Relationship between Emotional Intelligence and Attachment Styles and Communication Skills in Nurses

A B S T R A C T

Objectives: Among psychological factors, emotional intelligence and attachment styles can directly affect the quality of interactions and communication skills of nurses. The present study was conducted to determine the relationship between emotional intelligence and attachment styles with communication skills among nurses in 1403.

Tools and Methods: This descriptive-correlational study was conducted among nurses working in hospitals affiliated with Tehran University of Medical Sciences. Using convenience sampling, 291 nurses were selected as the research sample. The research tools included Bradbury and Graves' Emotional Intelligence Questionnaire (2004), Collins and Reed's Attachment Style Questionnaire (1990), and Barton's Communication Skills Questionnaire (1990). The data were analyzed using correlation coefficients and regression analysis to examine the relationships between the study variables

Findings: The relationships between attachment styles and nurses' communication skills and their variables were significant at the 95% confidence level ($p < 0.05$). A positive correlation ($r = 0.396$) was observed between secure attachment and nurses' communication skills. In addition, attachment styles and emotional intelligence together predicted 36.5% of the variance in nurses' communication skills. A negative correlation was observed between avoidant and anxious attachment styles with communication skills, indicating an inverse relationship. All components of emotional intelligence, except self-management, were significantly correlated with nurses' communication skills ($p < 0.05$).

Conclusion: Having emotional intelligence and secure attachment are prerequisites for effective interaction of nurses in clinical settings and seem to play a decisive role in the formation of nurses' communication behaviors as the basis of mental and social health.

Keywords: Emotional Intelligence, Attachment Styles, Communication Skills, Nurses

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Introduction

Nurses constitute the largest group of healthcare providers who, by utilizing their considerable potential, can play an important role in improving the quality of health care (1). As the healthcare group closest to patients and their families, they establish direct and close interactions with care recipients and play a valuable role in maintaining, providing, and promoting health; preventing diseases; and alleviating patients' suffering (2). Effective communication by nurses not only facilitates the collection of medical history and understanding its various aspects but also, by creating empathy and emotional support, can increase patient comfort (3). On the other hand, optimal communication in organizational environments increases staff capability, and evidence shows that human relationships are influenced more by emotional factors than rational ones (4). As an influential variable and a part of social skills, communication skills play a key role in nurses' interpersonal interactions (5). They are a set of abilities and competencies that enable an individual to convey messages, thoughts, emotions, and information clearly, effectively, and appropriately to the audience, as well as to be a listener and provide appropriate feedback; these skills include verbal and written communication, nonverbal communication (body language, facial expressions, eye contact, and tone of voice), active listening, empathy, and the ability to adjust messages in different situations and with different audiences (6). Deficiencies in these skills can lead to consequences such as social anxiety, feelings of loneliness, depression, and occupational failure. Strengthening communication skills requires attention to contextual and teachable factors such as emotional intelligence (7). Various factors influence communication skills. Emotional intelligence is recognized as one of the psychological factors affecting human interactions (8). It is a set of abilities that includes understanding, accurately recognizing, and perceiving one's own and others' emotions, adaptively regulating emotions, and using this emotional awareness to guide thinking and behavior in human interactions. These abilities help individuals have more effective interpersonal relationships, make

better decisions, and have emotional responses appropriate to the situation (9). Emotional intelligence is not only a positive trait but also a set of cognitive and emotional abilities that affect quality of life, social relationships, and occupational success (10). Nurses with higher levels of emotional intelligence can better understand their own and others' emotions and, by regulating emotions, establish more effective interpersonal relationships (11). The importance of these skills becomes more prominent when the patient is in physical distress and requires intimate and supportive human interaction (12). In addition to emotional intelligence, attachment styles are among the other factors affecting human interactions (13). Attachment styles refer to relatively stable emotional and behavioral patterns that individuals adopt in their close relationships—especially those based on early interactions with their caregivers—toward themselves and others. These styles affect the way individuals experience security, intimacy, conflict, dependency, and trust (14). Attachment theory emphasizes the role of emotional bonds in the quality of social relationships and shows that individuals' attachment types can affect their communication and social skills (15). On the basis of these foundations, it can be expected that nurses' attachment styles also play a role in improving the quality of their professional relationships with patients and colleagues(۱۶) . Therefore, given the necessity of conducting this research and since no such study has yet been conducted in the country, the researcher decided to conduct a study aiming to determine the relationship between emotional intelligence and attachment styles with communication skills among nurses in hospitals affiliated with Tehran University of Medical Sciences in 2024.

Instrument and methods

The present study is descriptive-correlational and aims to determine the relationship between emotional intelligence and attachment styles with communication skills among nurses in hospitals affiliated with Tehran University of Medical Sciences in 2025. A total of 291 nurses were selected via the convenience sampling method.

The inclusion criteria for participation in the study were as follows: 1. Employment as a formal, contractual, or official nurse in one of the hospitals affiliated with Tehran University of Medical Sciences. At least one year of clinical work experience to ensure sufficient familiarity with the hospital environment and required communication skills; 3. Willingness and informed consent to participate in the study and complete the questionnaires; 4. No known psychiatric disorders or debilitating chronic diseases were identified on the basis of self-reports. Ability to read and write in Persian to respond accurately to the questionnaires; and 6. Employment in one of the active work shifts (morning, evening, or night) during the study period. After the objectives of the study were explained to the nurses, written informed consent was obtained.

The data collection instruments included the following: 1. Demographic characteristics questionnaire (age, sex, marital status, and hospital of employment).

2. The Bradford and Graves Emotional Intelligence Questionnaire (2004) was translated and validated by Ganji (2005). This questionnaire includes 28 items scored on a 6-point Likert scale and assesses four components, namely, self-awareness, self-management, social awareness, and relationship management, as well as providing a total emotional intelligence score. Scores above 80 indicate high emotional intelligence, whereas scores below 60 indicate low emotional intelligence. Construct validity was established by administering this questionnaire along with the Bar-On Emotional Intelligence Test in a group of 97 participants, yielding a significant correlation coefficient of 0/99 (Ganji, 2005). In the present study, reliability was confirmed, with a Cronbach's alpha of 0.88, indicating high internal consistency. Porjavan (2013) reported a reliability of 91%.

3. The Barton Communication Skills Questionnaire (1990) is used to assess communication skills. This questionnaire includes 18 items measuring three dimensions of communication skills. Items are rated on a 5-point Likert scale from "very low" to "very high." Scores range from 18 to 90, with scores below 36 indicating low communication skills, scores between 36 and 72 indicating moderate skills, and scores above 73 indicating high communication skills.

4. Collins and Read Adult Attachment Scale (1990), which is based on the Hazan and Shaver Adult Attachment Questionnaire (1987) and was revised in 1996. This 18-item scale, rated on a 5-point Likert scale, measures three main attachment styles: secure, avoidant, and anxious ambivalent. Each subscale consists of six items: items 1, 6, 8, 12, 13, and 17 measure secure attachment; items 2, 5, 7, 14, 16, and 18 measure avoidant attachment; and items 3, 4, 9, 10, 11, and 15 measure anxious ambivalent attachment. Collins and Read reported a Cronbach's alpha above 0.80. In Iranian studies,

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Pakdaman (2001) reported alpha coefficients of 0/45 for the dependency subscale, 0/52 for the closeness subscale, and 0/75 for the anxiety subscale(17). Construct validity was confirmed via confirmatory factor analysis, which revealed three factors corresponding to secure, avoidant, and anxious attachment styles. Test–retest reliability over a one-month interval in Iran with a sample of 100 participants showed stable results for all subscales, with a 95% confidence level (Hamidi, 2009)(18). The questionnaires were distributed to nurses after they explained the study objectives and emphasized confidentiality. The participants were assured that their information would remain confidential and that there was no need to provide names. Written informed consent was obtained from all participants. Data analysis was performed via SPSS version 25. Descriptive statistics (mean, standard deviation) and inferential statistics (Pearson correlation coefficient and multiple regression) were used. The Kolmogorov–Smirnov test was employed to assess the normality of the data.

Findings

To examine the status of the study variables, descriptive statistical indices, including the mean and standard deviation, were calculated for each main variable. The total number of participants was 291, of whom the majority were employed in Imam and Shariati Hospitals (87 participants, 29/90%), most were female (261 participants, 96.97%), and the largest age group was 35–50 years (140 participants, 48/11%). With respect to marital status, most participants were married (234 participants, 80/41%).

Descriptive statistics for the Emotional Intelligence Questionnaire revealed that among its components, self-management had the highest score (mean = 72/32, SD = 8/464), and social awareness had the lowest score (mean = 68/18, SD = 4/426). The overall mean emotional intelligence score was 101.58 (SD = 19/993), indicating that participants performed better in managing their own emotions than in social awareness.

In the Attachment Styles Questionnaire, the highest mean was observed for secure attachment (mean = 15/02, SD = 4/328), and the lowest was observed for anxious attachment (mean = 9.34, SD = 4.589), indicating that among the participants, the tendency toward secure attachment was greater than that toward other styles.

In the Communication Skills Questionnaire, verbal communication had the highest mean score (20/95, SD = 3/813), and listening skills had the lowest score (20/57, SD = 4/117). The overall mean number of communication skills was 62/30 (SD = 11/158), suggesting that participants' verbal expression was better than their listening and feedback skills (Table 1).

Table 1. Descriptive Statistics of Emotional Intelligence Questionnaire Variables

variable	mean	Standard Deviation (SD)	Skewness	Kurtosis	Minimum	Maximum
Self-Awareness	21/11	4/591	-0/891	1/012	3	**29**
Self-Management	32/72	8/464	-0/823	0/411	6	**45**
Social Awareness	18/68	4/426	-0/852	0/378	4	**25**
Relationship Management	29/06	7/077	-0/919	-0/070	11	**40**
Emotional Intelligence (EI)	101/58	19/993	-0/589	-0/588	54	**133**
Secure Attachment	15/02	4/328	0/044	-0/992	7	**24**
Avoidant Attachment	9/38	4/100	0/414	-0/596	1	**20**
Anxious Attachment	9/34	4/589	0/160	-0/749	0	**21**
Verbal Skills	20/95	3/813	-0/116	-0/700	11	**29**
Listening Skills	20/57	4/117	-0/090	-0/681	10	**29**

To examine the normality of the data, the one-sample Kolmogorov–Smirnov test was used. The results revealed that the significance level for all the study variables was greater than 0/05, confirming the null hypothesis and indicating that the data were normally distributed.
The analysis revealed a positive and significant relationship between emotional intelligence and communication skills (p < 0/01). Additionally, the components of emotional intelligence (self-awareness, self-management, social awareness, and relationship management) had a positive and significant relationship with secure attachment. In contrast, avoidant and anxious attachment styles had a negative and significant relationship with emotional intelligence components and communication skills (p < 0/01) (Table 2).

Table 2. Correlation Test Results between Research Variables

To examine the relationships between attachment styles and emotional intelligence (independent variables) and between attachment styles and nurses' communication skills (dependent variables), multiple regression analysis was used. The results revealed that the correlation coefficient between attachment styles and emotional intelligence with communication skills was 0/604. Moreover, on the basis of the R^2 value, attachment styles and emotional intelligence together predicted 36/5% of

nber	variable	2	3	4	5	6	7	8	9	10	11	12
	Self-Awareness	0/522**	0/383**	0/496**	0/711**	0/391**	-0/539**	-0/467**	0/537**	0/413**	0/448**	**0/49**
	Self-Management	1	0/598**	0/514**	0/858**	0/180**	-0/228**	-0/211**	0/354**	0/238**	0/319**	**0/32**
	Social Awareness		1	0/678**	0/803**	0/249**	-0/297**	-0/304**	0/432**	0/358**	0/403**	**0/42**
	Relationship Management			1	0/836**	0/282**	-0/363**	-0/326**	0/548**	0/414**	0/427**	**0/48**
	Emotional Intelligence (EI)				1	0/321**	-0/414**	-0/379**	0/563**	0/424**	0/478**	**0/51**
	Secure Attachment					1	-0/808**	-0/798**	0/390**	0/354**	0/378**	**0/39**
	Avoidant Attachment						1	0/789**	-0/492**	-0/441**	-0/428**	**-0/48**
	Anxious Attachment							1	-0/450**	-0/440**	-0/433**	**-0/46**
	Verbal Skills								1	-0/835**	0/811**	**0/83**
	Listening Skills									1	0/858**	**0/85**
	Feedback Skills										1	**0/84**
	Communication Skills											**1**

the variance in nurses' communication skills (Table 3).

Table 3. Summary of the Simultaneous Multiple Regression Model for Examining the Relationships between Attachment Styles and Emotional Intelligence with Nurses' Communication Skills

Correlation Coefficient	Coefficient of Determination (R^2)	Adjusted Coefficient of Determination (Adjusted R^2)	Standard Error of Estimate (SEE)
0/604	0/365	0/356	**8/957**

According to Table 4, the significance level of the test was less than 0/05.

Table 4. Analysis of variance (ANOVA) table for assessing the adequacy of the regression model

Source of Variance	Sum of Squares (SS)	Degrees of Freedom (df)	mean	F Value	p value
Regression Model	13163/048	4	3290/762	41/016	
Residual	22946/340	286	80/232		**0/001**
Total	36109/388	290			

Therefore, the fitted regression model had an adequate fit. As shown in Table 5, the significance levels for avoidant attachment, anxious attachment, and emotional intelligence were all less than 0.05, indicating that these variables are related to nurses' communication skills. According to the beta coefficients, emotional intelligence ranked first (β = 0/367), anxious attachment ranked second (β = -0/220), and avoidant attachment ranked third (β = -0/211).

Table 5. Regression Path Coefficients and Significance Test

variable	Unstandardized Coefficients		Standardized Coefficient (β)	t value	p value
	β	Standard Deviation			
Constant	53/942	6/811		7/919	**0/001**
Emotional Intelligence (EI)	0/205	0/029	0/367	7/038	**0/001**
Secure Attachment	0/154	0/231	0/060	0/667	**0/505**
Avoidant Attachment	-0/573	0/244	-0/211	-2/351	**0/019**
Anxious Attachment	-0/510	0/209	-0/220	-2/434	**0/016**

The positive beta coefficient for emotional intelligence indicates a direct relationship with nurses' communication skills, whereas the negative beta coefficients for avoidant and anxious attachment indicate an inverse relationship with nurses' communication skills.

Discussion

The findings of the present study, which were conducted to examine the relationships between emotional intelligence and attachment styles with communication skills among nurses in hospitals affiliated with Tehran University of Medical Sciences in ۲۰۲۴, revealed a positive and significant relationship between attachment styles and emotional intelligence with nurses' communication skills. The correlation coefficient among the variables was 0/604, and the coefficient of determination was 0/365, indicating that attachment styles and emotional intelligence together explained approximately 36.5% of the variance in nurses' communication skills. According to the regression model, emotional intelligence had the highest predictive power for communication skills, whereas avoidant and anxious attachment styles had a negative relationship with communication skills.

These findings indicate that nurses with higher levels of emotional intelligence are more successful in establishing effective communication with patients, families, and colleagues. Emotional intelligence helps them identify their own emotions and the emotions of others and manage their emotional responses in stressful situations. In contrast, individuals with insecure attachment styles usually experience difficulties in trusting others and forming close relationships, which consequently reduces the quality of their professional communication. This finding is consistent with the results of Refati et al. (2021) and Warnock et al. (2024) (۲۰-۱۹)., who also emphasized that emotional intelligence and secure attachment are two key factors in improving communication skills in service and caregiving professions. According to the researcher, a combination of high emotional intelligence and a secure attachment style enhances empathy, mutual understanding, and more effective

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communication in healthcare settings. Nurses who have greater emotional stability and self-awareness can, when facing anxious or worried patients, create a safe environment for communication and mutual trust by remaining calm and controlling their emotions. Therefore, strengthening emotional intelligence and educating nurses about attachment styles should be considered as part of nursing training programs.

The results also revealed a positive and significant relationship between emotional intelligence and nurses' communication skills. The analysis indicated that the components of self-awareness, social awareness, and relationship management were positively associated with communication skills, whereas the self-management component was not significantly related. Among these components, self-awareness plays the most important role in predicting communication skills. This finding suggests that nurses who have a better understanding of their own and others' emotions and can intelligently manage interpersonal relationships perform more successfully in verbal and nonverbal communication. This result aligns with the findings of Mafi and Asefzadeh (2014) and Zina et al. (2024) (۲۲-۲۱)., who reported that higher emotional intelligence increases communication efficiency and reduces workplace conflicts in nursing. Researchers believe that emotional intelligence plays a fundamental role in the quality of human interactions. Nurses with high emotional intelligence not only understand patients' emotions but can also control their own emotions and act professionally. These abilities enable nurses to maintain effective, calm, and humane communication even in critical or high-stress situations. Therefore, attention to training emotional intelligence skills, including self-awareness, empathy, and relationship management, is essential in nursing education programs.

The results also revealed a significant relationship between attachment styles and nurses' communication skills. Secure attachment had a positive relationship with communication skills, whereas avoidant and anxious attachment styles had a negative and significant relationship.

This finding confirms that nurses with secure attachment are more inclined to establish intimate relationships, mutual trust, and empathetic behaviors, whereas individuals with insecure attachment usually avoid close relationships or experience anxiety and distrust in their interactions. These characteristics can hinder effective communication with patients and colleagues. This finding is consistent with the results of Fattizadeh et al. (2023), Wei et al. (2024), and Ahmed et al. (2023) (۲۳-۲۵). Who considered secure attachment a prerequisite for effective interaction and job satisfaction in clinical settings. According to the researcher, secure attachment, as a foundation of mental and social health, plays a determinant role in shaping nurses' communicative behaviors. Individuals who experienced stable and secure emotional relationships in childhood tend to feel more secure and confident in adulthood, which enables them to exhibit more empathetic and effective behaviors in the workplace.

Considering the importance of communication skills and emotional intelligence in nursing, the need for related classes and workshops is increasingly evident. It is recommended that courses on "Effective Communication and Communication Skills" be incorporated as part of the curriculum for nursing students, allowing them to become familiar with these skills and acquire practical application before entering clinical settings. Additionally, it is suggested that the findings of this study and similar research be shared with counseling centers and hospitals to ensure practical application of the results rather than limiting the studies to theoretical investigations.

Although the present study attempted to provide effective findings, it had several limitations. Some participants were less willing to participate, so explanations regarding the importance of the study were provided before completing the questionnaires to motivate participation. Moreover, owing to the self-reported nature of the questionnaires, there was a possibility of self-censorship in responses, and some nurses had a neutral or negative attitude toward receiving research feedback because they had not received results in previous studies.

Conclusion

The findings of this study indicated a positive and significant relationship between emotional intelligence, attachment style, and nurses' communication skills. Nurses with higher levels of emotional intelligence and secure attachment demonstrated better communication skills and were able to establish more effective interactions with patients, families, and colleagues. In contrast, nurses with avoidant or anxious attachment styles presented reduced-quality professional communication. These results emphasize the importance of training in emotional intelligence and understanding attachment styles within nursing education programs, highlighting their key role in enhancing professional interactions and interpersonal relationships.

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