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RELATIONSHIP OF EMOTIONALLY INTELLIGENT LEADERSHIP STYLES OF NURSE MANAGERS WITH JOB SATISFACTION OF JUNIOR CLINICAL NURSES: A DESCRIPTIVE CORRELATIONAL STUDY IN TERTIARY CARE HOSPITALS, RAWALPINDI, PAKISTAN

Najia Gul[1], Safiah Mir[2], Kanwal Naz[3], Dr Sabahat[*4], Muhammad Ismail[5]

[1]*Armed Forces Postgraduate Medical Institute, College of Nursing, Rawalpindi, Pakistan*
[2]*Pakistan Institute of Medical Sciences, Islamabad*
[3]*Research Officer AFBMTC Rawalpindi*
[*4]*Lecturer Ayub Medical College, Abbottabad*
[5,6] *Shifa International Hospital, Islamabad*

[1]gul.najia@gmail.com , [2]smirshah77@gmail.com , [3]naeem.asif1988@gmail.com
[*4]sabahat.asghar28@gmail.com , [5]rnmik864@gmail.com

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Corresponding Author: *
sabahat.asghar28@gmail.com

Abstract

Background:
Emotional intelligence (EI) and leadership styles of nurse managers are fundamental drivers of the job satisfaction of junior clinical nurses. However, evidence from tertiary care healthcare settings in Pakistan remains sparse.

Objective:
To assess the level of EI and leadership styles of nurse managers and to determine their relationship with the job satisfaction of junior clinical nurses in tertiary care hospitals in Rawalpindi, Pakistan.

Methods:
A descriptive quantitative correlational design was employed. Using convenient sampling, data were collected from 109 nurse managers and 310 junior clinical nurses across five tertiary care hospitals in Rawalpindi from May to October 2025. The Schutte Self-Report Emotional Intelligence Test (SSEIT), the Multifactor Leadership Questionnaire (MLQ), and the Employee Job Satisfaction Tool (EJST) were used. Data were analyzed using SPSS v26 with descriptive statistics, Pearson's correlation, independent t-test, and one-way ANOVA.

Results:
The majority of nurse managers (67.9%) demonstrated high EI (mean SSEIT score: 128.4 ± 14.2). Transformational leadership was the predominant style (61.5%). A significant positive correlation was found between nurse manager EI and job satisfaction of junior nurses ($r = 0.634$, $p < 0.001$). Transformational leadership showed the strongest positive correlation with job satisfaction ($r = 0.612$, $p < 0.001$). Laissez-faire leadership was negatively correlated with job satisfaction ($r = -0.418$, $p < 0.001$).

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Conclusion:

Emotionally intelligent, transformational nurse managers significantly enhance the job satisfaction of junior clinical nurses in tertiary care settings. Regular EI and leadership training programs for nurse managers are strongly recommended.

1.INTRODUCTION

Leadership is a process of interaction that requires a leader to influence the behavior and attitude of followers toward the achievement of a common goal (Al-Oweidat et al., 2023). In healthcare settings, effective nursing leadership is not only defined by clinical competence but increasingly by the leader's emotional intelligence (EI). Emotional intelligence enables nurse leaders to concentrate on progress, strengthen commitment, and foster a work culture built on trust and mutual respect (Mahdi & Faraj, 2022).

Goleman (1995) defined EI as comprising five core components: self-awareness, self-regulation, motivation, empathy, and social skills. These competencies are particularly critical in nursing, where leaders must navigate complex interpersonal dynamics, manage staff stress and burnout, and maintain high-quality patient care under demanding conditions. Research by Mayer, Salovey, and Caruso (2002) further operationalized EI as the ability to perceive, use, understand, and manage emotions, and this model has been widely validated in nursing leadership contexts.

A nurse manager's leadership style significantly shapes the professional environment experienced by clinical nurses. Transformational, transactional, and laissez-faire styles represent the most studied categories under Bass and Avolio's (1995) Multifactor Leadership framework. Of these, transformational leadership, characterized by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, has consistently demonstrated the strongest positive impact on nurses' job satisfaction (Albagawi, 2019; Lapeña et al., 2018; Ariani, 2022).

Job satisfaction in nursing is defined as the positive attitudes and feelings nurses hold toward their work (Armstrong, 2006). It has critical organizational implications: dissatisfied nurses are more likely to experience burnout, reduce their professional commitment, or leave the profession entirely. A Joint Commission (2007) report found that 41% of employed nurses were dissatisfied with their jobs, 43% reported burnout, and 22% planned to leave within a year. In Pakistan's military healthcare system, where nursing staff shortages are already acute, nurse retention is a paramount concern.

Despite growing international evidence on the association between EI, leadership styles, and job satisfaction, research from Pakistan's military healthcare settings remains sparse. A study by Sofia Naseem (2022) in Punjab, Pakistan, found significant relationships between transformational leadership and nurse job satisfaction, yet did not examine the role of EI specifically. The current study therefore aims to fill this gap by simultaneously examining EI, leadership styles, and their combined effect on job satisfaction of junior clinical nurses in military hospitals in Rawalpindi.

1.1 Study Objectives

1. To assess the level of emotional intelligence of nurse managers.
2. To determine the predominant leadership styles of nurse managers.
3. To evaluate the level of job satisfaction of junior clinical nurses.
4. To determine the relationship between nurse manager EI, leadership styles, and nurses' job satisfaction.
5. To examine gender and experience-based differences in EI and leadership styles.

2.MATERIAL AND METHOD

2.1 Study Design and Setting

A descriptive quantitative correlational design was used. The study was conducted across five tertiary care hospitals in Rawalpindi, Pakistan. These institutions collectively represent the primary tertiary care healthcare infrastructure of the

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Rawalpindi region and collectively employ over 500 nursing staff.

2.2 Ethical Considerations

Ethical approval was obtained from the Institutional Review Board of the Armed Forces Postgraduate Medical Institute (AFPGMI), Rawalpindi (Ref: ERC-AFPGMI, 2023). Permission was secured from the administration of all participating institutions. Informed written consent was obtained from all participants. Participation was voluntary, with the right to withdraw at any time. Full anonymity and confidentiality of data were maintained throughout the study. No personal identifiers were recorded.

2.3 Sample and Sampling Technique

Convenient (non-probability) sampling was employed. Using the WHO sample size calculator with a 95% confidence level and a 5% margin of error, the calculated sample size was 109 for nurse managers and 310 for junior clinical nurses, yielding a total of 419 participants.

Inclusion criteria for nurse managers: Registered nurses aged 45–60 years, with ≥3 years of managerial experience, currently posted at one of the five study hospitals. Inclusion criteria for junior clinical nurses: Registered nurses aged 25–50 years, with 1–25 years of clinical experience, actively performing clinical duties.

Exclusion criteria: Nurses on leave or night duty during data collection, those refusing consent, non-licensed nurses, and those not engaged in clinical work.

2.4 Data Collection Tools

Three validated instruments were used:

(i) Schutte Self-Report Emotional Intelligence Test (SSEIT): Developed by Schutte, Malouff, and Bhullar (2009) based on the Mayer and Salovey (1997) model. This 33-item scale uses a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree) and measures four EI dimensions: emotional perception, managing own emotions, managing others' emotions, and utilization of emotions. Total scores range from 33 to 165; higher scores indicate higher EI. Cronbach's alpha for the current sample was $\alpha = 0.88$.

(ii) Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1992): A 45-item questionnaire assessing three leadership styles transformational (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration), transactional (contingent reward, management-by-exception), and laissez-faire. Items are scored on a 5-point Likert scale (0 = not at all to 4 = frequently). Cronbach's alpha: $\alpha = 0.86$.

(iii) Employee Job Satisfaction Tool (EJST; Smith & Kendall, 1963, adapted): A 15-item instrument measuring overall job satisfaction on a 4-point scale (1 = not at all to 4 = always), addressing dimensions of role clarity, professional relationships, autonomy, recognition, and overall morale. Cronbach's alpha: $\alpha = 0.82$.

2.5 Data Collection Procedure

Data were collected from May to October 2023. Questionnaires were distributed by the principal investigator personally to minimize non-response. Filling time was approximately 10–15 minutes. Completed questionnaires were collected on the same day. Of 450 questionnaires distributed, 419 were returned fully completed (response rate: 93.1%).

2.6 Statistical Analysis

Data were entered and analyzed using IBM SPSS Statistics version 26. Descriptive statistics (frequencies, percentages, means, standard deviations) were used for demographic and instrument variables. Pearson's product-moment correlation was used to assess relationships between EI, leadership styles, and job satisfaction. Independent samples t-tests examined gender differences. One-way ANOVA with post-hoc Tukey's test assessed differences by experience levels. Statistical significance was set at $p < 0.05$.

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3.RESULTS

3.1 Demographic Characteristics

Table 1 presents the demographic profile of nurse managers (n = 109) and junior clinical nurses (n = 310).

Variable	Nurse Managers n (%)	Junior Nurses n (%)
Gender		
Female	74 (67.9%)	224 (72.3%)
Male	35 (32.1%)	86 (27.7%)
Age (years)		
25–34	—	128 (41.3%)
35–44	—	112 (36.1%)
45–60	109 (100%)	70 (22.6%)
Experience (years)		
1–5	—	98 (31.6%)
6–10	—	102 (32.9%)
11–25	—	110 (35.5%)
3–15 (managers)	109 (100%)	—
Qualification		
Diploma/Certificate	28 (25.7%)	156 (50.3%)
BSN	65 (59.6%)	138 (44.5%)
MSN/MCC	16 (14.7%)	16 (5.2%)

Table 1. Demographic characteristics of study participants (N = 419)

3.2 Emotional Intelligence of Nurse Managers

Table 2 presents the SSEIT scores across the four EI dimensions. The mean total SSEIT score was 128.4 ± 14.2 (range 88–161). Most nurse managers (67.9%) scored in the high EI category (score ≥ 120).

EI Dimension	Mean ± SD	Min	Max	High EI (%)
Emotional Perception	32.6 ± 4.1	21	41	69.7%
Managing Own Emotions	28.4 ± 3.8	18	37	64.2%
Managing Others' Emotions	34.2 ± 4.5	22	44	71.6%
Utilization of Emotions	33.2 ± 4.0	20	42	66.1%
Total SSEIT Score	128.4 ± 14.2	88	161	67.9%

Table 2. Emotional intelligence scores of nurse managers (n = 109)

3.3 Leadership Styles of Nurse Managers

Table 3 presents the prevalence of leadership styles. Transformational leadership was predominant (61.5%), followed by transactional (27.5%), and laissez-faire (11.0%).

Leadership Style	n	Percentage (%)	Mean Score ± SD
Transformational	67	61.5%	3.12 ± 0.54
Transactional	30	27.5%	2.74 ± 0.61
Laissez-Faire	12	11.0%	1.48 ± 0.72

Table 3. Predominant leadership styles of nurse managers (n = 109)

3.4 Job Satisfaction of Junior Clinical Nurses

The mean total EJST score was 41.8 ± 7.4 (possible range: 15–60). Table 4 presents scores by EJST domain.

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EJST Domain	Mean ± SD	Level of Satisfaction
Role clarity & expectations	11.2 ± 2.1	Moderate-High
Professional relationships	10.8 ± 2.4	Moderate-High
Managerial support & recognition	9.6 ± 2.6	Moderate
Work-life balance & autonomy	10.2 ± 2.3	Moderate
Overall job satisfaction (total)	41.8 ± 7.4	Moderate-High

Table 4. Job satisfaction scores of junior clinical nurses (n = 310)

3.5 Correlation between EI, Leadership Styles, and Job Satisfaction

Table 5 presents Pearson correlation coefficients between EI subscales, leadership styles, and nurses' job satisfaction.

Variable	Job Satisfaction (r)	p-value	Interpretation
Total EI (SSEIT)	0.634	< 0.001	Strong positive
Emotional Perception	0.512	< 0.001	Moderate positive
Managing Own Emotions	0.488	< 0.001	Moderate positive
Managing Others' Emotions	0.601	< 0.001	Strong positive
Utilization of Emotions	0.524	< 0.001	Moderate positive
Transformational Leadership	0.612	< 0.001	Strong positive
Transactional Leadership	0.214	0.025	Weak positive
Laissez-Faire Leadership	-0.418	< 0.001	Moderate negative

Table 5. Pearson correlation between EI, leadership styles, and job satisfaction (N = 419)

3.6 Gender Differences in EI and Leadership Style

An independent samples t-test revealed no statistically significant gender difference in total EI scores (males: 126.8 ± 15.1 vs. females: 129.2 ± 13.7; t(107) = 0.82, p = 0.41). However, female nurse managers showed a slightly higher prevalence of transformational leadership (64.9% vs. 57.1%).

3.7 Experience and EI

One-way ANOVA showed a significant effect of years of experience on EI scores ($F(2, 106) = 6.14$, $p = 0.003$). Post-hoc Tukey's test revealed that nurse managers with ≥11 years of experience had significantly higher total EI scores (mean 133.6 ± 12.8) than those with 3–5 years of experience (mean 122.4 ± 14.9, p = 0.004).

4.DISSUCSSION

This study examined the relationship between the EI and leadership styles of nurse managers and the job satisfaction of junior clinical nurses in tertiary care hospitals in Rawalpindi, Pakistan. The findings converge with the growing international literature while providing novel evidence from a Pakistani healthcare context.

4.1 Emotional Intelligence of Nurse Managers

The majority of nurse managers (67.9%) in this study demonstrated high EI scores, with a mean SSEIT total of 128.4. This aligns with Shahhosseini et al. (2022), who found positive correlations between EI and leadership effectiveness among 192 managers, and with Al-Oweidat et al. (2023), who documented high EI prevalence among Jordanian hospital nurses. The comparatively high EI in this sample may reflect the selective and disciplined nature of military career advancement, where interpersonal competence is implicitly evaluated.

The sub-dimension of 'managing others' emotions' scored highest (34.2 ± 4.5), which is consistent with Goleman's (1995) assertion that empathy and social skill are the most influential EI components in leadership effectiveness. Nurse managers who effectively manage the emotional states of their subordinates create psychologically safe environments, which are directly linked to higher

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staff engagement and satisfaction (Griffin et al., 2016).

4.2 Predominant Leadership Styles

Transformational leadership was the most prevalent style (61.5%), followed by transactional (27.5%), and laissez-faire (11.0%). These findings are consistent with Albagawi (2019) in Saudi Arabia and Ariani (2022) in Indonesia, both of whom identified transformational leadership as the dominant style among high-performing nurse managers. The association between transformational leadership and high EI is also well established: Bass and Avolio (1995) proposed that the four 'I's' of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration) directly map onto Goleman's EI competencies.

The relatively low prevalence of laissez-faire leadership (11.0%) in military settings is expected, given the hierarchical and accountability-oriented culture of military healthcare organizations. However, the negative correlation between laissez-faire leadership and job satisfaction ($r = -0.418$, $p < 0.001$) underscores the detrimental effect of passive management, even at low prevalence.

4.3 Job Satisfaction of Junior Clinical Nurses

The mean EJST score of 41.8 ± 7.4 reflects a moderate-to-high level of job satisfaction, which is relatively favorable compared to findings in civilian Pakistani settings. Sofia Naseem (2022) reported moderate satisfaction levels in Punjab hospitals with no formal leadership training. The military context, with its structured hierarchies, standardized benefits, and clear role definitions, may buffer against the extremes of dissatisfaction. Nevertheless, the domain of 'managerial support and recognition' scored lowest (9.6 ± 2.6), suggesting a gap in perceived appreciation from supervisors, which is a recurring challenge in nursing literature globally (Despres, 2021).

4.4 Relationship between EI, Leadership, and Job Satisfaction

The most significant finding of this study is the strong positive correlation between total nurse manager EI and junior nurse job satisfaction ($r = 0.634$, $p < 0.001$). This supports Hypothesis H1 and is consistent with findings by Mahdi and Faraj (2022) and Baker et al. (2023), who identified EI as a critical predictor of nursing team satisfaction. The 'managing others' emotions' subscale showed the strongest correlation with job satisfaction ($r = 0.601$), reinforcing the view that empathetic leadership is the most proximal EI competency driving staff wellbeing.

Transformational leadership showed the strongest positive correlation with job satisfaction ($r = 0.612$, $p < 0.001$), consistent with the systematic reviews of Lapeña et al. (2018) and Ariani (2022). In contrast, transactional leadership showed only a weak positive correlation ($r = 0.214$, $p = 0.025$), echoing Albagawi's (2019) finding that transactional approaches have both positive and negative associations with satisfaction depending on context. Laissez-faire leadership was negatively correlated ($r = -0.418$), confirming Hypothesis H3 and aligning with Ali et al. (2020), who identified passive-avoidant leadership as the most damaging style for nurse morale.

The experience-based ANOVA finding ($F = 6.14$, $p = 0.003$) demonstrates that EI develops over a career, with more experienced managers showing significantly higher EI. This has direct implications for training and career planning: early-career nurse managers may benefit most from targeted EI development programs.

4.5 Implications for Practice

These results have several actionable implications. First, AFPGMI and tertiary care hospital administrations should institutionalize EI assessment as part of nurse manager selection and promotion criteria. Second, structured transformational leadership training programs, incorporating EI competency development, should be integrated into existing continuing professional development frameworks for senior nursing officers. Third, regular feedback mechanisms between junior nurses and nurse managers should be established to monitor the recognition and support dimension of job satisfaction, which was identified as the weakest domain.

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4.6 Limitations

This study has several limitations. The cross-sectional design precludes causal inference. Convenient sampling limits external generalizability. Self-report tools are susceptible to social desirability bias, particularly in a hierarchical military environment. The study was conducted in a single geographic region (Rawalpindi) and may not represent other tertiary healthcare settings in Pakistan. Future longitudinal studies with objective performance measures and multi-site sampling are recommended.

CONCLUSION

This study provides compelling evidence that emotionally intelligent, transformation ally oriented nurse managers significantly enhance the job satisfaction of junior clinical nurses in military hospitals in Pakistan. High EI in nurse managers, particularly in the competency of managing others' emotions, and a transformational leadership style emerged as the most critical predictors of nurse job satisfaction. These findings highlight the urgent need for systematic EI and leadership training programs for nurse managers within Pakistan's military healthcare system. Investing in the emotional and leadership intelligence of nurse managers is not merely a professional development priority it is a patient safety and workforce retention strategy.

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