

Emotional Intelligence of House Officers in Nishtar Medical University, Multan

Ashar Ahmad Khan¹, Ambareen Khan²

¹Department of Surgery, Multan Medical and Dental College, Multan, ²Department of Obstetrics and Gynecology, Aga Khan University, Karachi

Correspondence to: Ashar Ahmad Khan Email: dr.ashar001@gmail.com

ABSTRACT

Background: Young doctors often face rude behavior, shouting and exchange of bad words at workplace, which leads to emotional stress and unhappiness. Mostly it is related to low emotional intelligence (EI). EI helps to control anger, solve problems, communicate better, resolve conflicts, teamwork and reduce burnout. As EI is teachable and coachable, our research aim was to determine why house officers were having low emotional intelligence and objective was to investigate the factors contributing low emotional intelligence in house officers at their workplace.

Methods: A concurrent mixed-method study was conducted on house officers at Nishtar Medical University, Multan, from July 1, 2024, to June 30, 2025. Data collection tool was a survey questionnaire, having SSEIT scores, demographics, and one open-ended question for personal opinion. Quantitative analysis was done in SPSS v27 using post-stratification, one-way ANOVA (specialty, age) and independent t-test (for other variables), with significance $p < 0.05$. Qualitative data was analyzed through content analysis, manual coding and theme development.

Results: Out of 202 participants, 57.9% had average EI, 24.3% high, and 17.8% low. Subscale means were: MOE 34.24 ± 5.53 , MOTE 30.82 ± 6.69 , UOE 24.29 ± 3.53 , and POE 37.06 ± 5.83 . EI increased with age ($p = 0.010$). Males scored higher than females (130.58 vs. 122.13; $p < 0.001$). Notably, high achievers had lower EI than average participants ($p < 0.001$). Thematic analysis revealed five key workplace challenges: burnout, gender bias, family/social pressures, unprofessional seniors, and hostile environment.

Conclusion: House officers demonstrated satisfactory emotional intelligence, which appears to improve within age and experience. Integrating EI training in to medical education could be beneficial for boosting to resilience.

Keywords: House officers, Emotional intelligence (EI), Burnout, Interpersonal relations, Workplace violence.

INTRODUCTION

Emotional intelligence (EI) is defined as ability to recognize, understand, and manage one's own and others emotions.¹ Three major models are described, with Goleman's model being most widely accepted.² It includes five components. Self-awareness and self-regulation are related to inner world of a person while empathy (Thinking like others) and social skills (communication skills) are related to outer world. Fifth component is motivation which has a central role for all other components.² Emotional intelligence helps in anger management, improving communication, conflict resolution, overcome stress, reduce anxiety, burnout

prevention, and improved patient satisfaction.³⁻⁸ Emotional intelligence is teachable and coachable.⁵

Emotional intelligence (EI) has emerged as a critical competency for young doctors as they navigate the demanding clinical environment of early medical practice. House officers frequently encounter high-pressure situations requiring effective communication, self-regulation, teamwork, and empathy; skills closely linked to EI. Evidence from Pakistan indicates that many junior doctors exhibit low to moderate EI levels, which correlate with poor emotional control, reduced professionalism, and increased workplace stress.⁵⁻⁷ These findings align with related national evidence showing that emotional dysregulation and alexithymia contribute to higher burnout risk among doctors.⁸ Worldwide, doctors with low EI usually suffer from burnout, have more conflicts with their colleagues, and face problems in patient management.^{9,10} Such encounters badly affect their work performance and many young doctors feel unhappy and dissatisfied in early career. However, emotional intelligence is teachable and can be improved by special training programs.⁵ Young doctors can learn how to manage anger, reduce stress, communicate effectively, and enjoy their work. This highlights the importance of understanding the causes and factors leading to low

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emotional intelligence among the house officers. Despite substantial research on EI, limited evidence exists on the determinants of low EI in early-career doctors, and no studies from Pakistan, particularly South Punjab have examined workplace influences on young doctors' emotional intelligence (EI). The objective of this mixed method study was to investigate the factors contributing low EI in house officers at their workplace. The findings will assist researchers, young doctors, medical educators, and policymakers in integrating EI into training and developing targeted interventions to strengthen EI competencies in early-career clinicians.

PARTICIPANTS AND METHODS

A concurrent mixed-method study under the pragmatic paradigm was conducted among registered house officers at Nishtar Medical University/Hospital, Multan, from July 1, 2024, to June 30, 2025. Ethical approval was obtained from the Institutional Ethical Review Board (Ref. No. 7103, June 3, 2024). Written informed consent was taken from the participants after explaining the study's purpose, risks, benefits, and voluntary participation rights.

Based on the WHO sample size calculator (95% CI, $d = 0.03$) and a local study by Yaqoob and Zulfiqar (Mean EI: 123.43 ± 14.77),¹¹ the required sample size was 94. A non-probability consecutive convenience sampling technique was used, and to improve representation, questionnaires were distributed to 300 house officers. After a reminder SMS at one week, 202 complete responses were received within two weeks, giving a 67.3% response rate. Data was collected through a structured three-part questionnaire. Section A recorded demographic details. Section B contained the trait-based Schutte Self-report Emotional Intelligence Test (SSEIT), a validated 33-item, 5-point Likert scale⁴ (range: 33–165) based on Salovey and Mayer's EI model, covering four domains: emotion perception, utilization, self-management, and management of others' emotions.^{1,12,13} Average score in large samples is 124 ± 13 , with <111 indicating low and >137 high EI.¹³ Section C included an open-ended question, "What factors do you think affect your emotions at workplace?" to explore the perceptions and influencing factors. A pilot study ($n = 20$) assessed clarity and feasibility before the final tool was distributed with a 15-day response period, extended by another 15 days for non-respondents.

Quantitative data was analyzed using SPSS v27. Post-stratification and one-way ANOVA were applied for age and specialty groups, while independent t-tests assessed other variables ($p < 0.05$ significant). Qualitative data underwent content analysis; themes were generated through manual coding. Results were presented in tables and graph.

RESULTS

Table 1 summarizes demographic and academic characteristics of the participants ($N = 202$). Most were 25–26 years old (59.9%), female (56.9%), and urban residents (66.3%). Majority had background of matric education (91.1%), while only 39.6% had significant academic achievements like medals/ distinctions. Most of the participants (42.1%) were working in surgery department, and 36.6% said that they had been involved in arguments or conflicts at work. Table 2 shows Emotional Quotient (EQ) scores and its four components (MOE, MOTE, POE, and UOE) according to different personal and academic factors. Figure 1 shows the overall EQ level of the participants.

House officers were asked about the main problems they faced at workplace which can affect their emotional intelligence. Following five major themes were generated after thematic analysis of their responses (Table 3). Burnout was a major theme, reported by 60.4% of house officers. Major subthemes were poor time management, excessive workload, difficulty in achieving personal goals, and lack of proper training. House officers said that they had long working hours, did not get proper rest, and felt tired all the time. This badly affected their physical and mental health. One participant stated verbatim: "During the long calls, there is too much work, and there is no time to eat or sleep. I become sick." Due to heavy

Table 1: Demographic profile of the study participants (n = 202)

Characteristics	Frequency n = (%)
Age groups	
23-24 years	66 (32.7)
25-26 years	121 (59.9)
27 years and above	15 (7.4)
Gender	
Male	87 (43.1)
Female	115 (56.9)
Residential status	
Rural	68 (33.7)
Urban	134 (66.3)
Educational background	
Matric	184 (91.1)
O-levels	18 (8.9)
Educational achievement	
Yes	80 (39.6)
No	122 (60.4)
Specialty	
Surgery	85 (42.1)
Medicine	23 (11.4)
Gynecology	44 (21.8)
Others	50 (24.8)
Involvement in altercation	
Yes	74 (36.6)
No	128 (63.4)

workload, they found it difficult to prepare for examinations, progress in their career, or fulfil family responsibilities.

Gender-based discrimination (55.4% responses) was another major theme, though views diverged by gender. Male house officers thought that female colleagues got extra favor, especially in surgical wards. "PGRs are asking only female house officers to scrub in for surgeries, and we're left with the donkey work," verbatim by one male officer. On the other hand, female officers felt that the system was male-dominated. They complained of being ignored, and unfairly treated. They also complained of lack of basic facilities like rest room. "There is no rest room for females, and we're asked to stay in the ward even after working hours," noted a female officer. Family

and social pressures emerged as another major theme and represented 22% responses. Problems included loneliness, family responsibilities, financial problems, social injustice, and pressure from the spouse. These issues made them emotionally unstable. "I have a 3-month-old sick baby. I missed one long call; my seniors misbehaved and issued a show-cause notice. I want to resign," shared a female participant. Unprofessional behavior by seniors and perception of hierarchical misconduct and favoritism were the subthemes. Around 21% of house officers complained about bad behavior of the seniors. They reported that seniors spoke disrespectfully and gave duties based on favoritism instead of ability. Hostile working environment was fifth major theme.

Table 2: Association between different variables and emotional quotient

Variable	EQ score	p-value	Components of EQ				
			MOTE	MOE	POE	UOE	
Age (years)	23-24	121.62 ± 13.64	0.010	29.44 ± 3.77	32.70 ± 5.41	35.98 ± 5.60	23.50 ± 3.39
	25-26	127.11 ± 15.92		30.70 ± 7.02	35.11 ± 5.01	37.48 ± 5.59	24.21 ± 3.82
	>27	133.27 ± 16.35		31.93 ± 3.51	36.73 ± 5.35	39.47 ± 6.41	25.13 ± 3.66
Gender	Male	130.58 ± 15.29	<0.001	31.46 ± 7.43	35.91 ± 5.30	38.82 ± 5.49	24.96 ± 3.48
	Female	122.13 ± 14.75		29.56 ± 4.39	33.33 ± 5.04	35.87 ± 5.56	23.35 ± 3.69
Residence	Rural	125.22 ± 14.59	0.720	29.51 ± 4.04	34.84 ± 4.84	37.31 ± 5.50	23.56 ± 3.94
	Urban	126.05 ± 16.03		30.82 ± 6.69	34.24 ± 5.53	37.06 ± 5.83	24.29 ± 3.53
Educational background	Matric	125.83 ± 15.59	0.875	30.18 ± 4.42	34.46 ± 5.33	37.13 ± 5.79	24.05 ± 3.69
	O-levels	125.22 ± 15.29		32.39 ± 14.26	34.22 ± 5.17	37.28 ± 4.95	24.05 ± 3.75
Educational achievement	Yes	120.11 ± 12.53	<0.001	28.70 ± 3.72	33.17 ± 4.42	35.22 ± 4.90	23.01 ± 3.49
	No	129.48 ± 16.22		31.48 ± 6.84	35.27 ± 5.67	38.40 ± 5.87	24.73 ± 3.66
Specialty	Surgery	130.11 ± 15.45	0.004	31.43 ± 4.00	35.48 ± 5.44	38.40 ± 5.86	24.78 ± 3.56
	Medicine	125.39 ± 20.19		32.22 ± 13.22	34.56 ± 6.20	36.30 ± 6.06	24.43 ± 4.78
	Gynecology	123.14 ± 11.99		29.39 ± 3.82	33.64 ± 5.05	36.59 ± 4.92	23.52 ± 3.01
	Others	120.90 ± 14.40		28.62 ± 4.36	33.32 ± 4.60	35.88 ± 5.67	23.08 ± 3.66
Altercation	Yes	125.79 ± 16.37	0.986	30.82 ± 7.91	33.92 ± 5.76	37.54 ± 6.61	24.17 ± 3.72
	No	125.76 ± 15.08		30.12 ± 4.47	34.74 ± 5.01	36.91 ± 5.13	23.97 ± 3.67

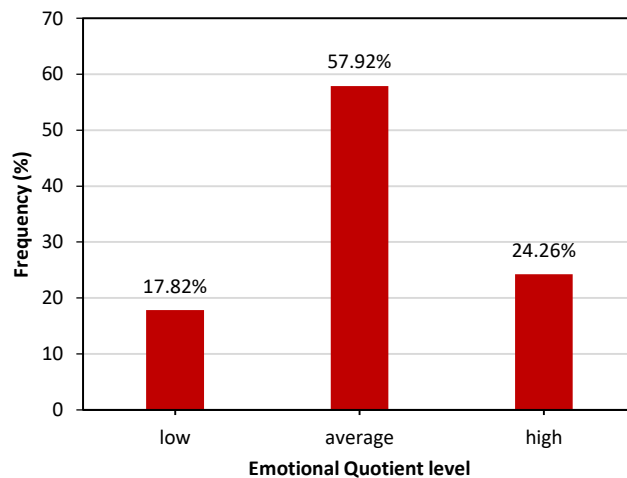


Figure 1: Emotional Quotient level of study population

Table 3: Factors affecting House Officer's Emotional Intelligence

Themes	Sub-themes
Burn out	Work overload
	Time management
	Lack of training
	Personal milestones
Gender bias	Female privilege
	Female marginalization
Family and social pressures	High expectations
	Financial issues
Unprofessional behavior by seniors	Hierarchical misconduct
	Favoritism
Hostile working environment	Toxic environment
	Job stress
	Authoritarian administration
	Ineffective communication
	Collegial misconduct

House officers showed frustration over the toxic atmosphere (37% responses) of the workplace. Problems included unfair treatment, fear of losing their job, poor facilities, strict and unsupportive administration. "Seniors are very toxic; they use us like slaves. We have no respect in the ward," one officer reported. Constant stress came from rude patient attendants, job dissatisfaction, poor sleep and future insecurity. Poor communication, limited learning opportunities, and grouping among colleagues reduced cooperation and teamwork.

DISCUSSION

Violence against doctors at workplace is becoming very common. Usual forms of violence are shouting, threats, and mental harassment. Studies showed that doctors with higher emotional intelligence handle these situations in a better way and are less likely to be aggressive. Studies from India and Pakistan showed that doctors with higher emotional intelligence stay emotionally strong, able to bear stresses and solve different conflicts.^{14,15}

This study evaluated emotional intelligence of the house officers. SSEIT scoring system was used for this purpose. Different factors affecting their workplace EI were evaluated. Majority of house officers (57.9%) had average EI, while only 17.8% had low EI. This is because people often rate themselves more positive than actually they are. Mean EQ score of this study (125.77 ± 15.81) was close to other reports.^{13,15} Irfan and colleagues observed a higher proportion of high-EQ individuals.¹⁶ Differences between the studies is likely due to variations in training context, assessment tools, and participant academic level. In examining the four EQ subscales, MOTE score was 30.82 ± 6.69 , MOE- 34.24 ± 5.53 , POE- 37.06 ± 5.83 and UOE- 24.29 ± 3.53 . These results are well within figures reported by other authors.^{13,17} Difference in results were due to variability in professions and training levels.

House officers were generally good at recognizing and controlling their own emotions in our study. They were weak in using emotional information in clinical decision-making and dealing with others at work. This study found that older and senior house officers had better emotional intelligence. Those aged 27 or above scored higher EQ than 23–24 years (133.27 vs 121.62), all EQ components showed the same trend ($p = 0.010$). Similar age-related improvement was reported by Budler and coresearchers where EQ rose from 98.0 in first-year to 107.8 in fourth-year students, and by Sohail and colleagues across house officers, residents, and consultants.^{18,19} These patterns collectively suggest that EI develops with age, maturity, and increasing clinical exposure.¹

In this study, females formed a slightly larger proportion of participants (56.9%), a trend consistent with several regional studies, although some reported male predominance.¹⁵ Male participants in this sample demonstrated significantly higher total EQ scores than females (130.58 vs. 122.13 ; $p < 0.001$), with higher values across all subscales. This contrasts with findings from other researchers, who reported higher EQ in females.^{20,21} One possible explanation in this setting is that female doctors, often less exposed to independent social interactions, may find it challenging to navigate emotionally charged workplace situations.

Residential background and schooling system showed no meaningful impact on EI. Urban and rural participants had comparable EQ scores (126.05 vs. 125.22 ; $p = 0.720$), consistent with Ehtisham et al.'s findings among boarders and day scholars.²² Likewise, EQ scores were nearly identical between Matric/F.Sc. and O-/A-level graduates ($p = 0.875$), despite prior reports by Irfan et al. suggesting higher EI in students from private institutions.¹⁶ Overall, these results indicate that sociodemographic and educational background may play a limited role in shaping EI among house officers in our setting.⁶ An interesting finding was that high academic achievers (medals/distinctions) had lower EI scores (120.11), whereas average-grade participants scored significantly higher (129.48 ; $p < 0.001$). This may explain why academically brilliant students sometimes struggle in professional life. In contrast, Naeem et al. from Saudi Arabia reported higher EI being linked to better academic performance, suggesting cultural and contextual variations.¹ EQ scores differed significantly by specialty ($p = 0.004$). Participants in surgery had the highest mean EQ score (130.11), while those in "other" specialties had the lowest (120.90). MOTE and POE were particularly higher among surgery and medicine specialties. This aligns with Jha et al.'s findings on resilience among surgical residents.¹⁵ EQ scores were virtually identical for

participants with and without altercations (125.79 vs. 125.76; $p=0.986$), with minimal differences in component scores. This unexpected finding may reflect bias inherent in the self-reported SSEIT, which enables respondents to portray themselves favorably.

Qualitative part of this study examined factors affecting emotional intelligence among house officers. Five themes emerged: burnout, gender bias, family/social pressures, unprofessional senior behavior, and a hostile work environment. Comparable themes were reported by Gillani SF et al.¹⁴ Burnout was one of the major themes. Many participants felt physically exhausted, did not get enough practical training, struggle in time management, and find it hard to get their personal and career goals. Lack of hands-on experience and fear of making mistakes increase their stress level. Study of Shanafelt et al. showed that burnout makes it hard for the young doctors to control their emotions and grow professionally.²³ Gender bias was another important theme. It was experienced differently by males and females. Male doctors felt that they were not given fair learning opportunities, while female doctors felt ignored, unfairly treated, and lacked basic facilities at work. These perceptions highlight the nuanced and bidirectional nature of gender dynamics in clinical training environments. Nasir and coworkers from Lahore showed that 43% of the female house officers faced gender-based violence at workplace, mostly in the form of mental pressure (29%) and verbal abuse (28%).²⁴ Family and social pressures such as social expectations, money related problems, loneliness, and issues related to spouse further increased the emotional stress. Female house officers, especially those with caregiving duties, found it very hard to balance between hospital duties and home. This caused emotional distress. These findings are consistent with study of Guille et al., on work–life imbalance and emotional fatigue in early-career medical professionals.²⁵ Unprofessional behavior by seniors, including disrespect, favoritism, and hierarchical misconduct, and ego of the consultant created an emotionally unsafe environment.¹⁴ Such behavior discouraged open communication and teamwork, hindering the development of interpersonal and intrapersonal emotional intelligence. A hostile working environment, characterized by job insecurity, toxic administration, poor infrastructure, and lack of peer cooperation, was another major source of emotional strain. Participants frequently reported emotional dysregulation, anxiety, depression, and a loss of motivation, suggesting that institutional culture plays a critical role in either enhancing or undermining emotional intelligence.

Self-reported measures (SSEIT) may introduce biases due to social disparity and faulty self-perception. Contextual factors like working environment, organizational culture and personal experience which can affect the EI are not covered in this study.

CONCLUSION

Most house officers demonstrated adequate emotional intelligence (EI), which was positively associated with age, clinical experience, male gender, and surgical specialty. Workplace challenges included burnout, gender bias, family and social pressures, unprofessional behavior by seniors, and a hostile environment. There is need for structured EI training in undergraduate and postgraduate medical education to improve resilience and professionalism.

Author Contributions

AAK: Conception and design, analysis and interpretation of data, drafting the article, critical revision for important intellectual content, and final approval.

AK: Conception and design, and final approval.

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