

# The Power of Emotional Intelligence in Healthcare: A Narrative Review of its Neurobiological Basis, Clinical Leadership and Patient-centric Care

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## ABSTRACT

The multifaceted functioning of Emotional Intelligence (EI) in formal healthcare settings is a testament to quality healthcare delivery; the present paper examines its neurophysiological bases, its role in clinical leadership, dynamic teamwork, workplace performance and patient-centred care. A range of studies was available, from which those with adequate quantitative strength or clear practical implications for healthcare were selected. The inclusion criteria covered research from 1998 to 2014 and comprised systematic reviews, observational studies, peer-reviewed Level II and Level III studies and relevant articles from organisational psychology. Literature searches were conducted in databases such as PubMed, Google Scholar, ResearchGate, PsycINFO and Scopus; more than 30 articles were critically reviewed. Multiple themes informed the work, ranging from the neural correlates of EI to its practical applications for patients and healthcare leaders. The impact of emotionally intelligent behaviours on patient satisfaction, staff resilience and healthcare delivery was mapped using a thematic, evidence-based synthesis. To improve outcomes for both clinicians and patients, the present review supports the growing consensus that EI is a strategic capability that can be nurtured through focused training, assessment tools such as the Emotional and Social Competency Inventory (ESCI) and integration into organisational leadership development programmes.

**Keywords:** Adaptation, Conflict, Health personnel, Personnel management

## INTRODUCTION

### Emotional Intelligence (EI) in Professional Healthcare Settings

Healthcare is one of the most emotionally charged and demanding professional contexts, in which EI is a crucial factor in success. Because healthcare delivery is characterised by complex decision-making, patient-centred care and interdisciplinary teamwork, more than clinical skill alone is required. Effective care requires perceiving, understanding, regulating and constructively using one's own emotions and those of others [1,2]. EI is defined as a subset of social intelligence that involves the capacity to monitor one's own and others' emotions, discriminate among them and use this knowledge to guide thinking and behaviour. Groundbreaking work [3-5] brought EI to the forefront of management and performance discussions, especially through the classification of EI into five core elements: motivation, self-regulation, empathy, self-awareness and social skills. These domains underpin essential abilities for managing stress, maintaining professional relationships and navigating emotionally and ethically challenging clinical situations; they also affect behaviour and interpersonal interactions [6]. In settings where professionals frequently face patient suffering, ethical dilemmas, time constraints and high-stakes judgements, emotionally intelligent clinicians can respond with perseverance, empathy and professionalism. Incorporating empathy and reassurance into healthcare practice enables the expression of patient vulnerabilities, which is essential to the holistic health and well-being of those receiving care and aligns with a culture of leadership development [7].

In healthcare environments where practitioners regularly confront patient suffering, ethical dilemmas, time limitations and high-stakes decisions, emotionally intelligent professionals can respond with tenacity, empathy and decorum. Research in psychology and

organisational behaviour continues to examine these traits, consistently demonstrating that interpersonal competence significantly influences team relationships, work performance and, ultimately, patients' experiences of care. Therefore, integrating EI into the social fabric of leadership development and healthcare practice is not only beneficial but also essential [8-10].

### Neurobiological Basis and Conceptual Framework for Emotional Intelligence (EI)

Numerous studies have examined the brain mechanisms underlying emotional processing and control and researchers have conducted extensive experiments over the years to explain the cerebral basis of EI. Collectively, these studies provide insights into the neural foundations of EI, emphasising the involvement of regions such as the anterior cingulate cortex and highlighting the intricate interplay between emotion and cognition. The field continues to evolve and newer studies further contribute to our understanding of how the brain supports EI [11,12].

Theoretical frameworks of EI also address its neural underpinnings. One influential model includes perceiving emotions, using emotions to facilitate thought, understanding emotions and managing emotions. Although not focused explicitly on neural bases, this work is relevant because it informs the development of performance-based measures of EI, whose tasks often engage brain regions associated with emotional processing [13,14].

Neuroimaging studies investigate the neural correlates of emotional awareness. The anterior cingulate cortex is implicated in emotion regulation and decision-making, including navigating context-specific fearful situations and error monitoring. These studies also explore how emotional responses are modulated through interactions between neocortical and limbic regions, contributing to a broader understanding of how distinct brain areas collaborate in emotional processing—a key aspect of EI that integrates physiological and

psychological mechanisms of emotional processing, analysis and functioning [15].

The amygdala in the limbic system plays a crucial role in processing emotional salience, particularly cues linked to fear and threat. Related work shows that prefrontal regions—specifically the ventromedial and dorsolateral prefrontal cortex—exercise top-down regulatory control over limbic responses by modulating amygdala activity, for example in response to facial expressions. Suppressing impulsive emotional reactions to align with situational demands is essential; interoceptive cues represented in the anterior insula support this process by helping translate bodily states into subjective feelings and informing response selection. In simpler terms, the anterior insula is a key region for emotional self-awareness, integrated with other cognitive and physiological information streams [16-18].

Dolcos F et al., suggest that individuals with higher trait EI are more consistently engaged in social cognition, emotional appraisal and control and show stronger functional integration between emotion-related regions (e.g., the amygdala) and cognitive control regions (e.g., the prefrontal cortex) during emotion-regulation tasks. This supports the view that EI reflects an interacting network rather than a single brain locus [19].

Lesion studies also illuminate the neural bases of EI. Individuals with orbitofrontal cortex dysfunction often exhibit emotional dysregulation, poor decision-making and impaired social judgement [20]. These deficits align with behavioural manifestations of low EI, suggesting that this region is essential for integrating cognitive and emotional processes.

In high-stress settings such as healthcare, these biological foundations and the deep interconnectivity underlying emotional responses play a pivotal role, underscoring the importance of adaptive functioning between patients and clinicians for effective regulation and expression of skill.

## CLINICAL LEADERSHIP: A SYNTHESIS OF RESEARCH EVIDENCE FOR AN EMOTIONALLY INTELLIGENT INDIVIDUAL

In the healthcare industry, leaders require fundamental skills to navigate their own emotions in high-stakes situations and, in parallel, to guide others and respond with composure and clarity. These skills reflect core components of EI, including self-awareness, self-regulation and the ability to manage others' emotions in context.

A healthcare team with a high level of collective EI is better able to defuse tense situations, comprehend non verbal cues and coordinate care [21]. Research indicates that healthcare transitions, interprofessional collaboration and conflict resolution are markedly enhanced when team members are emotionally aware and empathetic [22].

A significant question concerns the extent to which leaders and managers positively influence their employees and organisational functions. Concurrently, HR functions such as recruitment, selection, training and performance management significantly influence leadership effectiveness within healthcare delivery. Well-designed HR operations can enhance team members' capacity to perceive and manage emotions, while effective leadership helps create a safer workplace. High EI facilitates talent identification, appropriate task delegation and constructive conflict resolution. Reviews of the literature clarify the mechanisms connecting leadership and EI, emphasising their synthesis and reciprocal influence [23].

All operations and management processes involved in patient care require highly skilled leaders dedicated to patient-centred care, psychological resilience, team effectiveness and interpersonal harmony. However, gaps remain in the structural implementation of these frameworks across many large-scale healthcare delivery systems at the primary, secondary, tertiary and related levels [Table/ Fig-1] [6,8,9,23-31].

Author(s) and year	Study focus	Key findings	Interpretation and relevance to healthcare leadership	Level of evidence
Goleman D et al., 2002	Conceptual model of EI in leadership	EI in leaders fosters trust, engagement and climate transformation	Theoretical basis for EI's role in influencing team morale and motivation	Level V (Expert Opinion/Book)
Codier E et al., 2010 [8]	EI and nursing care performance	High EI improves nurse communication and collaboration	EI-driven leadership results in better staff relationships and patient care	Level III (Correlational study)
Por J et al., 2011 [9]	EI and stress in nursing students	EI buffers against emotional exhaustion and increases leadership confidence	Relevant to training future emotionally intelligent clinical leaders	Level II (Quasi-Experimental)
George JM, 2000 [23]	EI's effect on ethical behaviour and motivation	EI enhances moral reasoning and leadership impact	Highlights emotional self-regulation as core for ethical healthcare leadership	Level IV (Conceptual Paper)
Goleman D 1998 [24]	EI measurement in leadership (ESCI)	Identified EI competencies linked to leadership effectiveness	ESCI provides structured evaluation for healthcare leadership development	Level IV (Validation Study)
Akerjordet K and Severinsson E, 2008 [25]	EI and clinical nurse leadership	EI linked to ethical sensitivity, conflict management and team cohesion	Strong EI enables ethical and collaborative decision-making in complex situations	Level III (Qualitative Synthesis)
Cummings GG et al., 2010 [26]	Nurse leadership styles and outcomes	Transformational leadership linked with high morale and low burnout	Emotionally intelligent leaders positively affect nurse retention and safety	Level III (Systematic Review of Observational Studies)
Clarke N, 2010 [27]	EI and safety climate in nursing	EI improves communication and error management	Emotionally intelligent leaders help create a psychologically safe workplace	Level III (Cross-sectional Study)
Weng HC et al., 2011 [28]	EI and job satisfaction in clinical nurses	Positive correlation between EI and nurse job satisfaction, empathy and teamwork	High EI leads to better interpersonal functioning and staff wellbeing	Level III (Cross-sectional Study)
Sharma M and Garg D 2016 [29]	EI and transformational leadership in doctors	EI significantly predicts transformational leadership traits in physicians	Supports incorporation of EI training in leadership development programs	Level III (Correlational study)
Bourgeon L et al., 2016 BMJ Qual Saf [30]	EI training and patient-doctor communication	EI training improves clinician empathy and communication with patients	Emotionally intelligent leadership enhances patient trust and satisfaction	Level II (Controlled intervention)
Ma J et al., 2022 [31]	EI and patient safety culture	High EI in leadership positively influences safety attitudes and error reporting	Emotionally intelligent leaders foster accountability and reduce adverse events	Level III (Cross-sectional study)

**[Table/FIG-1]:** A detailed overview of various qualities of evidence available to understand the role of EI in clinical leadership [6,8,9,23-31].

## IMPACT OF EMOTIONAL INTELLIGENCE (EI) ON HEALTHCARE TEAM DYNAMICS AND COMMUNICATION

Effective teamwork and communication are essential to patient safety and quality care in the fast-paced, high-pressure healthcare industry. Trust building and conflict reduction depend on fostering empathy at both the individual and team levels, a pivotal factor for interpersonal connection [Table/Fig-2] [6,8,9,23,25-30]. The introspective processes involved in recognising and regulating emotional responses draw on both cognitive and emotional skills, which are essential for team cohesion and interpersonal effectiveness across clinical and multidisciplinary settings [32].

Leadership attribute	Supported by studies	Impact
Resilience	Por J et al., [9], Weng HC et al., [28], Cummings GG et al., [26]	Reduces burnout, builds emotional coping
Collaboration	Codier E et al., [8], Clarke N [27], Akerjordet K and Severinsson E [25]	Improves team cohesion and communication
Ethical conduct	George [23], Sharma M and Garg D [29], Akerjordet K and Severinsson E [25]	Strengthens moral reasoning and fairness
Performance	Goleman D et al., [6] Bourgeon L et al., [30]	Enhances patient outcomes and satisfaction

**[Table/Fig-2]:** Depicts summary of various leadership attribute along with their impacts [6,8,9,23,25-30].

A healthcare team with a high level of collective EI is better able to defuse tense situations, comprehend non verbal cues and coordinate care. Research indicates that healthcare transitions, interprofessional collaboration and conflict resolution are markedly enhanced when team members are emotionally aware and empathetic [21,33]. Reassurance and effective communication positively affect the patient's healing process. Conversely, negative or poorly framed statements can promote fear-avoidance behaviours and undermine health-promoting practices. Words can heal or harm; communicating appropriately—within the team, with patients and in one's self-talk—supports interpersonal and intrapersonal harmony and should be taught as part of professional training and team development in healthcare [27,34,35].

## WORKPLACE PERFORMANCE AND PATIENT OUTCOMES: EVIDENCE-BASED PERSPECTIVES

### Enhanced Leadership Skills

An exploration of competencies fostered through leadership development underscores the cultivation of self-management, social and work-facilitation capabilities. Our thoughts drive actions and, over time, form habits that shape behaviour; this capacity for self-management plays a crucial role in leadership development.

Beyond self-management, healthcare personnel should cultivate social abilities—such as building strong relationships, interpersonal effectiveness and clear communication—which create harmony with patients and colleagues and strengthen collective strategic thinking, creativity, objection handling, emotion regulation, sound decision-making and progress toward organisational objectives. Role models with a high level of empathetic understanding are better able to inspire and motivate their teams to fulfil collective goals and enhance productivity. Such leaders excel in communication, conflict resolution, empathy and decision-making, fostering a positive organisational culture [36].

### Improved Team Collaboration

Traditionally, leadership was associated with overseeing, planning and supervising operational aspects of an organisation. Contemporary perspectives in healthcare, however, emphasise relational leadership: motivating and inspiring colleagues and stakeholders; cultivating a positive workplace climate; and fostering authentic connections that generate a sense of involvement, significance and a collaborative approach to shared goals. Over the past decade, interpersonal skills have gained increasing prominence in effective leadership and in generating positive collaborative outcomes. Employees with strong EI contribute to a harmonious work environment [37]. They are better equipped to navigate interpersonal relationships, resolve conflicts amicably and collaborate effectively with diverse teams [38].

### Employee Well-being and Engagement

Employee engagement and well-being mediate the relationship between an individual's capacity to regulate emotions and their intent to leave, with perceived organisational support acting as a positive moderator [39,40]. Emotional intelligence correlates positively with job satisfaction and overall well-being, contributing to higher levels of staff engagement and retention [41].

### Increased Resilience

Self-resilience is a critical quality: in situations of instability and stress, the ability to bounce back helps stabilise a disrupted workplace and turns adversity into growth. Individuals with higher EI manage stress, adapt to change and maintain a positive outlook, contributing to a more resilient and adaptive workplace [42].

### Client and Customer Relations

Clinicians with higher EI are more adept at establishing rapport, demonstrating empathy and interpreting non verbal cues, all of which improve patient satisfaction, adherence and clinical outcomes [28]. Evidence suggests that physicians' EI directly affects the quality of the doctor–patient interaction, reduces medical errors and builds credibility [41,43]. The evidence-based impacts of Emotional Intelligence (EI) on workplace performance and patient outcomes has been presented in [Table/Fig-3] [6,8,9,28,35,38,40-42,44-49].

Key area	Authors (Year)	Findings	Level of evidence and study type
Team Collaboration	Palmer B et al., (2001); Cherniss C and Goleman D (2001) [38,44]	EI improves team effectiveness, cohesion and conflict resolution.	Level II - Observational and psychometric analysis
Organisational performance	Slaski M and Cartwright S (2002) [45]	EI training improved organisational climate and employee morale.	Level II - Quasi-intervention study
Conflict management in teams	Jordan PJ and Troth AC (2004) [35]	Teams with high EI managed workplace disputes more effectively and collaboratively	Level II - Experimental study (team-based laboratory experiment)
Impact on leadership in clinical education	Fletcher I et al., (2009) [46]	EI contributed to better mentoring and leadership behaviours in medical educators.	Level III - Qualitative study
Healthcare quality and safety	Codier E et al., (2010) [8]	Higher nurse EI correlated with safer patient care and reduced medication errors.	Level II - Correlational Quantitative study
Burnout reduction in clinicians	Por J et al., (2011) [9]	EI is negatively associated with stress and emotional exhaustion in nursing professionals.	Level II - Cross-sectional study
Leadership competency	Goleman D et al., (2002); McCauley CD (2008) [6,47]	EI enhances leadership traits like empathy, self-awareness and motivation.	Level II - literature review and mixed methods
Resilience and stress management	Salovey P and Mayer JD (2004); Brady DL et al., (2014) [42,48]	EI supports stress regulation and individual resilience.	Level III – narrative review+cross-sectional

Patient satisfaction and communication	Weng HC et al., (2011) [28]	Clinicians with high EI improve doctor-patient communication and clinical outcomes.	Level II- Observational Study
Employee well-being and engagement	Akhtar MW et al., (2017); Côté S et al., (2010); Villicana JC (2022) [40,41,49]	High EI is linked with improved job satisfaction and reduced turnover intentions.	Level II- Cross-sectional studies

[Table/Fig-3]: Evidence-based impacts of Emotional Intelligence (EI) on workplace performance and patient outcomes [6,8,9,28,35,38,40-42,44-49].

## DEVELOPMENT AND TRAINING OF EI IN HEALTHCARE PROFESSIONALS

- Training and development programs:** Organisations can invest in training programs that focus on EI skills development. These programs may include workshops, seminars and coaching sessions to enhance self-awareness, empathy and effective communication [50].
- Leadership modeling:** Leaders set the tone for EI within an organisation. By modelling emotionally intelligent behaviour, leaders inspire their teams to emulate these qualities, creating a positive ripple effect throughout the workplace [51].
- Feedback and recognition:** It is crucial for individuals to feel heard and respected for their efforts—a basic human need. A culture of regular feedback and brainstorming encourages people to invest emotionally in their work, strengthening organisational foundations. Acknowledging and celebrating instances of emotionally intelligent behaviour reinforces its value within the organisational context [52].
- Mindfulness and well-being initiatives:** Incorporating mindfulness practices and well-being initiatives contributes to the development of emotional competence. Such activities promote self-awareness and emotional regulation by integrating body, mind and spirit, fostering a healthier workplace ecosystem [17,53].

## CONCLUSION(S)

Work occupies a large part of life and flourishes when people genuinely enjoy what they do and feel a strong sense of purpose and belonging. Incorporating EI in the workplace catalyses improvements across the healthcare ecosystem, yielding benefits such as greater effectiveness, well-being, team collaboration, performance and growth. Recognising the multidimensional nature of EI, healthcare organisations are increasingly investing in strategies to develop and leverage EI skills among their employees and leaders. The significance of EI extends beyond individual competencies to encompass broader organisational outcomes, including enhanced resilience, improved client relations and increased employee engagement and retention. Organisations can establish a productive and supportive work environment that fosters both professional and personal development by emphasising the development of EI through training programs, leadership modelling, feedback systems and mindfulness initiatives. As EI continues to gain prominence in the healthcare workplace, its integration into organisational culture represents a strategic imperative for driving sustained, multifaceted growth in today's dynamic and interconnected environment.

## REFERENCES

- Cobb CD, Mayer JD. Emotional intelligence. *Imagin Cogn Pers*. 1990;58(3):14-18. [cited 2025 Apr 18]. Available from: <https://journals.sagepub.com/doi/10.2190/dugg-p24e-52wk-6cdg>.
- Anand N, Gorantla VR, Ranjan R, Morcos H. Emotional intelligence: An important skill to learn now more than ever. *F1000Research* 2023;12:1146. [cited 2025 May 18]. Available from: <https://f1000research.com/articles/12-1146>.
- Goleman D. The emotional intelligence of leaders. *Leader to Leader* [Internet]. 1998;1998(10):20-26. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/ltl.40619981008>.
- Gilar-Corbi R, Valdés MV, Navas L, Holgado-Tello FP, Castejón JL. Validation of the bar-on EQ-i: YV (S) inventory in its spanish version: Gender-based invariance analysis. *Int J Environ Res Public Health*. 2021;18(4):01-15.
- Thrita - Home [Internet]. [cited 2025 May 18]. Available from: <https://thritajournal.com/en/index.html>.
- Goleman D, Boyatzis R, McKee A. *Primal Leadership: Realizing the Power of Emotional Intelligence*. Boston: Harvard Business School Press; 2002. [cited 2024 Dec 25].
- Freshwater D, Stickley T. The heart of the art: Emotional intelligence in nurse education. *Nurs Inq*. 2004;11(2):91-98. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1440-1800.2004.00198.x>.
- Codier E, Muneno L, Franey K, Matsuura F. Is emotional intelligence an important concept for nursing practice? *J Psychiatr Ment Health Nurs*. 2010;17(10):940-48. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2850.2010.01610.x>.
- Por J, Barribal L, Fitzpatrick J, Roberts J. Emotional intelligence: Its relationship to stress, coping, well-being and professional performance in nursing students. *Nurse Educ Today*. 2011;31(8):855-60. [cited 2025 Apr 18]. Available from: <https://pubmed.ncbi.nlm.nih.gov/21292360/>.
- Birks Y, McKendree J, Watt I. Emotional intelligence and perceived stress in healthcare students: A multi-institutional, multi-professional survey. *BMC Med Educ*. 2009;9(1):61.
- Nadal M, Skov M. *The Routledge International Handbook of Neuroaesthetics*. The Routledge International Handbook of Neuroaesthetics. 2022.
- Mayer JD, Salovey P, Caruso DR. Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*. 2004;15(3):197-215. [cited 2024 Dec 25]. Available from: [https://doi.org/10.1207/s15327965pli1503\\_02](https://doi.org/10.1207/s15327965pli1503_02).
- Di Fabio A, editor. *Emotional Intelligence - New Perspectives and Applications* [Internet]. InTech; 2012. Available from: <http://dx.doi.org/10.5772/1188>.
- Burke RJ, Cooper CL. *Inspiring leaders. Inspiring Leaders*. 2006;01-352.
- Lane RD, Reiman EM, Axelrod B, Yun LS, Holmes A, Schwartz GE. Neural correlates of levels of emotional awareness: Evidence of an interaction between emotion and attention in the anterior cingulate cortex. *J Cogn Neurosci*. 1998;10(4):525-35. [cited 2025 Apr 18]. Available from: <https://dx.doi.org/10.1162/089892998562924>.
- Fellous JM. Emotion: Computational modeling. *Encyclopedia of Neuroscience*. 2009;909-13.
- Carmeli A, Yitzhak-Halevy M, Weisberg J. The relationship between emotional intelligence and psychological wellbeing. *J Manag Psychol*. 2009;24(1):66-78.
- Craig AD. How do you feel-now? The anterior insula and human awareness. *Nat Rev Neurosci*. 2009;10(1):59-70. [cited 2025 Apr 18]. Available from: <https://pubmed.ncbi.nlm.nih.gov/19096369/>.
- Dolcos F, Iordan AD, Dolcos S. Neural correlates of emotion-cognition interactions: A review of evidence from brain imaging investigations. *J Cogn Psychol (Hove)*. 2011;23(6):669-94. [cited 2025 Apr 18]. Available from: <https://pubmed.ncbi.nlm.nih.gov/22059115/>.
- Bechara A, Damasio H, Damasio AR. Emotion, Decision Making and the Orbitofrontal Cortex. *Cerebral Cortex* [Internet]. 2000;10(3):295-307. [cited 2025 Apr 18]. Available from: <https://dx.doi.org/10.1093/cercor/10.3.295>.
- Performance J, Assefa HK. The role of employee well-being the relation between emotional intelligence. *Int J Acad Multidiscip Res*. Available from: [www.ijeaais.org/ijamr](http://www.ijeaais.org/ijamr).
- Extremera N, Fernández-Berrocal P. Emotional Intelligence as predictor of the mental, social, and physical health in university students. *Span J Psychol*. 2006;9:45-51. [cited 2025 Apr 18]; Available from: [https://www.academia.edu/1345275/Extremera\\_N\\_y\\_Fern%C3%A1ndez\\_Berrocal\\_P\\_2006\\_Emotiona l\\_Intelligence\\_as\\_predictor\\_of\\_the\\_mental\\_social\\_and\\_physical\\_health\\_in\\_university\\_students\\_Spanish\\_Journal\\_of\\_Psychology\\_9\\_45\\_51](https://www.academia.edu/1345275/Extremera_N_y_Fern%C3%A1ndez_Berrocal_P_2006_Emotiona l_Intelligence_as_predictor_of_the_mental_social_and_physical_health_in_university_students_Spanish_Journal_of_Psychology_9_45_51).
- George JM. Emotions and leadership: The role of emotional intelligence. *Hum Relat*. 2000;53(8):1027-55.
- Goleman D. *Working with emotional intelligence*. NY: Bantam Books. 1998.
- Akerjordet K, Severinsson E. Emotionally intelligent nurse leadership: A literature review study. *J Nurs Manag*. 2008;16(5):565-77. [cited 2025 Apr 18] Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2834.2008.00893.x>.
- Cummings GG, MacGregor T, Davey M, Lee H, Wong CA, Lo E, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *Int J Nurs Stud*. 2010;47(3):363-85.
- Clarke N. Developing emotional intelligence abilities through team-based learning. *Hum Resour Dev Q* [Internet]. 2010;21(2):119-38. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/hrdq.20036>.
- Weng HC, Hung CM, Liu YT, Cheng YJ, Yen CY, Chang CC, et al. Associations between emotional intelligence and doctor burnout, job satisfaction and patient satisfaction. *Med Educ*. 2011;45(8):835-42. [cited 2025 Apr 18]. Available from: <https://pubmed.ncbi.nlm.nih.gov/21752080/>.
- Sharma M, Garg D. Personal growth as a correlate of gratitude, hope and curiosity among college students. *Indian J Posit Psychol*. 2016;7(2):201-05. [cited 2025 Apr 18]. Available from: <https://www.i-scholar.in/index.php/ijpp/article/view/122100>.
- Bourgeon L, Bensalah M, Vacher A, Ardouin JC, Debien B. Role of emotional competence in residents' simulated emergency care performance: A mixed-methods study. *BMJ Qual Saf*. 2016;25(5):364-71.
- Ma J, Peng W, Pan J. Investigation into the correlation between humanistic care ability and emotional intelligence of hospital staff. *BMC Health Serv Res* [Internet]. 2022;22(1):01-12. [cited 2025 Apr 18]. Available from: <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-022-08227-4>.
- Mayer JD, Caruso DR, Salovey P. Emotional intelligence meets traditional standards for an intelligence. *Intelligence*. 1999;27(4):267-98.

[33] Dhani P. Relationship between emotional intelligence and job performance: A study in Indian context. *Indian J Sci Technol.* 2016;9(1):1-12.

[34] Salas E, Shuffler ML, Thayer AL, Bedwell WL, Lazzara EH. Understanding and Improving Teamwork in Organizations: A Scientifically Based Practical Guide. *Hum Resour Manage* [Internet]. 2015;54(4):599-622. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/hrm.21628>.

[35] Jordan PJ, Troth AC. Managing emotions during team problem solving: Emotional intelligence and conflict resolution. *Hum Perform* [Internet]. 2004;17(2):195-218. [cited 2025 Apr 18]. Available from: [https://www.tandfonline.com/doi/abs/10.1207/s15327043hup1702\\_4](https://www.tandfonline.com/doi/abs/10.1207/s15327043hup1702_4).

[36] Goleman D, Boyatzis RE, McKee A. *Primal leadership: Unleashing the power of emotional intelligence*. Harvard Business Review Press. 2013.

[37] Palmer B, Donaldson C, Stough C. Emotional intelligence and life satisfaction. *Pers Individ Dif.* 2002;33(7):1091-100.

[38] Cherniss C, Goleman D. *The Emotionally Intelligent Workplace: How to Select for, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. San Francisco: Jossey-Bass (A Wiley Company);2001: Pp.385. [cited 2024 Dec 25].

[39] Quinn JF, Cola PA, Cooper M, Miller CW. Development of a survey tool to assess emotional and social behavioural competencies of Science Technology Engineering and Medicine (STEM) Graduate Students [Internet]. 2024. Available from: <https://www.researchsquare.com/article/rs-4565994/v1>.

[40] Akhtar MW, Ghufran H, Fatima T. The effect of emotional intelligence on turnover intentions; the role of employee well-being, engagement and perceived organizational support. *Jinnah Bus Rev.* 2017;5(2):69-80.

[41] Côté S, Lopes PN, Salovey P, Miners CTH. Emotional intelligence and leadership emergence in small groups. *Leadership Quarterly.* 2010;21(3):496-508.

[42] Salovey P, Mayer JD. Emotional Intelligence. In *Emotional Intelligence: Key Readings on the Mayer and Salovey Model*. Dude Publishing; 2004. [cited 2024 Dec 25].

[43] Gao X, Wang L, Lu L, Wu W. The influence of bootleg innovation on individual innovation performance: The mediating effect of cognitive flexibility and the moderating effect of leadership's emotional intelligence. *PLoS One.* 2024;19(2):e0296782.

[44] Palmer B, Walls M, Burgess Z, Stough C. Emotional intelligence and effective leadership. *Leadersh Organ Dev J.* 2001;22(1):05-10.

[45] Slaski M, Cartwright S. Health, performance and emotional intelligence: An exploratory study of retail managers. *Stress and Health* [Internet]. 2002;18(2):63-68. [cited 2025 Apr 18]. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1002/smj.926>.

[46] Fletcher I, Leadbetter P, Curran A, O'Sullivan H. A pilot study assessing emotional intelligence training and communication skills with 3<sup>rd</sup> year medical students. *Patient Educ Couns.* 2009;76(3):376-79.

[47] McCauley CD. Leader Development: A Review of Research. Greensboro, NC: Center for Creative Leadership; 2008. [cited 2024 Dec 25].

[48] Brady DL, Saklofske DH, Schwean VL, Montgomery JM, McCrimmon AW, Thorne KJ. Cognitive and emotional intelligence in young adults with Autism Spectrum Disorder without an accompanying intellectual or language disorder. *Res Autism Spectr Disord.* 2014;8(9):1016-23.

[49] Vilicicăna JC. Frontline workers serving students: A study on the well-being of student affairs professionals during the COVID-19 pandemic. 2022.

[50] Brackett MA, Rivers SE, Shiffman S, Lerner N, Salovey P. Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence. *J Pers Soc Psychol.* 2006;91(4):780-95.

[51] Singh EH, Dorji N, Zangmo L, Rigel L, Wangchuk N, Tamang LD, et al. A study on the relationship between emotional intelligence, leadership styles and perceived leadership effectiveness in Bhutan. *Glob Bus Rev.* 2021.

[52] Harter JK, Schmidt FL, Hayes TL. Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *J Appl Psychol.* 2002;87(2):268-79.

[53] Kabat-Zinn J. *Wherever you go, there you are: Mindfulness meditation in everyday life*. In *TA - TT - (1<sup>st</sup> ed)*. 1994. New York: Hyperion. Available from: [https://doi.org/10.1007/978-1-4612-0873-7\\_1](https://doi.org/10.1007/978-1-4612-0873-7_1) - <https://worldcat.org/title/28292696> - Google Search [Internet]. [cited 2024 Dec 25].

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