



The Association of Clinical Competence and Emotional Intelligence with Life Satisfaction in Nurses: The Mediating Role of Job Satisfaction

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Abstract

Introduction: Nurses are pivotal to the healthcare system, providing essential care to patients. However, the nursing profession is characterized by demanding workloads and significant challenges. Accordingly, this study aimed to predict life satisfaction based on clinical competence and emotional intelligence through job satisfaction in nurses working in hospitals and medical centers in Ahvaz in 2023.

Methods: The present study was correlational and of the structural equation modeling type. The study population included all nurses working in Ahvaz City hospitals during the period of April to June 2023. A convenience sample of 182 nurses was selected for participation. The research tools included the Satisfaction with Life Scale (SWLS), Minnesota Satisfaction Questionnaire (MSQ), and Competency Inventory for Registered Nurses (CIRN), and Emotional Intelligence Scale (EIS). Data were analyzed using structural equation modeling (SEM) with SPSS-25 and AMOS-24 software. All hypotheses were tested at a significance level of $\alpha = 0.05$.

Results: The results showed that there was a positive and significant relationship between clinical competence and job satisfaction in nurses ($P < 0.001$). The relationship between emotional intelligence and job satisfaction in nurses was also positive and significant ($P < 0.001$). In addition, the relationship between job satisfaction and life satisfaction was positive and significant ($P < 0.001$). The results suggest that job satisfaction mediates the relationship between emotional intelligence and clinical competence with life satisfaction in nurses ($P < 0.001$).

Conclusions: The findings of this study indicate positive and significant associations between clinical competence, emotional intelligence, and life satisfaction among nurses. Moreover, job satisfaction emerged as a mediating factor, suggesting that nurses with higher levels of clinical competence and emotional intelligence report greater job satisfaction, which subsequently contributes to increased life satisfaction. These results underscore the importance of fostering both clinical skills and emotional intelligence in nurses to enhance their overall well-being and potentially optimize patient care outcomes.

INTRODUCTION

Nursing is a specialized occupation intrinsically linked to human health and life. Nurses frequently encounter a range of stressful conditions, including emotional exhaustion, diminished self-efficacy, reduced personal accomplishment, and decreased life satisfaction [1, 2]. Life satisfaction is a subjective measure of contentment derived from fulfilling personal needs and desires across various life domains [3, 4]. A recent study of nursing personnel revealed a significantly elevated risk of mental disorders, up to 2.4 times higher, among those with low life satisfaction [5]. Research consistently demonstrates associations between nurses' life satisfaction and

resilience, gratitude, job satisfaction, compassion, and self-efficacy [6]. Moreover, a positive correlation exists between life satisfaction and job burnout, with nurses experiencing low life satisfaction being particularly susceptible to burnout [7]. Therefore, enhancing nurses' life satisfaction is paramount for retaining staff and promoting mental health.

A myriad of factors influence nurses' life satisfaction. Nursing is a multifaceted profession demanding a complex interplay of knowledge, skills, and attitudes, creating a demanding work environment [8]. In response to the dynamic healthcare landscape and

evolving patient needs, a competency-based approach has emerged as a pivotal policy in nursing [9]. This framework equips nurses to navigate the profession's complexities effectively. Concurrently, the expanding scope of nursing practice necessitates continuous professional development, driving a demand for enhanced clinical competence [10]. Substantial research supports the association between clinical competence and positive individual, psychological, and occupational outcomes [11]. For example, Gunawan et al. [12] identified job satisfaction, burnout, and specialized knowledge as correlates of clinical competence in nurses through meta-analysis. Similarly, Najafi et al. [13] linked job satisfaction to nurses' clinical competence.

Emotional intelligence is another focal point of this study in relation to nurses' life satisfaction [14]. This construct encompasses the ability to accurately perceive and understand one's own and others' emotions, and to utilize emotional information judiciously to enhance cognitive processes [15]. Research on registered anesthesia nursing students has demonstrated that emotional intelligence can mitigate the impact of negative emotions on critical decision-making and positively influence patient care [16]. Similarly, studies on Spanish nurses have linked emotional intelligence to reduced job burnout, psychosomatic complaints, and the negative effects of psychosocial stressors, while concurrently promoting job satisfaction [17]. Previous research has directly associated emotional intelligence with nurses' life satisfaction, suggesting that individuals with higher levels of emotional intelligence may experience greater life contentment [1, 18].

Clinical competence and emotional intelligence, in addition to their direct effects on nurses' life satisfaction, may also mediate these relationships through certain variables. One such factor that has been shown to influence life satisfaction based on the characteristics of the nursing profession, and that is also influenced by clinical competence and emotional intelligence according to the research literature [17, 19], is job satisfaction. Job satisfaction is a key indicator of organizational performance in healthcare settings, with research demonstrating its impact on culture and performance, workplace health, and even overall patient outcomes [20]. Job satisfaction is defined as the feelings and emotions employees have about their work and the level of contentment employees have with their jobs [21]. While engaging and satisfying employees has many benefits, it can be a complex undertaking as job satisfaction can be influenced by many factors. Positive facilitators include rewards, collaboration and support, and negative factors include increased stress and workload, difficult working conditions, and resource shortages [22-24].

Existing research has explored the relationships between clinical competence, emotional intelligence, job

satisfaction, and life satisfaction among healthcare professionals, including nurses. However, several gaps remain in the literature. Previous studies have often focused on the direct relationship between these variables, neglecting the potential mediating role of job satisfaction. Additionally, many studies have been conducted in specific healthcare settings or regions, limiting the generalizability of their findings. Given the significance of these variables for nurses' well-being and performance, it is crucial to investigate the complex interplay between clinical competence, emotional intelligence, job satisfaction, and life satisfaction in a broader context. By examining the mediating role of job satisfaction, this study aims to contribute to a more comprehensive understanding of the factors influencing nurses' overall well-being and satisfaction with their profession.

METHODS

This study employed a correlational design utilizing structural equation modeling (SEM). The study population encompassed all nurses employed in Ahvaz City hospitals from April to June 2023. A convenience sampling approach was adopted. Inclusion criteria comprised participant consent and a minimum of two years' work experience. Exclusion criteria included withdrawal of consent and incomplete questionnaires. Given the number of variables and the potential for attrition, a target sample size of 200 participants was established. Informed consent was obtained from all participants, who were assured of data confidentiality and the right to withdraw from the study at any time. After excluding incomplete and corrupted data, the final sample for analysis consisted of 182 questionnaires.

Research Instruments

Satisfaction with Life Scale (SWLS)

The assessment of life satisfaction was measured using the Satisfaction with Life Scale (SWLS) developed by Diener et al. [25]. This widely used instrument consists of five items, each rated on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Possible scores on the SWLS range from 5 to 35. Prior research has reported acceptable reliability for the SWLS, with Cronbach's alpha coefficients ranging from [26]. The SWLS demonstrated robust internal consistency in the present study, with a Cronbach's alpha of 0.83, indicating that its items effectively measure a unified construct of life satisfaction.

The Minnesota Satisfaction Questionnaire (MSQ)

Job satisfaction was assessed using the Minnesota Satisfaction Questionnaire (MSQ) [27]. This 19-item instrument utilizes a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) to measure various facets of job satisfaction. Scores are calculated by summing responses across all items, with higher scores indicating

greater satisfaction. Safi et al. [28] found good internal consistency (Cronbach's alpha = 0.84). In the present study, the MSQ demonstrated similar internal consistency with a Cronbach's alpha of 0.88.

The Competency Inventory for Registered Nurses (CIRN)

The Competency Inventory for Registered Nurses (CIRN), developed by Liu et al. [29], is a 55-item tool that assesses nurses' competence in seven dimensions: clinical care, leadership, interpersonal relationships, ethical/legal performance, professional development, mentoring and education, and research-critical thinking. The instrument is designed using a 5-point Likert scale, with scores ranging from 0 to 4. The overall instrument score range is 0-220, with higher overall scores indicating higher overall competence. Soudagar and Rambod [30] reported internal consistency reliability of the CIRN using Cronbach's alpha (0.94) and test-retest reliability (0.78). In the present study, Cronbach's alpha was 0.89.

Emotional Intelligence Scale (EIS)

Emotional intelligence was assessed using the instrument developed by Bradberry et al. [31]. This 28-item self-report measure evaluates four key dimensions of emotional intelligence: self-awareness, self-management, social awareness, and relationship management. Each item is rated on a 6-point Likert scale, with higher scores indicating greater emotional intelligence. Total scores range from 28 to 168, with established interpretations for emotional intelligence levels: below 60 = low emotional intelligence, 60-80 = moderate emotional intelligence, and above 80 = high emotional intelligence. Hadadian-Chaghahi et al. [32] reported the Cronbach's alpha of this questionnaire as 0.75. In line with previous research [32], the EIS demonstrated satisfactory internal consistency in the present study, with a Cronbach's alpha of 0.79.

Data Analysis

Data were analyzed using structural equation modeling (SEM). The SPSS-25 and AMOS-24 software were used for model analysis and data analysis. The significance level for all hypotheses was set at $\alpha = 0.05$.

RESULTS

A total of 182 nurses, comprising both males and females, participated in this study. The average age of the participants was 32.14 ± 8.82 years. Table 1 provides a detailed overview of the demographic variables of the study sample.

Table 2 presents the descriptive statistics (means, standard deviations) of the study sample and the results of Pearson's correlation tests to examine the relationships between the predictor, mediator, and criterion variables. The results indicated that all the study variables are significantly correlated. These

correlational analyses provide insights into the bivariate relationships among the study variables.

Table 1. Demographic variables of the study sample

	n	%
Gender		
Male	39	21.43
Female	143	48.57
Marital status		
Married	88	48.00
Single	94	51.00
Age (years)		
20-25	16	8.79
25-30	49	26.92
30-35	75	41.21
35-40	24	13.19
40-45	18	9.89
Work history (years)		
1-5	48	26.37
5-10	69	37.92
10-15	45	24.73
15-20	10	5.49
20-25	10	5.49

Before analyzing the data using SEM, the assumptions of multivariate normality, linearity, multicollinearity, and error independence were tested and confirmed. To assess data normality, skewness and kurtosis tests were conducted. Since all study variables had absolute skewness coefficients less than 2 and absolute kurtosis coefficients less than 3, the assumption of data normality was confirmed for the entire sample. To examine multicollinearity, the tolerance and variance inflation factor (VIF) statistics were used. For all variables, the VIF values were less than 10 and the tolerance values were greater than 0.1. Therefore, the assumption of no multicollinearity was met. To test the assumption of error independence, Durbin-Watson's test was used. The obtained value in this study was 2.04, which falls within the range of 1.5-2.5, indicating that the assumption of error independence was met.

Table 3 presents the fit indices for the proposed and modified tested model, including the normed chi-square statistic to degrees of freedom ratio, incremental fit index (IFI), comparative fit index (CFI), normed fit index (NFI), goodness-of-fit index (GFI), and root mean square error of approximation (RMSEA). According to the results, the proposed model did not exhibit adequate fit in terms of some fit indices, including the root mean square error of approximation (RMSEA). Additionally, based on the path coefficients presented in Table 3, the direct path from clinical competence to life satisfaction and the path from emotional intelligence to life satisfaction were not significant and were therefore removed from the model. Consequently, the proposed model was modified by removing the non-significant paths, and the fit indices of the modified model were re-evaluated. It was observed that the final modified model exhibited adequate fit in all fit indices (RMSEA= 0.07). Figure 1 presents the standardized path coefficients in the final tested model.

Table 2. Descriptive and correlation statistics of variables

Variables	Mean $\pm$ SD	1	2	3	4
1- Clinical competence	153.42 $\pm$ 33.48	1			
2- Emotional intelligence	119.92 $\pm$ 13.40	0.54**	1		
3- Job satisfaction	61.07 $\pm$ 15.35	0.54**	0.49**	1	
4- Life satisfaction	21.93 $\pm$ 7.61	0.26*	0.23*	0.44**	1

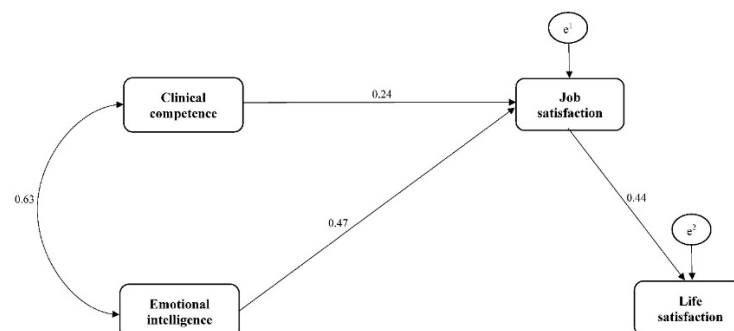
** $P < 0.01$; * $P < 0.05$

Table 3. The fit indices of the initial and final models

Fit indicators	χ^2	df	(χ^2 /df)	IFI	CFI	NFI	GFI	RMSEA
Proposed model	220.833	60	3.62	0.91	0.94	0.89	0.91	0.12
Final model	141.80	58	2.44	0.98	0.98	0.97	0.98	0.07

Table 4. Path coefficients for direct and indirect relationships of variables in the final model

Path	Final model	
	β	P
Clinical competence $\rightarrow$ Life satisfaction	0.02	0.319
Emotional intelligence $\rightarrow$ Life satisfaction	0.03	0.240
Clinical competence $\rightarrow$ Job satisfaction	0.25	0.003
Emotional intelligence $\rightarrow$ Job satisfaction	0.46	0.001
Job satisfaction $\rightarrow$ Life satisfaction	0.44	0.001
Clinical competence $\rightarrow$ Life satisfaction through the mediating role of Job satisfaction	0.11	0.001
Emotional intelligence $\rightarrow$ Life satisfaction through the mediating role of Job satisfaction	0.20	0.001

**Figure 1.** Standard path coefficients of the final model

The path coefficients and their standardized coefficients in the final model are presented in Table 4. According to the results, there was a positive and significant relationship between clinical competence and job satisfaction among nurses ($P=0.003$). Furthermore, a positive and significant relationship was found between emotional intelligence and job satisfaction ($P<0.001$). The direct relationship between job satisfaction and life satisfaction was also positive and significant ($P<0.001$). However, the results of this study suggest that there was no significant relationship between clinical competence and life satisfaction, nor was there a significant relationship between emotional intelligence and life satisfaction among nurses. Interestingly, the results indicate that job satisfaction mediated the relationship between emotional intelligence and clinical competence with life satisfaction ($P<0.001$). This suggests that job satisfaction plays an important role in transmitting the effects of emotional intelligence and clinical competence on nurses' life satisfaction.

DISCUSSION

The present study aimed to investigate the relationship between clinical competence and emotional intelligence

with life satisfaction in nurses, with job satisfaction as a mediating variable. The findings of this research yielded significant implications for understanding the interplay between nurses' clinical competence, emotional intelligence, job satisfaction, and life satisfaction.

The findings of this study provide valuable insights into the relationships between emotional intelligence, clinical competence, job satisfaction, and life satisfaction among nurses. Our results confirm the significant mediating role of job satisfaction in the relationship between emotional intelligence and clinical competence with life satisfaction. This supports the notion that job satisfaction serves as a critical bridge, linking nurses' professional attributes to their overall well-being. Interestingly, the direct relationships between emotional intelligence and life satisfaction, and clinical competence and life satisfaction were not significant in the initial model. This suggests that the presence of the mediating variable, job satisfaction, plays a substantial role in shaping these relationships. While the direct relationships were non-significant, the results demonstrated a significant positive association between emotional intelligence and clinical competence, aligning with previous research [12, 13, 17]. This finding

underscores the complementary nature of these constructs in nursing practice. Our findings are consistent with those of Gunawan et al. [12] and Najafi et al. [13], who demonstrated a positive association between clinical competence and emotional intelligence in nurses. Similarly, Soto-Rubio et al. [17] highlighted the importance of emotional intelligence in mitigating the negative impact of psychosocial risks on nurses' well-being and job satisfaction during the COVID-19 pandemic. However, our study also extends previous research by explicitly examining the mediating role of job satisfaction. This contributes to a more comprehensive understanding of the factors influencing nurses' life satisfaction and highlights the importance of fostering job satisfaction to enhance their overall well-being.

The findings of this study provide valuable insights into the relationships between clinical competence, job satisfaction, and life satisfaction among nurses. Our results confirm the significant mediating role of job satisfaction in the relationship between clinical competence and life satisfaction. Clinical competence, a cornerstone of nursing practice, encompasses the knowledge, skills, and abilities required to deliver high-quality patient care [10]. As nurses' clinical competence enhances, their ability to perform effectively and efficiently increases. This improved performance leads to better patient outcomes, which in turn contributes to enhanced job satisfaction among nurses. Our findings are consistent with those of Babaei et al. [33] and Zakeri et al. [34], who demonstrated the positive impact of clinical competence on nurses' well-being. However, our study extends previous research by explicitly examining the mediating role of job satisfaction. This contributes to a more comprehensive understanding of the factors influencing nurses' life satisfaction and highlights the importance of fostering clinical competence to enhance their overall well-being.

Job satisfaction, a crucial component of overall well-being, reflects an individual's positive or negative feelings towards their work. When nurses experience job satisfaction, they derive fulfillment and contentment from their professional endeavors. This positive work experience spills over into their personal lives, contributing to greater life satisfaction [35]. Nurses with high levels of clinical competence are more likely to feel confident in their abilities, fostering a sense of self-efficacy. This self-assuredness translates into a positive impact on their professional and personal lives [36]. In the workplace, nurses with high self-efficacy are more likely to take on challenges, seek out opportunities for growth, and persevere in the face of adversity. This proactive approach contributes to enhanced job satisfaction and overall well-being.

Clinical competence also plays a significant role in career advancement opportunities for nurses. As nurses demonstrate their expertise and competence, they are

more likely to be recognized for their contributions and considered for promotions, leadership positions, and specialized roles. These career advancements lead to increased professional satisfaction and contribute to greater life satisfaction [11]. Effective time management skills, a hallmark of clinical competence, enable nurses to manage their workload efficiently, reducing stress and burnout. This improved work-life balance allows nurses to dedicate more time to personal activities, relationships, and hobbies, enhancing their overall life satisfaction.

The findings of this study underscore the intricate relationship between clinical competence, job satisfaction, and life satisfaction in nurses. Clinical competence serves as a foundation for job satisfaction, which in turn contributes to enhanced life satisfaction. By fostering clinical competence among nurses, healthcare organizations can promote a positive work environment, improve patient care, and enhance the overall well-being of their nursing workforce.

In interpreting the findings of this study, it is essential to acknowledge several limitations that may have influenced the results. The study was conducted exclusively among nurses in hospitals and healthcare centers in Ahvaz, Iran. Therefore, the generalizability of the findings to other cultural, organizational, and healthcare system contexts should be considered with caution. Additionally, the study relied solely on self-report questionnaires for data collection. While self-report measures are a valuable tool for assessing psychological constructs, they may be subject to biases such as social desirability bias or recall bias. Future research could benefit from incorporating additional data collection methods, such as observational measures or interviews, to triangulate findings and enhance the validity of the results. Furthermore, the cross-sectional design of this study limits our ability to establish causal relationships between the variables. Longitudinal studies are needed to investigate the temporal sequence of relationships and to determine whether changes in one variable lead to changes in another.

CONCLUSION

This study demonstrated that clinical competence and emotional intelligence are positively correlated with job satisfaction among nurses. Importantly, job satisfaction was found to mediate the relationship between these constructs and life satisfaction, highlighting its crucial role in bridging nurses' professional attributes with their overall well-being. These findings contribute to the existing body of knowledge by providing further evidence for the importance of cultivating both clinical competence and emotional intelligence in nursing practice. By fostering these attributes and creating supportive work environments, healthcare organizations can enhance job satisfaction, leading to

improved patient care and a more positive nursing workforce.

ETHICAL CONSIDERATIONS

The research was approved by the Ethics Committee of Islamic Azad University, Ahvaz Branch, with the ethical code IR.IAU.AHVZ.REC.1403.

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AUTHORS' CONTRIBUTIONS

ZA and SB did the planning and design of the study. Data gathering was done by ZA. Analysis of data was done by SS and PA. AH was a major contributor to writing the manuscript. All authors were in close collaboration and responsible for critical revisions of the manuscript. All authors read and approved the final manuscript.

CONFLICT OF INTEREST

There are no conflicts of interest regarding the publication of the current research.

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