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The Relationship Between Job Satisfaction and Professional Identity among Nurses: A Cross-Sectional Study

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Despite the recognized importance of job satisfaction and professional identity in nursing outcomes, their precise empirical interplay remains underexplored within specific Iranian clinical contexts. Therefore, this study aimed to investigate the relationship between job satisfaction and professional identity among nurses at Bent al-Hoda Hospital, Bojnourd, Iran. This descriptive-analytical, cross-sectional study. All 89 eligible nurses working at the hospital were enrolled. Data were collected using the Professional Identity Scale for Nurses and the Minnesota Satisfaction Questionnaire. The findings indicated a significant positive correlation between nurses' job satisfaction and their professional identity. Multivariate analysis using the generalized linear model showed that marital status, employment type, and job satisfaction were significantly associated with professional identity. Moreover, a one-unit increase in job satisfaction led to a 0.47 increase in professional identity. Given the critical role of job satisfaction in healthcare systems and its significant association with professional identity, healthcare managers and policymakers are recommended to consider interventions that enhance nurses' job satisfaction to strengthen their professional identity.

Keywords: Job Satisfaction; Professional Identity; Nurses

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Introduction

Nurses, as a vital pillar of hospitals, play a significant role in improving hospital performance. In addition to possessing sufficient knowledge in patient care, nurses must also have specific clinical and personal skills, while maintaining a high level of job satisfaction in order to perform their duties effectively. Nurses provide approximately 80% of direct patient care and maintain close interactions with patients [1]. Within the healthcare system, nurses constitute the largest portion of the workforce, playing a crucial role in promoting community health. Without efficient nursing personnel, the healthcare system cannot achieve its goals. Currently, severe shortages of nursing staff and high turnover rates have become major challenges in both developed and developing countries [2]. Considering the sensitivity and importance of the nursing profession and the central role of nurses in health, treatment, and patient care, job satisfaction is regarded as a critical factor in this profession [3]. Job satisfaction is defined as a set of positive and negative attitudes toward one's job, which is influenced by emotions, motivations, desires, and individual needs in the workplace [4].

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Job satisfaction is described as an emotional state that depends on the interaction of employees' personality traits, values, and expectations with their work environment and organization [5]. This concept is highly important not only for the individual but also for achieving the desirable organizational goals [6]. Traditional models of job satisfaction have often focused on an individual's feelings about their job; however, what truly shapes job satisfaction is not merely the nature of the profession itself, but rather the expectations an individual holds toward that job [7]. Herzberg proposed that job satisfaction has two dimensions: the first relates to environmental characteristics and external aspects of the job, including supervision, salary, interpersonal relationships, and working conditions; the second dimension is associated with the content and internal aspects of the job, such as the importance of advancement, responsibility, and personal growth [8].

Dynamic organizations, including hospitals, must not only focus on organizational development in response to rapid changes but also take into account the needs of their employees, ensuring their satisfaction while preventing stress and dissatisfaction caused by such changes [9]. Managers have realized that motivated and committed employees significantly influence the quality of organizational performance and are considered the most valuable assets of any institution. Therefore, enhancing employees' job satisfaction is viewed as a means to foster motivation and organizational commitment, thereby strengthening competitiveness with other organizations [10]. Consequently, nurses' job satisfaction affects various factors such as quality of life, burnout, occupational stress, the quality and quantity of nursing care provided, patient satisfaction, turnover and absenteeism rates, and ultimately, the overall success of the organization [8]. Moreover, fairness in career advancement, the availability of welfare facilities and necessary resources in the workplace, and the quality of social relationships among staff contribute substantially to higher job satisfaction [11].

Studies indicate that job satisfaction is associated with improved quality of patient care and increased productivity among nurses. For every 25% increase in nurses' job satisfaction, their motivation to continue working rises by 29%. Such improvements in job satisfaction have been shown to reduce infections by 78%, patient falls by 17%, and pressure ulcers by 59%, reflecting the positive outcomes of enhanced nursing care for patients as a result of higher job satisfaction among nurses [6]. Psychosocial factors are diverse and abundant, and over the past decade, greater attention has been given to the impact of psychosocial job factors on employees' health [12].

Another factor that may be related to job satisfaction is professional identity. Professional identity is associated with group interactions in the workplace and how individuals in a given profession distinguish themselves from those in other fields [13]. It has been identified as a key factor influencing nurses' ability to provide high-quality care for patient recovery. Professional identity includes both the subjective dimension—nurses' feelings and self-perception as members of the profession—and the external perspective, or how others view an individual as a nurse. It encompasses specific attitudes and behaviors aligned with professional roles [14].

The New York State Nurses Association has emphasized that professional identity should be considered a global outcome in all nursing curricula, from undergraduate to doctoral programs [15]. Possessing a strong professional identity is not only important for boosting self-confidence, fostering a sense of belonging to the profession, and promoting interpersonal relationships among nursing students, but it is also the most significant factor in achieving job satisfaction and the strongest predictor of nurses' retention within the profession. Nurses with underdeveloped professional identity and low job satisfaction are more likely to leave the profession [16]. Furthermore, a positive professional identity can contribute to an individual's personal, social, and professional development [17]. As such, professional identity has been highlighted as a critical factor for nurses in providing high-quality care for patients. A positive professional identity is also essential for enhancing self-confidence, strengthening the sense of belonging to the profession, and improving interpersonal relationships among nurses [18].

Job satisfaction is a vital component in the nursing profession, directly impacting the quality of patient care [3]. Similarly, a strong professional identity plays a key role in nurses' clinical performance and resilience. Currently, the Iranian healthcare system is facing a critical challenge regarding nurse turnover and migration. Therefore, identifying and strengthening factors that can enhance nurse retention—such as professional identity—is of paramount importance. However, it remains unclear how this factor correlates with job satisfaction specifically within the context of

small-city hospitals, where resources and working conditions often differ from metropolitan centers. To address this empirical gap and provide actionable evidence for healthcare administrators, this study aimed to investigate the relationship between job satisfaction and professional identity among nurses at Bent al-Hoda Hospital in Bojnourd in 2022.

Materials and Methods

This research employed a descriptive-analytical cross-sectional approach. The study population comprised nurses employed at Bent al-Hoda Hospital in Bojnourd, Iran, in 2022. During the study period, the overall count of qualified nurses at this hospital was precisely 89. Consequently, no sampling formula was necessary, and all 89 qualified nurses participated in the study (census method). The criteria for inclusion included a willingness to participate in the research, holding at least a bachelor's degree in nursing, and having at least six months of clinical work experience. The exclusion criterion involved the participant's decision to withdraw or their reluctance to continue participating at any point during the study. In order to observe research ethics, prior to distributing the questionnaires, participants were provided with necessary explanations about the study objectives and the procedure for responding to the questions. It was emphasized that they had the right to withdraw from the study at any stage or to refrain from answering any questions. All participants were assured that their information would be kept strictly confidential and anonymous

Data Collection Tools

Data were collected using two instruments: the Nurses' Professional Identity Questionnaire developed by Hao et.al and the Minnesota Job Satisfaction Questionnaire (MSQ).

Nurses' Professional Identity Questionnaire

The Nurses' Professional Identity Questionnaire developed by Hao et al. consists of 17 items measuring five dimensions: professional self-image, job achievement, social comparison and self-reflection, professional independence, and social modeling. Responses are rated on a 5-point Likert scale ranging from *strongly disagree* (score 1) to *strongly agree* [score 5]. The minimum possible score is 17 and the maximum is 85. Scores between 17–34 indicate a low level of professional identity, scores between 34–51 indicate a moderate level, and scores above 51 indicate a high level of professional identity. The internal consistency of the questionnaire was reported by its developers with a Cronbach's alpha of 0.83, and the split-half reliability was 0.84. validity was established through content validity and construct validity. Content validity was assessed by 4 experts, the result was satisfactory. Construct validity was evaluated by exploratory factor analysis [19].

The Persian Version of Minnesota Job

The Minnesota Job Satisfaction Questionnaire was originally developed by Weiss et al. in 1967. The short form used in this study consists of 19 items designed to assess six dimensions of job satisfaction: compensation system, nature of the job, opportunities for advancement, organizational climate, leadership style, and physical working conditions [20]. Scores on the questionnaire range from 19 to 38, indicating low job satisfaction; scores from 38 to 57 indicate moderate job satisfaction; and scores above 57 indicate high job satisfaction. The validity of the aforementioned questionnaire was confirmed based on experts' opinions, and its reliability was estimated with a Cronbach's alpha coefficient of 0.78 [21]. In a study conducted by Mohammadi, the reliability of the questionnaire was reported as 0.86 [22]. In the present study, the reliability of the tool was confirmed with a Cronbach's alpha coefficient of 0.85.

Data Analysis

Data were analyzed using descriptive and inferential statistics with SPSS software version 22. The normality of data distribution was assessed using the Shapiro-Wilk test. As the data followed a normal distribution, independent-samples t-test and one-way ANOVA were used to compare mean scores of job satisfaction and professional identity across demographic and occupational variables.

Results

In this study, a total of 89 nurses, all of whom were female, participated. This complete female representation is attributable to the study setting — Bent al-Hoda Hospital, Bojnourd, which is a specialized maternity and women's hospital where the entire nursing workforce is female. Most of the participants held a bachelor's degree in nursing (86.5%), while 12 nurses (13.5%) held a master's degree. The majority of the nurses had between 5–10 years of work experience (30.3%). Most participants were married (82%). Regarding age, the largest proportion was under 30 years old (38.2%). In terms of employment status, 55 nurses (61.8%) were permanent staff. The highest participation rate was observed in the obstetrics/gynecology and surgery wards (37.1%). The largest proportion of nurses scored in the moderate level of job satisfaction

(48.3%), while the majority achieved a very good level of professional identity (76.4%) (Table 1).

Table 1. Demographic Characteristics and Variables Related to Nurses' Job Satisfaction and Professional Identity

Variable		Frequency (%)
Job Satisfaction		
	Low	21 (23.6)
	Moderate	43 (48.3)
	High	25 (28.1)
Professional Identity		
	Low	6 (6.7)
	Moderate	15 (16.9)
	High	68 (76.4)
Age		
	< 30 years	34 (38.2)
	31–35 years	24 (27)
	> 35 years	31 (34.8)
Education		
	Bachelor's degree	77 (86.5)
	Master's degree	12 (13.5)
Work Experience		
	0–5 years	26 (29.2)
	6–10 years	27 (30.3)
	11–15 years	19 (21.3)
	> 15 years	17 (19.1)
Marital Status		
	Married	16 (18)
	Single	73 (82)
Employment Type		
	Permanent	55 (61.8)
	Contractual	10 (11.2)
	Other	24 (27)
Department		
	NICU	12 (13.5)
	Neonatal	31 (34.8)
	Obstetrics/Surgery	33 (37.1)
	Emergency/ Operating Room	13 (14.6)

In assessing the dimensions of job satisfaction, the mean and standard deviation of scores were as follows (Table 2).

Table 2. Mean and Standard Deviation of Nurses' Job Satisfaction and Professional Identity Scores in the Study Sample

Variable	Dimension	Mean(SD)
Job Satisfaction	Compensation System	5.53(2.40)
	Nature of the Job	12.03(3.90)
	Opportunities for Advancement	7.10(3.05)
	Total Score	47.07(13.53)
Professional Identity	Organizational Climate	5.68(2.08)
	Leadership Style	10.38(3.28)
	Physical Conditions	6.31(3.08)
	Total Score	58.66(13.16)

Univariate analyses showed no statistically significant relationships between marital status, education level, work experience, age, employment type, or department with nurses' job satisfaction and professional identity ($p > 0.05$) (Table 3).

Table 3. Relationship Between Nurses' Demographic Variables and Job Satisfaction and Professional Identity

Variable	Job Satisfaction Mean (SD)	Professional Identity Mean (SD)
Marital Status		
Single	51.31 (14.84)	56.00 (14.04)
Married	46.15 (13.15)	59.25 (12.98)
P-value*	0.17	0.37
Education		
Bachelor's	46.27 (13.67)	57.53 (13.26)
Master's	52.25 (11.77)	65.92 (10.14)
P-value*	0.15	0.39
Work Experience		
1–5 years	46.30 (13.47)	55.62 (13.31)
6–10 years	47.73 (14.71)	58.44 (13.18)
11–15 years	48.23 (12.05)	63.63 (13.72)
>15 years	47.07 (13.53)	58.12 (11.68)
P-value**	0.96	0.25
Age		
≤30 years	46.35 (12.74)	56.38 (12.89)
31–35 years	46.04 (16.20)	59.42 (13.02)
>35 years	48.67 (12.37)	60.58 (13.60)
P-value**	0.72	0.42
Employment Type		
Permanent	46.56 (13.60)	57.53 (13.58)
Contractual	48.80 (11.98)	62.30 (11.79)
Other	47.54 (14.41)	59.75 (12.83)
P-value**	0.87	0.51
Department		
Neonatal	45.75 (12.79)	57.50 (9.97)
NICU	46.87 (12.80)	61.06 (13.27)
Obstetrics/Surgery /Management	46.54 (14.44)	56.73 (14.61)
Emergency/OR	50.15 (14.63)	58.92 (11.91)
P-value**	0.84	0.61

*Independent *t*-test **One-way ANOVA

Multivariate analysis using a generalized linear model indicated that marital status, employment type, and job satisfaction were significantly associated with nurses' professional identity. Specifically, the professional identity score was 8.8 points higher in married nurses compared to single nurses and 9.3 points higher in nurses categorized under other employment types compared to permanent staff.

Furthermore, job satisfaction showed a positive correlation with nurses' professional identity, such that each one-unit increase in job satisfaction was associated with a 0.47-unit increase in professional identity score (Table 4).

Table 4. Relationship Between Nurses' Job Satisfaction and Professional Identity, Controlling for Other Variables

Variable	Category	B Coefficient [95% CI]	P-value*
Marital Status	Single	Reference	
	Married	8.88 (2.21, 15.54)	0.009
Education	Bachelor's	Reference	
	Master's	5.67 (-1.40, 12.74)	0.12
Work Experience	1–5 years	Reference	
	6–10 years	3.15 (-4.05, 10.35)	0.39
	11–15 years	6.28 (-3.13, 15.68)	0.19
	>15 years	1.27 (-9.24, 11.78)	0.81
Age	≤30 years	Reference	
	31–35 years	2.67 (-4.55, 9.91)	0.46
	>35 years	3.27 (-5.65, 12.21)	0.47
Employment Type	Permanent	Reference	
	Contractual	5.09 (-2.59, 12.77)	0.19
	Other	9.33 (2.89, 15.75)	0.004
Department	Neonatal	Reference	
	NICU	5.59 (-1.98, 13.17)	0.14
	Obstetrics/Surgery/Management	2.04 (-5.55, 9.64)	0.59
	Emergency/OR	-0.97 (-9.42, 7.47)	0.82
Job Satisfaction		0.47 (0.30, 0.63)	0.000

*Multivariate analysis using a generalized linear model

Discussion

This study aimed to investigate the relationship between job satisfaction and professional identity among nurses at Bent al-Hoda Hospital. The findings demonstrated a significant positive correlation between job satisfaction and professional identity, indicating that for each one-unit increase in job satisfaction, nurses' professional identity increased by 0.47 units.

Previous studies support these findings. For example, the studies conducted by Arkaouz et al. [23], Taghribi et al. [4], Ghorbanzadeh et al. [24], Abbasi et al. [25], and Gholipour et al. [26] reported that the majority of participating nurses had moderate job satisfaction, consistent with the present study. Conversely, Alshaberni, El-Mazri, and colleagues [27] found low levels of job satisfaction among Egyptian nurses. Similarly, Sansoni et al. in Italy reported low job satisfaction among nurses [28], and Samacho et al. in Ethiopia found that one-third of nurses were dissatisfied with their jobs [29]. In contrast, Reed's study reported that over 80% of Australian nurses experienced high job satisfaction [30]. Furthermore, Bokani et al. reported that 35% of nurses in Isfahan were completely satisfied with their jobs [31].

Mousavi et al. [32] reported that overall job satisfaction among nurses was at a good level, whereas in the present study, the majority of nurses' job satisfaction scores were at a moderate level. This discrepancy may be attributed to differences in the study populations, working conditions, and organizational climate.

The current study found no statistically significant relationship between marital status, education level, work experience, age, employment type, or department and nurses' job satisfaction. In contrast, Asghari et al. [33] reported that higher age, being married, and contractual employment positively influenced nurses' job satisfaction. Similarly, Gholipour et al. [26] found a significant relationship between employment type, age, and gender with job satisfaction, which contradicts the findings of the present study.

Notably, although marital status and employment type showed no significant association with professional identity in the bivariate analysis, both variables emerged as significant predictors in the multivariate model. This likely reflects a confounding effect, as job satisfaction appears to have masked their true influence when examined in isolation. Once job satisfaction and other covariates were accounted for, the independent contribution of marital status and employment type became evident—underscoring the value of multivariate analysis in capturing relationships that simpler comparisons may obscure.

Regarding the subdimensions of job satisfaction (compensation system, nature of the job,

opportunities for advancement, organizational climate, leadership style, and physical conditions), the present study showed that the highest scores were related to the nature of the job, while the lowest scores were associated with the compensation system and organizational climate. This finding aligns with the results of Ghorbanzadeh et al. [24] and Abbasi et al. [25], who also reported the highest scores for the nature of the job and the lowest for compensation and organizational climate.

The relatively high scores for the nature of the job in this study suggest that nurses perceive their work as valuable and have intrinsic motivation toward it. This positive perception likely contributed to favorable interpersonal relationships. Previous studies have identified factors such as leadership style, inadequate pay and resources, reduced recognition from patients and families, and high workload as key determinants that decrease job satisfaction [34–35]. These inconsistencies across studies likely reflect differences in measurement instruments, organizational climate, and hospital policy contexts, underscoring the need for center-specific evaluation of job satisfaction.

Hashemi et al., in a systematic review, reported that one of the most important factors influencing the development of professional identity in nurses is job satisfaction [15], which aligns with the findings of the present study. Similarly, Samacho et al. [29] indicated that factors such as professional commitment increase job satisfaction. Biglari et al. [36], who examined the relationship between organizational identity and job satisfaction among nurses, found a positive and direct correlation between organizational identity and job satisfaction, consistent with the current study.

Furthermore, studies by Van Dyck et al. [37] and Gholipour & Amiri [38] also reported a positive relationship between organizational identity and job satisfaction, supporting the results of the present research. Ehsani Farid [14] similarly found that professional identity has a significant negative relationship with role stress among nurses. In other words, higher professional identity is associated with lower role stress.

Limitations

The present study has some limitations. Data were collected using self-administered questionnaires, which may be subject to response bias and could affect the results. Additionally, this research was conducted as a single-center study at a specialized women's hospital, resulting in an entirely female sample; caution is therefore needed when generalizing the findings to mixed-gender nursing populations or other hospital settings.

Recommendations for Future Research

Given the significant and undeniable role of professional identity in job satisfaction, it is recommended that nursing managers not only identify the barriers to job satisfaction but also implement educational workshops, professional and personal counseling, and foster a work environment characterized by respect. Encouraging nurses to join professional nursing associations can further strengthen their professional identity. Future studies should also examine these relationships in different hospitals and healthcare settings to validate and expand upon the current findings.

Conclusion

The study demonstrated a significant positive correlation between nurses' job satisfaction and professional identity. Specifically, a one-unit increase in job satisfaction was associated with a 0.47-unit increase in professional identity. This finding can be explained by the fact that nurses with higher professional identity often exhibit characteristics such as higher job satisfaction, greater professional commitment, and systematic, rational problem-solving skills. They approach issues and challenges in an organized manner, maintain a realistic perspective on social opportunities, and experience less role-related stress.

Authorship contribution statement

All authors have reviewed and approved the final version of the manuscript. S, F & SH conducted the study and collected the data; HS, E & A performed the data analysis and interpretation

Ethical Considerations

This study was conducted in accordance with the Declaration of Helsinki. Written informed consent was obtained from all participants. ..ethics code:

Conflict of interest statement

No conflict of interest has been declared

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Conflict of Interest

The authors declare no conflicts of interest in this study.

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Data Availability Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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