous improvement.

6. Conclusions and Outlook

6.1. Research Conclusions

Through a cross-sectional survey of 291 vocational nursing students, this study found that these students experience measurable levels of psychological distress and low mood. Family support emerged as a core protective factor influencing both mental well-being and professional identity; lower levels of family support were associated with higher perceived stress, more pronounced psychological distress and low mood symptoms, and weaker professional identity. Family support varies across sociodemographic groups, and students reporting limited family support face heightened psychological vulnerability. However, current institutional approaches to ideological and political education and mental health education operate in isolation, lacking an integrated support framework capable of effectively mitigating disparities in familial resources.

Based on these findings, this study proposes a collaborative educational pathway integrating ideological and political education with mental health support, grounded in family support enhancement: by establishing a home–school collaboration mechanism, reinforcing the emotional scaffolding function of ideological and political education, strengthening the comprehensive psychological support system, fostering a multi-stakeholder educational community, and instituting a sustainable support infrastructure, a two-tiered model—'family support + school collaboration'—can be realized. This

systemic educational design aims to offset variability in family support and advance the integrated development of psychological resilience and professional competence among vocational nursing students.

6.2. Limitations and Future Directions

This study has the following limitations: First, as a single-center cross-sectional survey, the sample was drawn exclusively from one vocational undergraduate institution, which limits the generalizability of the findings; future research could expand the sample scope to include multiple institutions. Second, family support was assessed using a single-item self-report measure rather than a validated multidimensional scale, limiting measurement precision; future work could adopt established, psychometrically robust instruments. Third, this study documented current conditions and constructed a path model but did not implement or evaluate structured educational activities grounded in the proposed collaborative framework; subsequent studies could apply and assess the framework through longitudinal implementation, tracking changes in nursing students' mental health and professional identity to examine its practical utility.

References

1. S. Cohen and T. A. Wills, "Stress, social support, and the buffering hypothesis," *Psychological Bulletin*, vol. 98, no. 2, p. 310, 1985.
2. J. Fook, *Social Work: A Critical Approach to Practice*, 2022.
3. L. Y. D. Almeida, M. O. Carrer, J. D. Souza, and S. C. Pillon, "Evaluation of social support and stress in nursing students," *Revista da Escola de Enfermagem da USP*, vol. 52, p. e03405, 2018.
4. U. Bronfenbrenner, *The Ecology of Human Development: Experiments by Nature and Design*, Harvard University Press, 1979.
5. K. Kroenke, R. L. Spitzer, and J. B. Williams, "The PHQ-9: validity of a brief depression severity measure," *Journal of General Internal Medicine*, vol. 16, no. 9, pp. 606–613, 2001.
6. C. A. Stubin and J. D. Hargraves, "Faculty supportive behaviors and nursing student mental health: a pilot study," *International Journal of Nursing Education Scholarship*, vol. 19, no. 1, p. 20220044, 2022.
7. R. L. Spitzer, K. Kroenke, J. B. Williams, and B. Löwe, "A brief measure for assessing generalized anxiety disorder: the GAD-7," *Archives of Internal Medicine*, vol. 166, no. 10, pp. 1092–1097, 2006.
8. K. Fortes, C. L. Latham, S. Vaughn, and K. Preston, "The influence of social determinants of education on nursing student persistence and professional values," *Journal of Professional Nursing*, vol. 39, pp. 41–53, 2022.
9. A. Brajsa-Zganec, L. K. Lipovcan, D. Ivanovic, and Z. P. Larsen, "Well-being of nursing students: Role of affect regulation, self-esteem, family cohesion and social support," *The Open Public Health Journal*, vol. 10, no. 1, 2017.
10. K. McLaughlin, M. Moutray, and C. Moore, "Career motivation in nursing students and the perceived influence of significant others," *Journal of Advanced Nursing*, vol. 66, no. 2, pp. 404–412, 2010.
11. K. L. Reeve, C. J. Shumaker, E. L. Yearwood, N. A. Crowell, and J. B. Riley, "Perceived stress and social support in undergraduate nursing students' educational experiences," *Nurse Education Today*, vol. 33, no. 4, pp. 419–424, 2013.
12. B. I. Saveman, C. D. Måhlén, and E. G. Benzein, "Nursing students' beliefs about families in nursing care," *Nurse Education Today*, vol. 25, no. 6, pp. 480–486, 2005.
13. M. Y. Choi, S. Park, and G. O. Noh, "Social support for nursing students: A concept analysis study," *Nurse Education Today*, vol. 132, p. 106038, 2024.
14. J. S. Gooding, L. G. Cooper, A. I. Blaine, L. S. Franck, J. L. Howse, and S. D. Berns, "Family support and family-centered care in the neonatal intensive care unit: origins, advances, impact," in *Seminars in Perinatology*, vol. 35, no. 1, pp. 20–28, W. B. Saunders, Feb. 2011.
15. H. J. Gu, "A study on the relationship between perceived family support and satisfaction of clinical practice by nursing students," *The Journal of Korean Academic Society of Nursing Education*, vol. 14, no. 2, pp. 205–215, 2008.
16. A. I. Meleis, *Transitions Theory: Middle Range and Situation Specific Theories in Nursing Research and Practice*, Springer Publishing Company, 2010.