

## REVIEW

## Insights into the role of emotional intelligence in nursing leadership

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### Abstract

**Aim:** Emotional intelligence (EI) is increasingly recognized as an essential competency in nursing leadership. This study explores how EI shapes the fundamental components of nursing leadership and its impact on healthcare outcomes. **Design:** The study is classified as qualitative research. **Methods:** A comprehensive literature review was performed using databases including EBSCO, Google Scholar, OVID, and Web of Science. Studies published in English between 2017 and 2022 were screened against predefined inclusion criteria. Thirty-three peer-reviewed articles were selected and subjected to contextual and thematic analysis. This qualitative approach allowed synthesis of recurring themes and insights into the influence of EI on nursing leadership and practice. **Results:** Emotional intelligence significantly impacts nursing leadership by improving patient outcomes, fostering teamwork, enhancing communication, and supporting quality care. Nurses with high EI exhibit empathy, resilience, and positivity, contributing to stronger team dynamics, reduced turnover, and increased cohesion. Leaders with elevated EI levels earn trust, build respectful relationships, and inspire commitment. Moreover, EI reduces burnout, enhances job satisfaction, and ensures consistent quality control in nursing management. **Conclusion:** Emotional intelligence is fundamental to effective nursing leadership and has a positive impact on staff retention, satisfaction, and quality of care. Incorporating EI training into nursing education and recruitment is vital for sustaining nursing leadership excellence and optimizing healthcare outcomes.

**Keywords:** emotional intelligence, leadership, nursing.

### Introduction

Emotional intelligence (EI), a notion initially proposed by Salovey and Mayer in the 1990s, denotes the capacity to monitor one's own emotions and those of others, differentiate between different emotions, and use emotional information to guide thinking and behaviour. In simpler terms, it involves being aware of emotions, controlling them effectively, and using them to improve interpersonal interactions and decision-making (Mayer & Salovey, 1993).

Goleman's updated concept highlights the ability to recognize our own and others' feelings, manage our emotions, and handle relationships constructively into key components: (I) self-awareness: recognizing and understanding one's own emotions;

(II) self-management: controlling or redirecting one's emotions, especially in stressful situations; (III) social awareness: understanding the emotions of others and responding with empathy; (IV) relationship management: using emotional understanding to manage interactions and build positive relationships (Goleman, 1995).

Emotional intelligence is considered an essential trait for effective leadership, particularly in healthcare, where it significantly influences relationship management, patient outcomes, and organizational culture enhancement.

Nurses make up a large part of the healthcare workforce and play a significant role in their organisations through their impact on patient outcomes, organisational culture, and team relationships. Although studies have shown that traits, characteristics, and relationships of nursing leaders are an essential part of nursing leadership, few

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conclusions have been drawn as to which specific nursing leader characteristics contribute most effectively to the development of nursing leadership (Chen & Chen, 2018; Cummings et al., 2021). Some recent studies have shown that EI makes a significant contribution to effective leadership and has become one of the most important characteristics of leaders (Prezerakos, 2018). The role of relationships and emotions within the concept of intelligence was first explored in the context of multiple intelligence theory. Raghurir (2018) categorized EI in nursing into personal and social attributes. Social attributes include social awareness and relationship management and personal attributes include self-awareness and self-management.

The results of a plethora of studies indicate that EI is a useful tool for nursing leaders and contributes decisively to the achievement of effective management in healthcare. Tyczkowski et al. (2015) and Spano-Szekely et al. (2016) believe that EI has an impact on the application of transformational style among nursing leaders and outcomes measures of extra effort, effectiveness, and satisfaction. Emotional intelligence has been shown to have critical-constructive effects by meeting nurses' needs while influencing their turnover intentions and team culture (Majeed & Jamshed, 2021; Phillips et al., 2021). Other studies have found that a nurse's level of EI is positively associated with their teamwork abilities. One thing that can affect the quality of teamwork and competence development is how emotionally intelligent a nursing leader is (Furukawa & Kashiwagi, 2021). Cox (2018) concluded that emotional intelligence has the potential to improve multidisciplinary teamwork as well as communication between members of the team, which ultimately leads to better patient outcomes. Emotional intelligence has been linked to fewer cases of burnout in the workplace and greater levels of job satisfaction. Based on these initial findings, it appears that satisfied nurses provide high-quality care (Bock, 2020). An increase in professional performance, as well as mental and personal abilities, might result from having a superior with high EI. Emotional intelligence, also known as social capital, is essential for the establishment of healthcare institutions, the culture of an organization, and satisfaction with one's employment (Chen & Chen, 2018).

Although studies in recent decades have raised awareness of the impact of EI on nursing leadership, almost all studies have pointed to the need for further research to understand and develop EI in nursing leaders. Given the impact of EI, nursing leaders are not organizationally presented with the fundamental areas

that require higher than usual levels of EI and the impact of EI is in these areas of nursing leaders' work. With the rapid evolution of healthcare and the increasing demands and expectations placed on leaders, they can no longer use outdated methods to manage healthcare organizations and employees.

## Aim

The aim of this study was to provide a comprehensive literature review of current scientific knowledge on EI in nursing leadership, with a focus on identifying and categorizing the key leadership components that require elevated levels of EI.

## Methods

### Design

The study is classified as qualitative research, as it entails the interpretation of literature through contextual and thematic analysis.

This article is a review of previously published work. Prior to commencing the search, the following research question was defined: To what extent do certain fundamental nursing concepts require a higher standard of EI, and what are the implications, particularly from a leadership perspective?

### Eligibility criteria

The eligibility criteria for the study were as follows: The review focused primarily on nurse assessment, including a review of the literature examining the areas of nurse assessment, supervision, and the role of nurse practitioners in the profession. There was a need for research to examine the relationship between leadership style and EI in the nursing profession. The review focused mainly on studies that examined the role of EI in effective leadership among nursing staff. Only English language scholarly research papers were included in the search. These publications provide a compilation of original research results and a comprehensive summary of the current literature. For convenience, only papers published in the last five years were considered. This time period was strategically chosen to include the latest developments and ideas in nursing.

This review excluded studies that were not in English, did not meet the criteria for publication type and date, or were not directly related to the specific topics of nursing or leadership and EI. This review examines the importance of EI in nursing leadership in clinical settings, providing insights for future research.

### Search strategy

The PICO search strategy was determined before the search began, and the primary goal of the investigation was to identify findings from the evidence-based practice approach (Jensen, 2018).

- P (Population): Nurse / leader / team.
- I (Intervention): Influence emotional intelligence.
- C (Comparison): Not applicable.
- O (Outcome):  
Satisfaction / wellbeing / fulfilment.

The review covered the years 2017 through 2022 in terms of article publication. The following electronic databases were searched: EBSCO, Google Scholar, OVID, and Web of Science. The Boolean operators AND and OR were used in the search; AND was used in the primary category, and OR was used in the secondary category.

### Study selection inc. PRISMA flow diagram

Based on the respective research experiences of the team of authors, they agreed on the following search terms:

- a. OVID:
  1. Nursing / OR Nursing Assessment / OR Nursing, Supervisory / OR Nursing Staff / OR Nursing Staff, Hospital /
  2. Leadership / AND Emotional Intelligence /
  3. 1 AND 2 / limit 5 to last 5 years.
- b. Web of Science: nursing (Topic) AND leadership (All Fields) AND emotional intelligence (All Fields).
- c. EBSCO: nursing AND leadership AND emotional intelligence.
- d. Google Scholar: nursing AND leadership AND emotional intelligence.
  1. English language
  2. Review article

Studies that addressed nursing leadership or EI separately were excluded from the review. Articles that were not peer-reviewed and grey literature were also removed from the review process.

To compile a complete list of studies relevant to the topic, a comprehensive search of the appropriate literature was carried out to identify abstracts suitable for inclusion. A total of 483 articles were found from all searches processed.

### Evaluation of quality of articles

After compiling the titles and abstracts, duplicates were removed (73 articles), and the remaining abstracts were assessed to determine whether or not they met the inclusion / exclusion criteria.

Using automation techniques, 198 records were identified as ineligible.

Automation approaches involve the use of digital tools or software to automatically scan articles for relevance based on predefined criteria (e.g., date, language, keywords). These strategies aid in the rapid elimination of publications that do not match fundamental eligibility conditions, such as those published outside of the specified time period or those unrelated to nursing or EI. However, the specific software or tools utilized in this automation process as well as how they contributed to the review's accuracy should be stated.

A total of 81 records were excluded from the dataset for additional reasons (lack of relevance to EI or nursing leadership based on the full-text review, insufficient methodological rigor, etc.).

A total of 130 records were selected for assessment during the screening phase. Forty-five articles were excluded during the screening process. Of the records reviewed, a total of 85 were selected for full-text retrieval. Forty articles could not be retrieved, indicating potential challenges in obtaining full versions of the articles. A total of 45 articles were evaluated to determine whether they met the eligibility criteria. Seven records were excluded at this stage for unique reasons.

Finally, a total of 33 studies were included in the aforementioned literature review (see Figure 1 for the PRISMA flow diagram).

### Data extraction

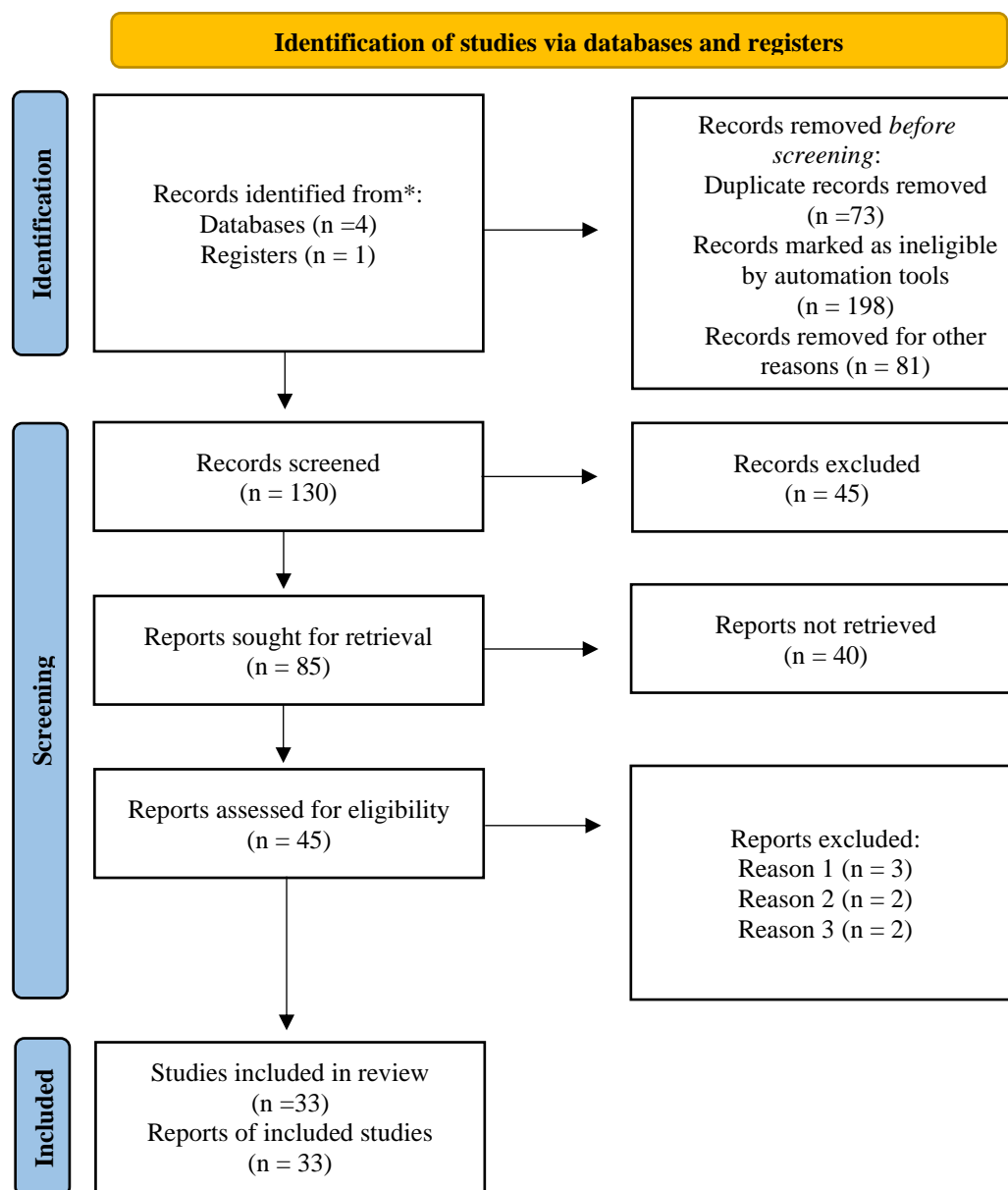
The following data were extracted from each included study: author, year, title, research objectives, research methods or study type, analysis results, and conclusions. Thematic analysis was used to extract the classification framework of the fundamentals of the nursing aspect in which EI is essential. The authors read the classifications and agreed on the final draft.

The research findings presented in Table 1 collectively emphasize the importance of EI in improving nursing outcomes. The research utilizes different strategies and emphasizes practical applications, establishing a solid basis for understanding how emotional intelligence might enhance patient care and nursing leadership. The emphasis on practical applications further encourages the integration of EI into nursing education and practice, ultimately benefiting both patients and healthcare providers.

The table summarizes the characteristics of research articles focusing on EI and its impact on nursing outcomes, including study design, sample demographics, and key findings. It highlights the diverse methodologies employed, such as surveys and qualitative interviews, as well as variations

in sample sizes and settings, predominantly involving female nurses. The key findings indicate a consistent positive correlation between high EI and improved patient outcomes, enhanced teamwork, and reduced burnout among nursing professionals.

This was qualitative research in that the authors interpreted the data they collected in a way that was adaptable, open, and context-sensitive.



**Figure 1** PRISMA flow diagram

\*Reasons for excluding records or full-text articles were as follows: no evidence of the concept of EI knowledge in the abstract; the study was unrelated to nursing leadership.

## Results

The study has revealed that EI significantly impacts nursing leadership across several domains. Emotional intelligence enhances positive patient outcomes, fosters effective teamwork, and supports transformational leadership by building trust and engagement. It improves communication, reduces burnout, and promotes psychological well-being

among nurses. Emotional intelligence is vital for providing high-quality care and is essential in nursing education and leadership training. Additionally, it aids in maintaining a healthy work-life balance and addressing stress, ultimately leading to better job satisfaction and reduced nurse turnover. Integrating EI into leadership practices strengthens team cohesion, optimizes healthcare delivery, and enhances organizational success.

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 1)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Abraham and Scaria (2017)</b>	Emotional intelligence: The context for successful nursing leadership: A literature review.	Palliative care, oncology, and mental health settings have all successfully adopted an emotionally intelligent nursing leadership style.	A literature review; from 2008 to 2015.	The necessity to hire emotionally intelligent nurse managers, the future scope of study in this area, and implications for integrating emotional intelligence into the nursing curriculum have all been made.	For nurse leaders, EI is a charismatic quality. It solves long-standing problems in nursing practice. Its application is what makes it successful.
<b>Abuayyash et al. (2018)</b>	An empirical review of the relationship between emotional intelligence and work performance.	To review the literature on the connection between emotional intelligence and job success.	A literature review.	EI has significant effects on how well employees perform at work. Employees who can evaluate their own EI have better communication skills than those who don't, and they are able to accomplish work objectives and maintain a high level of performance.	There is a positive correlation between crucial work manners and EI. In the field of education, EI is most strongly associated with successful work results.
<b>Beauvais et al. (2017)</b>	The role of emotional intelligence and empathy in compassionate nursing care.		A cross-sectional study; a descriptive, correlational design.	This study supports the idea that empathy and EI can help prevent compassion burnout and tiredness while fostering compassion satisfaction. The results suggest that healthcare institutions should use training sessions to improve practitioners' EI and positive empathy. Such tactics may help encourage nurse retention and enhance the standard of patient care in addition to facilitating compassion satisfaction and preventing compassion fatigue.	Empathy and EI can prevent compassion burnout and tiredness. Healthcare institutions' education can improve EI and positive empathy. This will help encourage nurse retention, enhance the standard of patient care, and prevent tiredness.
<b>Bock (2020)</b>	Nurse characteristics and the effects on quality.	To research the relationship between EI and level of care.	A literature review.	Early research has demonstrated that nurse leaders with strong EI have lower occupational burnout and higher job satisfaction. Although there is little research on EI in bedside nurses, it is generally accepted that nurses who are satisfied with their jobs and do not feel burned out provide superior care.	EI is the key element for reducing burnout, increasing job satisfaction, and high standards of care.

EI – emotional intelligence

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 2)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Castelino and Mendonca (2021)</b>	Emotional intelligence in nursing: The heart of the art – A review.	To analyze how emotional intelligence enhances the art and craft of nursing, a practice discipline.	A literature review.	Modern health care systems require professional nurses who are emotionally intelligent in order to provide successful nursing interventions, satisfy patients' demands for care, and deal with various clinical challenges and occupational stressors.	EI in the nursing field refers to a nurse's positive capacity to employ self-awareness, empathy, and emotional control, which promotes and distinguishes the core of expert caring and nursing. To deliver high-quality care, a nurse must be able to connect with patients, control their own emotions, and sympathize with patients.
<b>Cox (2018)</b>	Use of emotional intelligence to enhance advanced practice registered nursing competencies.	To create a framework for APRN professional competencies and EI competencies alignment to improve leadership, communication, and teamwork in healthcare organizations.	Analysis of competencies of APRN.	Well-educated and emotionally intelligent APRNs support enhanced collaboration within multidisciplinary teams, improved communication, and APRN leadership to achieve improved patient outcomes.	EI has an effect on improved patient outcomes, increased multidisciplinary team collaboration, and improved communication.
<b>Cui (2021)</b>	The role of emotional intelligence in workplace transparency and open communication.	To better comprehend EI in the workplace, the variety of duties that people are required to complete, and how to maintain suitable terms and relationships with others around them, including managers, superiors, and subordinates.	The Integrative Multilevel Literature Thinking model.	There is a fundamental relationship between EI and employee engagement. Effective communication abilities allow us to perform more effectively in everyday situations where stronger bonds can make a difference. There are emotional connections between intelligence, corporate commitment, and worker performance. EI may be raised by increasing training to make it easier for workers to develop their mental skills and by encouraging them to focus on their social skills. This would enrich the work environment and help employees and subordinates succeed.	EI is based on effective communication and is associated with intelligence, corporate commitment, and work performance. Training can boost employees' EI and help their jobs succeed.

*EI – emotional intelligence; APRN – advanced practice registered nurses*

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 3)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Cupit et al. (2019)</b>	Assessing the nurse manager's span of control: A partnership between executive leadership, nurse scientists, and clinicians.	To use an evidence-based, all-encompassing tool to evaluate the acute care clinical nurse managers' span of control, to make a visual representation of the managers' span of control, and to come up with ways to improve the performance of acute care clinical nurse managers and reduce the negative effects of excessive spans of control on unit, staff, and patient outcomes.	Project evaluation.	Whereas 44% of nurse managers had an excessive span of control, about 56% of them had an acceptable span. The evaluation of clerical support employees, the delivery of leadership training that incorporates social and emotional intelligence, and the adoption of best practice initiatives are among the recommendations.	It is necessary to include social and emotional intelligence elements in leadership education.
<b>Freedman (2019)</b>	Risk factors and causes of interpersonal conflict in nursing workplaces: Understandings from neuroscience.	To investigate the risk factors and root causes of interpersonal conflicts in healthcare nursing settings and to determine whether the SCARF (status, certainty, autonomy, relatedness, and fairness) model can be used to explain, predict, and lessen interpersonal conflicts.	A literature review.	The SCARF model provides support for explaining, predicting, and reducing workplace conflict for nurses.	Similar effects of modulating or moderating the expression of SCARF responses in healthcare workplace conflict are produced by an individual's EI level.
<b>Furukawa and Kashiwagi (2021)</b>	The relationship between leadership behaviors of ward nurse managers and teamwork competency of nursing staff: A cross-sectional study in Japanese hospitals.	To identify the leadership behaviours of ward nursing managers that are associated with the nursing staff's capacity for teamwork.	A cross-sectional study; 13 hospitals in Japan; between May and August 2019.	Leading with EI was a key component of nurses' teamwork competencies. Rather than their own behaviour, nurse managers' teamwork skills were more tightly connected to how they interacted with patients and other staff members.	

*EI – emotional intelligence; SCARF – status, certainty, autonomy, relatedness, and fairness*

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 4)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Gandhi and Vijaykarthigeyan (2020)</b>	Emotional intelligence (EI) and quality of work-life (QWL): Exploring the connection.	To determine how emotional intelligence affects the quality of work-life (QWL).	A literature review.	EI may result in a high quality of work-life, which may include appropriate and good pay, secure and healthy work conditions, the chance to advance one's skills, continuing growth, etc. A high level of inter-group cooperation is required in the contemporary era of globalization, and greater emotional maturity on an individual level is required for success. EI development and practice are the roots of QWL reinforcement.	EI influences a high quality of work-life, good pay, secure and healthy work conditions, and continuing growth. EI enhances and increases a person's work-life efficiency.
<b>Gou et al. (2021)</b>	A multilevel analysis of the impact of group organizational citizenship behaviour on nurse-patient relationship: The mediating effect of work engagement and the moderating effect of emotional intelligence.	To investigate the cross-level connections between the nurse-patient interaction, EI, work engagement, and group organizational citizenship behaviour.	1,246 nurses from 55 nursing groups in a hospital in China.	The nurse-patient interaction is positively correlated with group organizational citizenship behaviour, with work engagement acting as a mediator.	The association between group organizational citizenship behaviour and nurse-patient relationships is moderated by EI. High EI specifically lessens the beneficial effects of organizational citizenship behaviour on nurse-patient relationships.
<b>Guibert-Lacasa and Vazquez-Calatayud (2022)</b>	Nurses' clinical leadership in the hospital setting: A systematic review.	To determine the most efficient nursing clinical leadership interventions in the hospital context.	A systematic review.	Evidence suggests that interventions meant to foster nurses' clinical leadership are complicated and call for addressing psychological empowerment, EI, and critical reflexivity abilities in addition to cognitive, interpersonal, and intrinsic competencies.	Nurse leaders need interventions to foster cognitive, interpersonal, and intrinsic competencies. They seek support with EI, critical reflection, and psychological empowerment.
<b>Hassan et al. (2019)</b>	A review of literature on emotional intelligence focusing on job satisfaction and organizational commitment.	To examine the literature on EI with an emphasis on organizational commitment and work satisfaction.	A review study.	Having high EI resulted in improved job performance, mental health, and personal abilities. This study looked further into how EI increased corporate commitment and employee work satisfaction. Researchers in a variety of sectors, such as business, engineering, and healthcare, can explore EI, a crucial concept for the development of organizations and individuals.	EI improve job performance, mental health, and personal abilities. EI is a crucial concept for the development of organizations and individuals.

*EI – emotional intelligence; QWL – quality of work-life*

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 5)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Johnson (2015)</b>	Emotional intelligence as a crucial component to medical education.	To determine what is already known about EI, its function in interpersonal interactions, and its significance in the disciplines of health care and health care education.	A literature review.	The findings indicate a strong relationship between EI skills and medical knowledge, making this area a good target for more EI training.	The field of medical education should prioritize teaching EI in order to better support this relationship in the future.
<b>Lim et al. (2018)</b>	Effects of nurses' emotional intelligence on their organizational citizenship behavior, with mediating effects of leader trust and value congruence.	To examine the potential mediating roles of organizational ideals and leader trust as well as the causal link between nurses' organizational citizenship behaviour and emotional quotient.	348 nurses working in a general hospital in a metropolitan area.	The EI of the leaders directly influenced leader trust and value congruence favourably, while the EI of the nurses negatively affected these two variables. Furthermore, while there was no correlation between value congruence and organizational citizenship behaviour, leader trust did. Through leader trust, the EI of the nurses had a limited, indirect impact on corporate citizenship behaviour.	Leaders' EI has an effect on leader trust and value congruence; nurses' EI has a limited, indirect impact on corporate citizenship behaviour.
<b>Lucas et al. (2008)</b>	The impact of emotionally intelligent leadership on staff nurse empowerment: The moderating effect of span of control.	To assess the correlation between the structural empowerment of nurses and the EI of their nurse manager, and the impact of the nurse manager's authority (the quantity of direct reports) on these two notions.	203 nurses; 2 hospitals; questionnaires.	Every effort must be made to ensure that managers have reasonable spans of control, enabling them to develop and use the leadership skills necessary for empowering their staff to practise to the full scope of their professional role.	If their spectrum of influence is broad, even managers with high EI may struggle to empower their staff.
<b>Majeed and Jamshed (2021)</b>	Nursing turnover intentions: The role of leader emotional intelligence and team culture.	To investigate the impact of a leader's EI on the teamwork culture that eventually affects nurses' decisions to leave their jobs.	313 participants.	A leader's EI stimulates important positive impacts by meeting the requirements of nurses and has an effect on those nurses' intentions to leave the profession. The research provides an empirical lens of leadership and culture, which notably explains turnover intention. This study confirmed the strong links between a leader's EI, the culture of their team, and their plans to leave.	Given the scarcity of nurses in healthcare facilities, leaders' EI positively influences nurses. It also has a positive impact on nurses' intentions to leave the profession.

EI – emotional intelligence

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 6)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Nashir and Sulistiadi (2019)</b>	Leadership styles of nursing management to improve nurse work engagement in hospital: A systematic review.	Teaching EI should be a top priority in the realm of medical education.	A systematic review.	Nurse managers' transformational leadership philosophies had a favourable impact on staff nurses' work engagement. Nurse managers' leadership techniques have a significant impact on nurses' job satisfaction, turnover, and healthcare service improvement.	Engagement in staff nursing work is positively impacted by nurse managers' transformational leadership styles.
<b>O'Toole et al. (2021)</b>	Residential aged care leadership in Australia – Time for a compassionate approach: A qualitative analysis of key leader skills and attributes.	To investigate how leaders in residential aged care view their roles as leaders and to identify the essential ingredients for effective leadership in this complex sector.	Qualitative methodology with thematic analysis.	Senior workers in the elderly care sector believe that compassion is both a critical quality and a weakness in the sector's leadership and management abilities. Compassionate care is critical to high-quality care in residential elderly care, but most studies define good leadership and care in relation to clinical "safety" and "efficiency".	As a foundational element of humane and dignified care, the aged care sector needs to strengthen and promote compassionate leadership.
<b>Phillips and Harris (2017)</b>	Emotional intelligence in nurse management and nurse job satisfaction and retention: A scoping review protocol.	To describe the purpose of each study, the methodology used, the outcomes, and a synthesis of the findings pertinent to the review questions.	A literature review.	Nurse leaders can use this study's findings to their advantage as they work to keep talented nurses. Nurse managers' talents and support indirectly influence nurses' work satisfaction and intention to stay in their current positions. Health care businesses should view a nurse manager's emotional skill set and competency as a means of enhancing the nurse's job.	EI influences the work satisfaction of nurses and their intention to stay in the field. With EI, we can keep talented nurses. EI should be the competency of each nurse manager.
<b>Poornima et al. (2017)</b>	Impact of emotional intelligence for organisational betterment specially in healthcare sector – A review study.	To determine the extent to which EI improves a variety of organizational characteristics, such as conflict resolution, stress management, leadership abilities, training and development, performance management, and the like, in the healthcare sector.	A review study.	Having high levels of EI is a sign of, and a helpful component in, controlling and improving the issues mentioned. Healthcare practitioners must pay more attention to EI because of its advantages and necessity. A lack of EI is associated with poor outcomes in the medical field. In the healthcare context, studies have shown that EI is a challenging yet attainable skill.	EI is a useful tool for controlling and improving quality. Poor outcomes in healthcare are associated with a lack of emotional intelligence. EI is teachable and must be integrated into education.

EI – emotional intelligence

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 7)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Prezerakos (2018)</b>	Nurse managers' emotional intelligence and effective leadership: A review of the current evidence.	To review qualitative and quantitative studies on nurse leaders' EI, as well as the scientific foundation of their findings.	A literature review.	EI is a valuable tool for nurse leaders and significantly aids in the attainment of effective management in the healthcare industry.	The unique nature of the nursing profession, which centres on the healthy or weak individual, necessitates that nurses develop their social and emotional skills.
<b>Raghubir (2018)</b>	Emotional intelligence in professional nursing practice: A concept review using Rodgers's evolutionary analysis approach.	To elucidate the understanding of EI, the characteristics that comprise it, its causes, effects, associated terms, and its implications for enhancing nursing practice.	A concept review.	Various disciplines encourage the integration of EI due to its agreed-upon influence on job satisfaction, stress level, burnout, and fostering a good environment. EI is a notion that may be fundamental to nursing practice because it has the ability to affect the standard of patient care and outcomes, decision-making, critical thinking, and overall wellbeing of practising nurses. It explicitly aims to advance nursing practice.	EI affects job satisfaction, stress level, burnout, and helps to foster a good environment. Integration of EI is encouraged across a variety of disciplines. EI is fundamental to nursing practice and affects the standard of patient care and outcomes, decision-making, critical thinking, and wellbeing.
<b>Richard-Eaglin (2021)</b>	The significance of cultural intelligence in nurse leadership.	To determine the most efficient nursing clinical leadership interventions in the hospital context; the capacity to work well in contexts with a variety of cultures is known as cultural intelligence.	A systematic review.	There is evidence that programs meant to help nurses become better clinical leaders are complicated and need to focus on cognitive, interpersonal, and intrinsic competencies as well as psychological empowerment, EI, and critical reflexivity.	The interaction between EI and quality care improves mindfulness, which in turn strengthens the capacity to control bias. It also increases the capacity to gain confidence to engage in multicultural situations.
<b>Salminen-Tuomaala and Seppala (2022)</b>	Nurses' ratings of compassionate nursing leadership during the COVID-19 pandemic: A descriptive cross-sectional study.	To find out how emergency and intensive care nurses assessed the effectiveness of compassionate leadership during the early COVID-19 outbreak.	A quantitative descriptive cross-sectional study; a questionnaire; a central hospital in Finland; 50 intensive and emergency care nurses.	A number of leadership techniques based on altruistic principles and EI are part of compassionate leadership, which also benefits from identifying and utilizing staff members' abilities. Work monitoring, conversation, and simulation-based learning are all beneficial to both managers and staff members.	Compassionate leadership utilizing altruism and EI help identify and utilize the values of staff members. Managers and staff members benefit from work evaluation, communication, and simulation-based learning.

*EI – emotional intelligence*

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 8)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Sharfras Navas and Vijayakumar (2018)</b>	Emotional intelligence: A review of emotional intelligence effect on organizational commitment, job satisfaction, and job stress.	To study the impact of EI on job stress, job satisfaction, and organizational commitment.	A literature review.	The affective commitment, continuation commitment, and normative commitment were three organizational commitment components that EI had a strong positive association with. EI incorporates optimism and the ability to be emotionally resilient, both of which aid in a person's ability to deal with interpersonal difficulties.	EI has a strong positive connection with both affective continuation and normative commitment. EI incorporates optimism and resilience. EI should be considered during the hiring and selection process because it will help the business increase productivity and meet its objectives.
<b>Specchia et al. (2021)</b>	Leadership styles and nurses' job satisfaction: Results of a systematic review.	To understand the relationship between leadership styles and nurses' job satisfaction; to discover and evaluate the knowledge that has been developed to date in that area.	A systematic review.	Strong EI characterizes the behaviour of individuals in leadership roles. Their ability to form solid, trustworthy connections and foster an upbeat environment that encourages commitment stems from their ability to tune into the emotions of those around them, use empathy, and skilfully control their own emotions. Even in the face of difficulty, resonance leaders use their EI to mentor, motivate, and include others. Others are more willing and able to give to the fullest extent when they are in a high-engagement setting.	Improved job satisfaction, organizational commitment, and intention to remain in the post are all benefits of positive and encouraging leadership, which also lessens emotional fatigue in nurses.
<b>Wang et al. (2018)</b>	When nurse emotional intelligence matters: How transformational leadership influences intent to stay.	To investigate the relationship between transformative leadership and nurse retention intent.	535 Chinese nurses' cross-sectional data examined using structural equation modelling.	The study's conclusions emphasized the significance of transformational leadership in raising nurses' EI and gave insight into the mediating function of EI in the relationship between the transformational leadership of nurse managers and nurses' intent to stay. To enhance staff nurses' EI and nursing managers' transformational leadership in the workplace, nurse leaders should create training programs.	Transformational leadership enhances the EI of nurses. EI and transformational leadership influence nurses' intent to stay. EI should be part of education for nurses and nurse leaders.

*EI – emotional intelligence*

**Table 1** Summary of research articles on emotional intelligence and nursing outcomes (Part 9)

Author(s), year	Title	Aim	Method	Analysis	Results
<b>Wilson (2021)</b>	Emotional intelligence: The key to staff retention.	To argue that having strong EI in a leader is essential for retaining talented staff members; to elucidate the application of EI in leadership roles.	A literature review.	A leader's EI is crucial to staff retention. Job happiness is a critical factor in employee retention because people who are happy in their jobs are less likely to quit. Job satisfaction results from a leader's capacity to comprehend their team members and give them the encouragement and resources they need to be motivated. The capability to do this is provided by EI in leaders.	EI is crucial to staff retention.
<b>Xu and Stark (2021)</b>	A conceptual model of nurses' workplace social capital: A theory synthesis.	To examine the process of creating a conceptual model of nurses' workplace social capital, a clear and efficient way to explain a scientific reality.	A theoretical synthesis	The 13 positive outcomes for nurses include lessening emotional exhaustion, reducing burnout and mental distress, increasing healthy self-behaviours, improving job satisfaction, strengthening the intention to stay, knowledge sharing, organizational commitment, professional commitment, motivation to improve professional capabilities, willingness to mentor or be mentored, adopting evidence-based practice, and preventing occupational injuries and accidents. Nurses' workplace social capital has only one negative effect: social isolation.	Individual characteristics of nurses include such less universal terms as educational level, years of experience, years in the present unit, work role, employment status, and EI.
<b>Xue et al. (2020)</b>	Experiences of nurses involved in natural disaster relief: A meta-synthesis of qualitative literature.	To explore nurses' experiences in natural disaster response.	A meta-synthesis of qualitative literature.	The role of nursing staff in disaster rescue is receiving significant attention. Understanding the experiences of nurses during disaster rescue can assist future leaders in enhancing their response capacity and nursing preparedness through education, training, and management, as well as in providing ongoing emotional support after the event.	The study highlighted EI, the capacity to adapt to changing circumstances, and the ability to manage limited resources in extreme scenarios.

*EI – emotional intelligence*

## Discussion

Thirty-three distinct articles published between 2018 and 2022 were considered. Most of them were classified as literature reviews. Including literature review articles as references enhances new literature reviews by providing context, identifying gaps, and supporting points. It indicates involvement in the field and contributes to establishing a solid basis for new study designs.

### *Positive patient outcomes*

Better nursing outcomes undoubtedly help patients and provide nurses with the satisfaction of a job well done, which is how quality of work is measured. Emotional intelligence improves patient outcomes (Cox, 2018) and moderates the association between group organization and nurse-patient relationships (Gou et al., 2021; Xu and Stark, 2021).

### *Teamwork*

Nursing teamwork focuses on shared goals among nurses and is patient-centred. To provide high-quality, effective nursing care and to promote good healthcare outcomes for all patients, the concept makes use of the distinct qualities and abilities of each nursing team member. Many authors have shown that EI can have an impact on teamwork (Cox, 2018) and increase collaboration between multidisciplinary teams and across disciplines (Furukawa & Kashiwagi, 2021; Cui, 2021). Interactions with patients and staff are also related to teamwork skills (Abraham & Scaria, 2017), through an increased focus on finding solutions to persistent issues in nursing practice (Raghubir, 2018). Furthermore, teamwork can help retain talented nurses and there are various disciplines that promote the integration of EI (Phillips & Harris, 2017; Sharfras Navas & Vijayakumar, 2018).

### *Leadership*

Nearly all researchers have concluded that EI is essential for nursing leadership. Leadership trust and values are impacted by EI (Lim et al., 2018; O'Toole et al., 2021). Transformational leadership is enhanced by EI. However, Wang et al. (2018) believe that age and professional experience have more of an impact on leadership than EI.

Compassionate leadership makes use of altruism and EI. Additionally, managers and employees benefit from work evaluation, communication, and simulation-based learning (Salminen-Tuomaala & Seppala, 2022).

To promote cognitive, interpersonal, and intrinsic competencies, nursing leaders need to take action to increase competencies in EI. Elderly care institutions need to develop and support compassionate leadership as a fundamental

component of humane and dignified care (Guibert-Lacasa & Vazquez-Calatayud, 2022).

Emotional intelligence and the capability to manage scarce resources under extreme conditions and the flexibility to adjust to changing circumstances have been highlighted (Xue et al., 2020). In Croatia, it was particularly crucial to integrate EI into nursing leadership during the COVID-19 lockdown and the 2020 earthquake.

An individual's level of EI has similar impacts on regulating or moderating the manifestation of SCARF responses in interpersonal conflicts in healthcare (Freedman, 2019). It has been implied that even managers with high levels of EI may struggle to motivate their team when their sphere of influence is large (Lucas et al., 2008).

Emotional intelligence is a charismatic quality for nursing leaders (Abraham & Scaria, 2017). The transformational leadership philosophies of nursing managers have a favourable effect on nursing staff engagement (Nashir & Sulistiadi, 2019).

Positive and supportive leadership is beneficial for nurses' job satisfaction, organizational commitment, and intention to retain their jobs, while reducing their emotional exhaustion (Specchia et al., 2021). Every nurse manager and leader should be competent in EI (Phillips et al., 2021).

### *Communication*

Emotional intelligence includes both the ability to communicate well and the drive to continually improve one's communication skills. Effective communication is the foundation for developing EI. There is a correlation between EI and intelligence, as well as between EI and organizational commitment and job performance. Training can increase employees' EI and help them be more successful in their careers (Cox, 2018).

### *Positive psychological effect*

Nursing leaders seek support with EI, critical reflection, and psychological empowerment (Guibert-Lacasa & Vazquez-Calatayud, 2022). Emotional intelligence improves job performance, mental health, and personal abilities (Hassan et al., 2019), incorporating optimism and resilience (Sharfras Navas & Vijayakumar, 2018). Education by healthcare institutions can improve EI and positive empathy (Beauvais et al., 2017).

### *Adequate nursing education*

Emotional intelligence should be part of the education of nursing staff and nursing leaders (Wang et al., 2018). It would also be necessary to include elements of social and emotional intelligence in leadership

education (Cupit et al., 2019). Apart from the educational level attained, other universal aspects impact the development of EI, such as years of experience, years in the current unit, work role, and employment status (Xue et al., 2020).

Emotional intelligence is most strongly associated with successful work outcomes in the field of education (Abuayyash et al., 2018), and medical education should prioritize teaching EI to better support this relationship in the future (Johnson, 2015). Emotional intelligence is teachable and has to be part of education (Poornima et al., 2017), especially considering that training can boost employees' EI and help them succeed at work.

Castelino and Mendonca (2021) suggest that the education of nurses may involve self-inquiry, storytelling, forum theatre, reflective conversation and writing, practising listening skills in the classroom and in practice, the use of video for observation and feedback, the arts, effective listening skills, varied exercises, and training in EI skills.

#### *Quality of nursing care and nursing management*

In the field of nursing, EI is referred to as a nurse's positive ability to employ self-awareness, empathy, and emotional control that promotes and distinguishes the core of expert caring and nursing (Castelino & Mendonca, 2021).

Mindfulness is improved when EI is combined with effective medical care, which in turn develops one's ability to exercise bias control (Richard-Eaglin, 2021). Emotional intelligence has an impact on providing high-quality care (Bock, 2020).

A nurse should be able to empathize with patients, establish a connection with them, and maintain emotional self-control to deliver quality care (Castelino & Mendonca, 2021).

Emotional intelligence enhances and increases a person's work-life efficiency (Gandhi & Vijaykarthigeyan, 2020). In controlling and improving quality, EI is a helpful component. Lack of EI is associated with poor outcomes in healthcare (Poornima et al., 2017).

Nurses' EI has a limited, indirect impact on corporate citizenship behaviour (Lim et al., 2018). Emotional intelligence and transformational leadership influence nurses' intention to retain their jobs (Phillips & Harris, 2017; Wang et al., 2018; Wilson, 2021). This is particularly important considering the general shortage of nurses in healthcare facilities (Majeed & Jamshed, 2021). High EI enhances the beneficial effects on nurse-patient interaction (Gou et al, 2021). It also increases the capacity to gain confidence

to engage in multicultural situations (Richard-Eaglin, 2021). Emotional intelligence is the key element for high job satisfaction (Abraham & Scaria, 2017; Hassan et al., 2019). There is also a positive correlation between critical work behaviours and EI (Abuayyash et al., 2018).

Emotional intelligence is a crucial concept for the development of organizations and individuals. It is fundamental to nursing practice, affecting the standard of patient care and outcomes, decision-making, critical thinking, and wellbeing (Raghubir, 2018). It ought to be taken into account in the recruitment and selection process, as it will help the organization to increase productivity and achieve its goals (Sharfras Navas & Vijayakumar, 2018). The unique nature of the nursing profession, which is centred on unhealthy or weak individuals, urges nurses to develop their social and emotional skills (Prezerakos, 2018).

Emotional intelligence helps promote nurse retention, improve the standard of patient care, and prevent tiredness (Beauvais et al., 2017). Intelligence, organizational commitment, and job performance are all related to EI.

#### *Work-life balance*

Emotional intelligence influences the quality of work life, good pay, safe and healthy working conditions, and continuous growth (Gandhi & Vijaykarthigeyan, 2020). It affects job satisfaction, stress levels, burnout, and helps to foster a good environment (Bock, 2020; Raghubir, 2018). Empathy and EI can prevent compassion burnout and tiredness (Beauvais et al., 2017).

Based on the review of relevant research, the following conclusion can be drawn: Emotional intelligence has a strong and positive relationship with emotional persistence and normative commitment.

The key aspects affecting nurses' EI identified in the literature cover a wide range of implications, ranging from education, to experience, and to interpersonal relations. On the one hand, it can be approached from a leadership perspective. Experts agree that nursing leadership requires EI and that nursing leaders need it to build cognitive, interpersonal, and intrinsic skills. Humane, dignified geriatric care requires compassionate leadership. Positive and supportive leadership boosts nurses' job satisfaction, organizational commitment, and intention to stay in the profession. Apart from the reactive approach of using EI to increase job retention, a proactive EI approach in employment may also prove beneficial. Emotional intelligence should be considered in recruitment and selection because

it helps organizations to increase productivity and achieve goals.

On the other hand, EI particularly fosters the positive effects of teamwork. According to several authors, EI affects teamwork, increasing multidisciplinary and cross-disciplinary collaboration, while teamwork influences patient-staff interactions. By relying on EI in teamwork, the unique characteristics and skills of each member of the team are utilized to provide high-quality, effective care and to improve patient outcomes.

Most importantly, EI is a teachable skill and should be part of nursing and healthcare education to support the nurse-patient relationship in the future.

The review identifies possible key areas for future research aimed at improving the comprehension of EI within nursing leadership, including: (i) contextual analysis: examining EI in different nursing environments and medical fields; (ii) longitudinal and quantitative research: establishing measurable relationships between EI and outcomes; evaluating the effectiveness of EI training programmes; (iii) team dynamics: analyzing the role of EI in teamwork, burnout prevention, and interdisciplinary collaboration; (iv) development of assessment tools: improving instruments for assessing EI in leadership. These guidelines are essential for implementing EI in healthcare and nursing leadership to enhance patient care, team performance, and nurse well-being.

#### *Limitation of the study*

In summary, the studies reviewed have some methodological limitations that impact the interpretation and generalizability of findings related to EI in nursing. These include limited sample sizes and diversity, reliance on cross-sectional designs, and potential self-report bias. Additionally, the lack of longitudinal data restricts our understanding of the long-term effects of EI interventions, while the variability of measurement instruments raises concerns about consistency across studies. Furthermore, consideration should be given to the inclusion of contextual factors, such as the work environment and organizational culture, which may influence the relationship between EI and nursing outcomes. Finally, the limited focus on specific EI interventions highlights a gap in practical application. Addressing these limitations in future research is essential for developing a more comprehensive understanding of the role of EI in improving nursing practice and patient care.

## **Conclusion**

Emotional intelligence has a significant impact on nursing. The areas in which EI plays a role can be categorized into several key aspects of nursing practice: positive patient outcomes; teamwork; leadership; communication; quality of nursing care and nursing management; positive psychological effects; appropriate nursing education; and work-life balance.

The benefits of EI are seen in better patient outcomes and enhanced work quality. Additionally, teamwork improves communication, understanding, and respect. An emotionally intelligent nurse demonstrates strength, empathy, and a positive outlook. With the global shortage of nurses, leaders with EI reduce the need and desire for nurses to leave the profession. A nursing leader with EI is more successful, efficient, and trustworthy. Nurses with high EI experience less burnout and more satisfaction.

In light of the findings of this literature review, nursing leaders should consider incorporating lessons on EI into nursing education and workplace training.

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## **Author contributions**

Conception and design (RSC, SG), analysis and interpretation of data (RSC, FB, FAS), drafting of the manuscript (RSC), critical revision of the manuscript (FAS, BM), final revision of the article (RSC, FAS).

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