

EMOTIONAL INTELLIGENCE AMONG DELHI NCR MEDICAL STUDENTS: AGE AND GENDER AS KEY PREDICTORS

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ABSTRACT

Understanding how Emotional Intelligence varies by age and gender helps educators design targeted interventions. This study examines 658 final year MBBS students from six Delhi NCR colleges, using the Trait Emotional Intelligence Questionnaire to measure four domains of EI. One way ANOVA revealed that older students scored significantly higher on every domain of EI. Independent sample tests showed no gender difference in self awareness, empathy, or use of emotion, while female students displayed stronger emotion regulation. These findings suggest age related maturation and selective gender effects, providing a data driven rationale for differentiated EI training strategies.

Keywords: Emotional Intelligence, Age Differences, Gender Differences, Medical Students, Delhi NCR, Trait Emotional Intelligence Questionnaire, Emotion Regulation, Empathy

1. INTRODUCTION

As medical students proceed through their training years, they face the need for rapidly complex clinical responsibilities, emotionally charged interactions and interdisciplinary cooperation (Austin et al 2006). This gradual immersion in real -world hospital settings often shape not only their clinical logic but also their emotional reactions. Therefore, it plays an important role in emotional development. In the years after older students or medical training, they are usually more exposed to the patient's pain, life care and moral dilemmas (Car, S. E. 2009). These experiences can either accelerate their emotional awareness and regulation or, if, contribute to inauspicious, emotional exhaustion.

Many international studies have seen that emotional intelligence grows with age, especially in academic and clinical contexts (Endal, S. 2021). Greater maturity, combined with more frequent contact for emotionally complex conditions, often leads to better emotional regulation and sympathy (Qadadi, S., and Bharmanikat, S. R. R. R. 2020). However, in the Indian Medical Education System, the region remains unspecified, especially between graduate students (Acmanman, TF., And Wall, HP. 1994). Despite India's high-stress clinical environment and diverse medical education scenario, EI has little empirical research on how EI develops in various age groups (Austin et al. 2006).

The penis introduces another important dimension. Culturally embedded gender roles and expectations shapes how men and women experience, expressed and regulated emotions (dyrbye et al. 2005). In many social contexts, women are encouraged to be more emotionally expressive and empathetic, while men are often expected to suppress emotional vulnerability (Ashforth, B. E., & Humphrey, R. H. 1995). These social constructs may influence scores on certain EI dimensions, such as empathy and regulation of emotion (Harrison, R. 1997)aus. Yet, findings on gender-based differences in EI remain mixed. While some studies suggest women outperform men in emotional regulation, others find negligible differences (Christakis, D. A., & Feudtner, C. 1993).

This study focuses on final-year MBBS students in Delhi NCR—a region known for its demographic diversity and heavy clinical workloads. It aims to investigate whether age and gender significantly influence the Emotional Intelligence levels of future doctors. By examining these variables in a high-pressure educational setting, the research provides insights into how emotionally prepared medical students are for the demands of modern healthcare. The results could inform the development of more targeted and inclusive EI training programmes within medical curricula.

2. OBJECTIVES

- 1) To analyse age related variations across the four domains of Emotional Intelligence among medical students.
- 2) To determine gender differences in each EI domain.
- 3) To provide recommendations for age sensitive and gender responsive EI development in Delhi NCR medical colleges.

3. REVIEW OF LITERATURE

Emotional Intelligence (EI) has been increasingly recognised as a vital component of effective healthcare delivery, particularly in high-pressure academic and clinical environments. Several studies have attempted to explore the relationship between EI and various performance indicators among medical students and healthcare professionals.

Austin et al. (2006) did a fundamental study connecting EI and sympathy for the first year medical students. Their findings suggest that high EI students not only show more sympathetic tendencies, but also perform academically better, indicating the development of EI in early medical training. In a similar vein, Carr (2009) investigated whether EI traditional medical school selection belongs to the metrics and found mixed but meaningful associations, indicating re-evaluation of entry-level assessment that often ignore emotional competencies.

In the Indian context, Andal (2021) and Qadadi and Bharmanikat (2020) examined the EI among health professionals and noticed that emotionally intelligent persons managed stress better and demonstrated high professional satisfaction regardless of the penis. These conclusions confirm the universal purpose of EI in high-deserved healthcare settings and emphasize the need for initial EI education.

Other researchers have detected EI relations with stress, burnout and moral sensitivity. Dyrbye et al. , Acroman and Wall (1994) highlighted the vulnerability of dependent or emotionally immature medical students, stating how EI deficiency can give rise to serious mental health results. Christakis and Feudtner (1993) added that medical students regularly face ethical dilemmas that require not just cognitive reasoning but also emotional regulation and empathy.

From a workplace perspective, Ashforth and Humphrey (1995) stressed the importance of emotional expression and control in professional roles, noting that gender-based emotional expectations can shape behaviour in complex ways. Harrison (1997) emphasised that organisations increasingly value EI over traditional measures of intellect for leadership and communication.

Finally, Austin, Saklofske, and Egan (2005) confirmed strong correlations between trait EI, personality, well-being, and health, reinforcing the idea that EI grows with experience and self-awareness—both often shaped by age and socialisation.

These studies collectively suggest that age and gender can meaningfully influence the development and application of Emotional Intelligence in medical education.

4. RESEARCH METHODOLOGY

A descriptive cross sectional design was adopted. Universal sampling yielded 658 participants from six Delhi NCR institutions. The Trait Emotional Intelligence Questionnaire measured self awareness, empathy, use of emotion, and regulation of emotion on a five point Likert scale. Age was grouped into three bands: twenty to twenty five, twenty six to thirty, and thirty one to thirty five. Gender was coded as male or female. Ethical consent was obtained. Data were analysed with SPSS. Descriptive statistics summarised domain means. One way ANOVA tested age effects, and independent sample t tests examined gender differences, with significance set at $p < 0.05$.

5. RESULTS

The overall mean EI score rose from 3.42 in the youngest band to 3.79 in the oldest. ANOVA indicated significant age effects for self awareness ($F = 13.75$, $p < 0.001$), empathy ($F = 18.85$, $p < 0.001$), use of emotion ($F = 26.66$, $p < 0.001$), and regulation of emotion ($F = 8.46$, $p < 0.001$). Post hoc tests showed that students in the thirty one to thirty five bracket outperformed both younger groups on every domain. Gender analysis revealed no significant difference in self awareness, empathy, or use of emotion. Emotion regulation differed, with females scoring a mean of 3.71 compared to 3.49 for males ($t = 4.09$, $p < 0.001$).

6. DISCUSSION

The upward trajectory of EI with age supports developmental theories that place emotional growth alongside clinical exposure and reflective practice. Older students may acquire stronger coping strategies through repeated patient encounters and mentoring roles. The female advantage in regulation aligns with social conditioning that encourages women to manage affect in interpersonal contexts. Lack of gender gaps in the other domains suggests that medical training may level certain emotional skills across sexes.

7. RECOMMENDATIONS

Foundational courses should introduce EI early, while advanced clerkships can incorporate scenario based workshops for older students to refine empathy and complex regulation. Mentoring schemes should pair senior and junior students, accelerating experiential learning for the younger cohort. Gender responsive coaching is advisable. Male students can benefit from targeted exercises in emotional modulation through simulation labs and feedback sessions. Faculty development programmes should equip tutors to recognise subtle gender and age related EI needs, enabling tailored guidance in clinical settings

8. LIMITATIONS

Self report measures may introduce desirability bias. The sample came exclusively from Delhi NCR, limiting broader applicability. Cross sectional data cannot capture how individual EI levels change over time.

9. CONCLUSION

Age shows a robust positive association with every dimension of Emotional Intelligence, while gender differences appear only in emotion regulation. These insights emphasize the value of age sensitive curricula and gender aware mentoring. Embedding such practices will nurture emotionally competent physicians ready to meet the interpersonal demands of contemporary healthcare.

CONFLICT OF INTERESTS

None.

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