




Original Article

The effect of perceived social support on the professional socialization of final-year nursing students: A cross-sectional correlational study

Vahid Yousoufvand¹ , Seyedeh Nayereh Falahan^{2*} , Amir Sadeghi³ , Naser Kamyari⁴ ,
Behrad Sadeghi⁵ 

¹PhD Candidate in Nursing, Student Research Committee, School of Nursing and Midwifery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

^{2*}Msc, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran.

³PhD in Nursing Educational Management, Department of Nursing, School of Nursing and Midwifery, Hamadan University of Medical Sciences, Hamadan, Iran.

⁴PhD in Biostatistics, Department of Biostatistics and Epidemiology, School of Health, Abadan University of Medical Sciences, Abadan, Iran.

⁵Bachelor Student, Faculty of Nutrition and Food Sciences, Tabriz University of Medical Sciences, Tabriz, Iran.

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*Corresponding author:

Seyedeh Nayereh Falahan, Msc
.School of Nursing and Midwifery,
Hamadan University of Medical
Sciences, Hamadan, Iran.

Email: nfallahan92@gmail.com

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Abstract

Background & Objective: Professional socialization can improve nursing students' performance and learning. In their final year, nursing students will likely attain professional socialization through adequate social support. Thus, the purpose of this study was to look at how final-year nursing students' professional socialization was impacted by their perceptions of social support.

Material & Methods: In 2022, this cross-sectional correlational study was conducted in Hamadan, Iran, at the Hamadan School of Nursing and Midwifery. The study involved 128 final-year nursing students in total. Toit's professional socialization questionnaire, Zimet's perceived social support questionnaire, and demographic information forms were the data gathering instruments used in this study.

Results: A relationship was discovered ($r = 0.237$, $p < 0.001$) between the professional socialization of nursing final-year students and their social support. The family dimension was identified as the most influential predictor of professional socialization among final-year nursing students within the social support variable ($p < 0.001$, $\beta = 0.447$). Furthermore, various factors had significant negative predictive effects on the socialization of final-year nursing students. The study found that several factors were associated with certain career choices. Choosing a mandatory field and family pressure ($p < 0.001$, $\beta = -0.278$), picking a field based mainly on earnings ($p = 0.017$, $\beta = -0.209$), the mother's occupation as a homemaker ($p = 0.009$, $\beta = -0.220$), and the father's work in the private sector ($p = 0.037$, $\beta = -0.175$) were among these factors.

Conclusion: These findings highlight the critical role that family-related factors play in influencing how nursing students socialize professionally, which is important information for nursing education and support programs.

Keywords: social support, professional role, socialization, students, nursing, education

Introduction

The process through which people absorb and shape their professional identities in a particular field—like nursing, for example—is known as professional socialization (1). It entails learning the essential knowledge, abilities, attitudes, convictions, values, conventions, and moral principles for the field (2). Nursing students must go through this process in order to shape their professional

behavior and identity as they become professional nurses (3). During their professional socialization, nursing students experience profound cognitive, emotional, and behavioral changes in order to conform to nursing norms and expectations. Along with developing clinical skills, they also develop values like empathy, integrity, and compassion—all of which are critical for patient-



centered care (4–6). Nurses and patients may suffer negative consequences from inadequate professional socialization (7). A strong ethical foundation is necessary for novice nurses, as they may face role confusion (8). Interprofessional teamwork may be hampered and feelings of isolation may result (9, 10). When nurses struggle to satisfy professional standards, patients may also get subpar care (11, 12). Professional socialization needs to incorporate a range of elements to guarantee the success of nursing students (13). Creating a supportive learning environment that fosters cooperation, open communication, and mutual respect is essential (14). Guidance and support from seasoned professionals are crucial in mentoring new nurses and imparting them with practical knowledge and assistance (15). Nursing students' professional identities are shaped by real-world experiences that adhere to professional standards, like direct patient care and multidisciplinary teamwork (16, 17). Furthermore, social assistance is necessary for people's general development and wellbeing. This assistance could be of an emotional, educational, or assessment nature (18–20). Anticipating nursing students' effective integration into the professional field requires taking social assistance into account. This knowledge can direct the creation of successful educational plans and interventions that strengthen support networks (3, 13). Recognizing the important role that social support plays in the professional development of aspiring nurses is vital. This study was required to investigate the impact of perceived social support on final-year nursing students' professional socialization, notwithstanding its current constraints.

Material & Methods

Design and setting(s)

The current research is a cross-sectional correlational descriptive study conducted in the School of Nursing and Midwifery of Hamedan University of Medical Sciences, Hamadan, Iran, from February to June 2022. For this study, all nursing students in their final year of study were chosen using a census method. The research states that during their four years in nursing school, nursing students normally go through three distinct stages of socialization: reliance, separation, and integration. Both professional and extraprofessional circumstances and events have an impact on this trip, which ultimately results in the formation of their personality structures. Notably, the fourth year of study is typically when the completion of this socialization process becomes more apparent. In order to capture their advanced stage of

professional socialization, this study concentrated on fourth-year nursing students.

Participants and sampling

Following the study's inclusion criteria and applying the census method were part of the sampling procedure. A total of 128 fourth-year nursing students from semesters 7 and 8 took part in the study, resulting in a response rate of 98.45%. One individual declined to participate, and one questionnaire was left incomplete. It should be emphasized that the sampling process was carried out face-to-face. The study specifically focused on fourth-year nursing students who were willing to take part, with those who did not complete the questionnaires being excluded

Tools/Instruments

Demographic profile form: The demographic profile form included age, gender, marital status, student work experience, parents' education, parents' occupation, number of children in the family, the order of children, and the reason for choosing the nursing major. Regarding face validity, this form was approved by ten faculty members of the Hamadan School of Nursing and Midwifery. Multidimensional Scale of Perceived Social Support (MSPSS): The Multidimensional Scale of Perceived Social Support (MSPSS) by Zimet et al. includes 12 items that measure perceptions of the adequacy of social support in three sources: family (4 items), friends (4 items) and Significant others (4 items). Each item is scored on a seven-point Likert scale (very strongly disagree = 1 to very strongly agree = 7). The minimum score for each subscale is 4, and the maximum is 28. The total score is obtained from the sum of all items. The overall score of the questionnaire is between 12 and 84. Higher scores indicate higher perceived social support. Zimet et al. reported that Cronbach's coefficient alpha, a measure of internal reliability, was obtained for the scale as a whole as well as for each subscale. The values were 0.91, 0.87, and 0.85 for the Significant Other, Family, and Friends subscales, respectively. The whole scale's reliability was 0.88. These numbers show that both the scale and its three subscales have strong internal consistency. Sixty-nine of the 275 subjects were retested 2 to 3 months after initially completing the questionnaire. The test-retest reliability for the Significant Other, Family, and Friends subscales were .72, .85, and .75, respectively. For the whole scale, the value obtained was .85. In effect, the MSPSS demonstrated good internal reliability and adequate stability over the period indicated (21). In Iran, according

to Hatamian et al., the internal reliability (Cronbach's alpha) of the Persian version of the questionnaire is 0.84, which indicates it is appropriate (22). Also, in the present study, Cronbach's alpha was 0.88. Toit's professional socialization questionnaire: The Toit's professional socialization questionnaire (1995) has 48 questions; the method of scoring each item is a seven-point Likert-type scale, where the number 1 is a very low answer, and the number 7 is a very high answer. The level of professional socialization of nursing students is examined in four areas: valuing and recognizing the profession (Knowledge profession) (11 items), professional skills (24 items), management and organizational policies (10 items), and interpersonal communication (3 items). The total score of the questionnaire varies from 48–336, which is the sum of all the questions. Suppose the average scores obtained in each area are between 48 and 107. In that case, it is considered poor professional socialization; 108–162 is low, 163–221 is average, 222–278 is high, and 279–339 is regarded as a very high level of professional socialization. Toit et al. reported that the reliability of this questionnaire has been confirmed by Cronbach's alpha coefficient method of 0.88 (14). In Iran, the face validity of this questionnaire has also been confirmed, and its internal reliability has been reported as 0.91 using Cronbach's alpha method (23). The study conducted by Moghadam et al. received approval for face and content validity from 11 faculty members at Guilan University of Medical Sciences. The instrument used in the study had an alpha coefficient of 0.92 and an ICC of 0.94 (24). Additionally, Cronbach's alpha in the current study was found to be 0.93.

Data collection methods

The researcher first explained the study's purpose, instructed participants on how to fill out the questionnaires, and assured them of the confidentiality of their information. The census approach was then used in the sampling process, which was conducted in accordance with the study's inclusion criteria. Out of 130 nursing students, 128 fourth-year students took part in the study.

Data analysis

determine if the data were normally distributed after the questionnaires were completed. For the purpose of characterizing the data, descriptive statistics such as frequency, frequency percentage, mean, and standard deviation were used. Additionally, the findings of the Kolmogorov-Smirnov test showed that all of the quantitative data had a normal distribution, which

allowed researchers to investigate the relationships between the variables. To investigate the association, Pearson's correlation coefficient was therefore used. To determine the predictive impact of independent factors on the dependent variable, a multiple regression test was performed with a significance level of 0.05. SPSS 22 was the program used for the analyses.

Results

Students with an average age of 23.22 (SD = 1.80) were involved in the study. The bulk of participants (57.8%) were male, (89.8%) were single, and (64.1%) had never worked independently as a student in a clinical setting before. Regarding parental education and employment, the majority of fathers (76.6%) had no formal education and were employed in the private sector (58.6%), whereas the majority of moms (89.8%) had no formal education and were at home with their children. Table 1 shows that nearly 77% of students expressed interest in nursing. The primary reasons for students choosing nursing were willingness (47.7%), income (23.4%), other reasons (17.2%), and social position (11.7%) (**Table 1**).

The study's findings showed that the mean social support of students is 45.67 (SD = 8.12), at a moderate level, and the social support received from the family had the highest mean, with 16.33 (SD = 2.82). Also, the mean professional sociability of students was 259.85 (SD = 34.44), at a good level. Professional sociability in the dimension of professional skill had the highest value, with a mean of 131.20 (SD = 19.94) (**Table 2**).

There was a direct and weak correlation between perceived social support and the level of professional socialization of final-year nursing students ($r = 0.237$ and $p < 0.001$). The results indicated the existence of a direct, strong, and significant association between family ($r = 0.867$), friends ($r = 0.884$), and significant other ($r = 0.890$) with social support ($p < 0.001$). Among the dimensions of professional socialization, professional knowledge ($r = 0.214$, $p < 0.05$) and professional skills ($r = 0.309$, $p < 0.001$) showed a positive and significant relationship with perceived social support (**Table 3**).

Using multivariate regression (enter method) determined that among the various dimensions of perceived social support and the general index of social support, family is the most effective dimension in predicting the level of professional socialization of final-year nursing students ($\beta = 0.447$, $p < 0.001$, $R^2 = 0.125$, Adjusted $R^2 = 0.104$) (**Table 4**).

Table 1. Socio-demographic characteristics of participants (n = 128).

Variables	n (%)	
Gender	Male	74 (57.8%)
	Female	54 (42.2%)
Marital status	Single	115 (89.8%)
	Married	13 (10.2%)
Prior student clinical work experience independently	Yes	46 (35.9%)
	No	82 (64.1%)
Father's education	Illiterate	98 (76.6%)
	Literate	30 (23.4%)
Mother's education	Illiterate	101 (78.9%)
	Literate	27 (21.1%)
Father's job	Employee	40 (31.3%)
	Freelance	75 (58.6%)
	Unemployed	13 (10.2%)
Mother's job	Employee	10 (7.8%)
	Freelance	3 (2.3%)
	Housewife	115 (89.8%)
Number of children in family	One	18 (14.1%)
	Two	43 (33.6%)
	Three and more	67 (52.3%)
Children's family order	First	47 (36.7%)
	Second	43 (33.6%)
	Third or more	38 (29.7%)
Interest in nursing	Yes	77 (60.2%)
	No	51 (39.8%)
Reason for selecting nursing major	Willingness	61 (47.7%)
	Income	30 (23.4%)
	Social position	15 (11.7%)
	Others	22 (17.2%)
Age (year)	Mean ± SD (Min–Max)	23.22 ± 1.80 (21–29)

Note: The data is presented as number (percentage) for categorical variables and mean ± standard deviation (minimum - maximum) for age.

Abbreviations: n, number of participants; SD, standard deviation; Min, minimum; Max, maximum.

Table 2. Mean and standard deviation of social support and professional socialization and their dimensions

Factors & sub-factors	Number of items	Mean ± SD	Min–Max
1. Social support	12	45.67 ± 8.12	24–60
Family ¹	4	16.33 ± 2.87	8–20
Friends ¹	4	14.52 ± 3.18	4–20
Significant other ¹	4	14.83 ± 3.17	6–20
2. Professional socialization	48	259.85 ± 34.44	169–335
Knowledge profession ²	11	62.41 ± 7.82	38–77
Professional skills ²	24	131.20 ± 19.94	86–208
Organizational management ²	10	50.79 ± 12.38	31–09
Interpersonal communication ²	3	15.45 ± 3.11	9–21

1: Sub-factor of social support; **2:** Sub-factor of professional socialization.

¹.Sub-factor of social support

².Sub-factor of professional socialization

Note: The data is presented as mean ± standard deviation (minimum - maximum).

Abbreviations: SD, standard deviation; Min, minimum; Max, maximum.

Table 3. Pearson Correlations coefficients among the social support and professional socialization and their dimensions

Factors & sub-factors	(1)	(1-1)	(1-2)	(1-3)	(2)	(2-1)	(2-2)	(2-3)	(2-4)	(1)
1. Social support	1									1
1-1. Family	0.867**	1								0.867**
1-2. Friends	0.884**	0.647**	1							0.884**
1-3. Significant other	0.890**	0.666**	0.676**	1						0.890**
2. Professional socialization	0.237**	0.335**	0.163	0.140	1					0.237**
2-1. Knowledge profession	0.214*	0.326**	0.086	0.168	0.779**	1				0.214*
2-2. Professional skills	0.309**	0.326**	0.265**	0.232**	0.901**	0.649**	1			0.309**
2-3. Organizational management	0.002	0.148	-0.038	-0.092	0.677**	0.366**	0.349**	1		0.002
2-4. Interpersonal communication	0.093	0.210*	0.043	0.004	0.644**	0.487**	0.542**	0.360**	1	0.093

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Note: The data is presented as correlation coefficients between factors and sub-factors of social support and professional socialization.

Abbreviations: (1), Social support; (1-1), Family; (1-2), Friends; (1-3), Significant other; (2), Professional socialization; (2-1), Knowledge profession; (2-2), Professional skills; (2-3), Organizational management; (2-4), Interpersonal communication.

Table 4. Results of multiple linear regression analyses of professional socialization

Variables	Unstandardized		Standardized	t	P	95.0% CI for B	
	B	SE	β			Lower	Upper
Family	5.363	1.446	0.447	3.708	<0.001	2.500	8.226
Friends	-0.385	1.324	-0.035	0.291	0.772	-3.005	2.235
Significant other	-1.460	1.357	-0.134	-1.075	0.284	-4.147	1.227

R² = 0.125, Adjusted R² = 0.104

Note: Multiple linear regression analysis was used to assess the impact of social support factors on professional socialization. The table presents unstandardized coefficients (B), standard errors (SE), standardized coefficients (β), t-values (t), p-values (P), and 95% confidence intervals (CI) for the coefficients.

Abbreviations: SE, Standard error; CI, Confidence interval; R², coefficient of determination.

Table 5. Results of multiple linear regression analyses of professional socialization

Variables	Unstandardized		Standardized	t	P	95.0% CI for B	
	B	SE	β			Lower	Upper
Age (year)	0.748	1.945	0.039	0.384	0.701	-3.107	4.602
Gender (female)	-4.056	6.640	-0.058	-0.611	0.543	-17.214	9.102
Marital Status (married)	9.951	12.703	0.088	0.783	0.435	-15.220	35.122
Work experience (yes)	8.610	7.189	0.120	1.198	0.234	-5.634	22.855
Father education (Literate)	-8.894	9.171	-0.110	-0.970	0.334	-27.067	9.278
Mother education (Literate)	9.005	12.169	0.107	0.740	0.461	-15.109	33.118
Father job = freelance	-19.923	9.473	-0.175	-2.103	0.037	-38.675	-1.172
Father job = Unemployment	-21.594	18.432	-0.190	-1.172	0.244	-58.118	14.929
Mother job = freelance	24.905	23.167	0.110	1.075	0.285	-21.001	70.811
Mother job = housewife	-24.945	9.464	-0.220	-2.636	0.009	-43.678	-6.212
Number of children's family	2.715	5.141	0.144	0.528	0.598	-7.472	12.903
Order in children's family	-2.134	4.826	-0.117	-0.442	0.659	-11.697	7.429
Interest	4.705	10.677	0.067	0.441	0.660	-16.452	25.861
Reason = income	-16.922	6.983	-0.209	-2.423	0.017	-30.743	-3.100
Reason = social status	-8.569	15.104	-0.080	-0.567	0.572	-38.498	21.360
Reason = others	-25.290	7.712	-0.278	-3.279	0.001	-40.555	-10.025

R² = 0.218, Adjusted R² = 0.105

Note: Multiple linear regression analysis was used to assess the impact of various socio-demographic factors on professional socialization. The table presents unstandardized coefficients (B), standard errors (SE), standardized coefficients (β), t-values (t), p-values (P), and 95% confidence intervals (CI) for the coefficients.

Abbreviations: SE, standard error; CI, confidence interval; R², coefficient of determination.

Among the socio-demographic variables, multivariate regression showed that the reason for choosing the nursing field (other reasons) (β = -0.278, p < 0.001) followed by the mother's job (housewife) (β = -0.220, p = 0.009), the reason for choosing the nursing field (income) (β = -0.209, p = 0.017) and the father's job year nursing students. None of the demographic variables played a predictive role in the level of

(private sector jobs) (β = -0.175, p = 0.037) were the most effective predictors of professional socialization of final-year nursing students. All the above factors had a negative role in predicting the students' professional socialization. Together, these factors explained about 22% of the variance in professional socialization of final-year nursing students (Table 5).

Discussion

This study looked primarily at how nursing students' professional socialization during their last year of education was impacted by their perceptions of social support. The results showed that these students' perceptions of social support and their professional socialization were somewhat positively correlated. This implies that their socialization process may be aided by higher levels of perceived social support. Interestingly, a strong predictor of kids' socializing levels was shown to be the family component of perceived social support.

This result might have been affected by the nature of nursing education, which requires regular engagement with patients, their families, and different medical and paramedical specialists. Kim (2021) noted in their study that social support can increase self-resilience by 1.37 times and lessen anxiety. Furthermore, higher levels of personal resilience were associated with increased social support from peers, highlighting the significance of social support in predicting academic performance. (25). According to Zhao et al.'s research, nursing students' professional identities were evolving in relation to higher levels of self-efficacy and perceived social support. Furthermore, increased self-efficacy was found to have an indirect impact on nursing students' professional identities through improved perceived social support (26). Professional self-assurance and professional interpersonal abilities are strongly correlated, according to a study by Noohi et al. (1). According to Zhou et al.'s study, among nursing students, perceived social support and psychological wellness are mediated by self-compassion and professional self-concept. Moreover, professional self-concept can be significantly predicted by self-compassion (27). Our findings are at odds with those of Safari et al., who discovered no connection at all between nursing students' professional socialization and commitment (28). The discrepancies in sample sizes between the two research can be partially blamed for the variance in outcomes. Additionally, the demographics of the subjects varies significantly. While Safari et al. included nursing students from all academic years, our study focused exclusively on fourth-year students.

These results lend credence to the notion that mentors, family, and friends assist nursing students in overcoming obstacles in their careers and feeling emotionally valued. A more self-assured nurse will be better able to adjust to clinical practice and feel more a part of the nursing community (29, 30). Nonetheless, Gosse et al. and Walsh et al. claim that favorable contacts with teachers, nurses, and multicultural coworkers who act as role models are beneficial for nursing students (31, 32). Research has

also demonstrated that nursing students have a better understanding of the roles, responsibilities, and expectations of their profession by witnessing and engaging with experienced nurses (5, 33, 34). Nouhi et al. state that social support from friends and professors, cooperative learning opportunities, and constructive criticism can all help nursing students feel more competent and confident in their professional abilities. In the end, this fosters their socialization and advancement in the nursing sector (35). On the other hand, nursing students' acceptance by the nursing community has fostered a feeling of unity and shared identity that encourages collaboration, respect, and teamwork—all of which are essential for professional socialization (36). The attitudes, behaviors, and professional identities of nursing students are thought to be greatly influenced by their perception of social support. The current study found that "friends" and "significant other," two categories of perceived social support, have an impact on the professional socialization of final-year nursing students. According to Yıldırım et al., friends, family, spouses, and faculty members are a few examples of the people who can provide social support. In this situation, the student may receive social support from clinical educators if they give him timely and helpful comments. Consequently, teachers need to understand that even minor adjustments to how they engage with students can have a big impact (37). In particular, Kim highlighted the family component as the most powerful element in determining the amount of professional socialization among final-year nursing students, underscoring the value of social support in predicting academic performance. This result is consistent with the current investigation and emphasizes the critical function that family support plays in helping nursing students in the classroom feel at ease and focused (25). In this study, social support and the professional knowledge and skill dimension from the professional socialization variable had a positive and significant association. According to Taylan & Özkan's qualitative study, nursing instructors, instructional content, and teaching methods can all have a big impact on how well students socialize professionally (38). In their semi-experimental study, Mam Qaderi et al. found that professional socialization training successfully develops and enhances nursing students' clinical competency (39). Professional socialization, which enables people to join a group by acquiring behaviors and attitudes, is the process of learning new roles, knowledge, abilities, and traits of a group in society (34). Social interactions help nurses become professionals. To understand how nursing

students become professionals, it is crucial to look at the patterns and processes of social interactions (40). On the other hand, successfully completing the professional socialization process can result in the development of an identity that is consistent with professional roles, dedication to the profession and organization, job satisfaction, and ultimately, an improvement in the standard of client care. However, improper and inadequate use of this procedure may result in adverse outcomes, including nurses' burnout and departure from their jobs, role conflicts, and future declines in their motivation and level of satisfaction. The results of this study also demonstrated that no demographic factor positively predicted the degree of professional socialization that nursing final-year students experienced. The most powerful negative predictors of final-year nursing students' socialization were things like having to choose a major against one's will, family pressure, major selection based on financial need, mother being a stay-at-home mom, and father working in the private sector. The majority of the students in this study, according to the researchers, came from low-education households, which meant that they knew very little about college courses—especially those in nursing. These elements probably made it more difficult for the students to choose a major and affected their decision-making process negatively. Some Iranian national entrance exam candidates choose to major in nursing because of the relatively good job market in this field, even though they may not have a thorough understanding of it. As a result, their expectations may not match the realities they will face once they begin their studies. Parents want the best for their kids in life, and one of the things that goes into that is selecting the appropriate course of study and career for them (41). The influence parents have on their children can be weakened by their excessive involvement in decision-making. It is imperative for parents to refrain from placing their personal goals on their offspring or viewing their accomplishments as a reflection of their own worth. (42). Thus, it's a good idea to consult counselors while assisting kids in selecting their course of study and potential employment.

According to the study's findings, Hamadan University of Medical Sciences' fourth-year nursing students' perceptions of social support were deemed to be moderate. Based on the examination of the perceived social support scores among the three categories of family, friends, and significant others, the students perceived the greatest amount of support from their families. This study emphasized the value of family interactions even when children had little time to engage

with their friends and classmates. Students spent a lot of time at home during the COVID-19 pandemic, which resulted in more interactions with family members. The significance of families as a vital source of social support for students has been brought to light by this increased engagement. University students, according to Labrague et al. (43), reported a modest level of perceived social support during the COVID-19 quarantine period. Labrague et al. emphasized the importance of enhancing social support to counteract the detrimental psychological and mental consequences of disease control protocols, such as house confinement, social separation, and quarantine measures during the pandemic. According to the study's findings, professional socialization scores were typically high, with the dimension with the highest mean score being professional skill. This implies a high degree of professional socialization among the pupils. Additionally, prior studies have shown that nursing students have high levels of sociability (24). Albikawi concluded that being a nurse involves more than just a set of tasks and practical abilities. As the internalization and formation of a professional identity, it is actually a component of the socialization process. A strong sense of belonging and a clearly defined professional identity are key components of professional socialization in nursing (40). One of the requirements of the care profession, according to Mafumo et al., is that nurses have professional socialization. Research indicates that this socialization has a direct impact on the caliber of services that nurses offer (34). Studies have shown that the process of professional socialization starts when people enrol in nursing programs and continues when they finish their school and enter the field (44). Consequently, socialization is a result of school and work experiences, whether that result is intended or not (45). According to Lee and Yang's research, experiential learning aids in the development of coping mechanisms and professional socialization in students; nevertheless, a deficiency of social support might cause issues with curriculum management and the acquisition of theoretical and practical skills. Students receive their first nursing experiences alongside nursing instructors since clinical training is conducted by qualified and experienced nursing instructors, who also serve as teachers and professional role models for nursing students. Thus, before beginning clinical training, teachers should acquaint students with professional culture (46). A key idea in nursing is professional socialization, which is a result of a person's interaction with their workplace and interpersonal connections.

Consequently, more social support leads to improved treatment quality provided by nurses (47).

The study has several limitations that should be considered. Firstly, the use of self-reporting for questionnaire completion may impact the accuracy and dependability of respondents' responses due to their physical and mental condition. The researchers suggested that students take rest periods to mitigate this constraint and fill out the questionnaire when they are not under significant physical or mental strain. Additionally, the stressful circumstances brought on by the COVID-19 epidemic may have influenced the study's findings. Furthermore, the study only focused on fourth-year nursing school students in a limited sample size using the full number technique, and it is not possible to demonstrate a cause-and-effect link in terms of methodology. Therefore, caution should be exercised when extrapolating the findings. Additionally, the limited sample size of 128 students in the study may account for the observed weak but direct link between social support and professional socialization. Consequently, future research with a larger sample size of fourth-year nursing students from other faculties and a design that examines cause-and-effect linkages is recommended.

Conclusion

The current study discovered a direct and positive correlation between fourth-year nursing students' professional socialization level and their perception of social support. It appears that among nursing students, social support promotes greater socialization. Increased socializing is probably a factor in nursing students' improved performance. An individual's interactions with coworkers and other people in the office influence their professional socialization. The nursing education system should place a high priority on providing students with a safe, disciplined atmosphere where knowledgeable teachers mentor their career development in order to improve this process. This strategy will support the accomplishment of learning goals and foster the development of capable and committed students. Ultimately, the results of this study may help educational planners and nursing managers create professional socialization programs that work for nursing students. It is therefore advised that studies investigating the causal links between these variables be designed for use by future researchers. By applying evidence-based techniques, trainers and experts in nursing education can improve the educational system in an efficient manner.

Ethical considerations

This study was approved by the ethics committee of Hamadan University of Medical Sciences with ethics number IR.UMSHA.REC.1400.818. The researchers first explained the objectives of the research to the participants; then, written informed consent was obtained from the students to participate in the study. During the study, the researchers provided the necessary explanations to the students regarding the confidentiality of all the information and the right to withdraw from participation at any stage of the study.

Artificial intelligence utilization for article writing

In this article, artificial intelligence was employed not to generate the content but to enhance the manuscript's grammatical quality.

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Conflict of interest statement

All the authors of this paper agree on the absence of any conflict of interest.

Author contributions

All authors contributed to the study's conception and design. Vahid Yousofvand contributed to designing and conducting the research, analyzing the data, writing the article, and submitting the article. Amir Sadeghi contributed to designing and conducting the research, analyzing the data, writing the article, and submitting the article. Naser Kamyari contributed to designing, conducting the research, and analyzing the data. Behrad Sadeghi contributed to designing and conducting the research and writing the article. Seyedeh Nayereh Fallahan contributed to designing and conducting the research and writing the article.

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Data availability statement

The datasets generated and/or analyzed during the current study are not publicly available since participants' information is kept confidential. However, they are available from the corresponding author at reasonable request.

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