

## Nursing Team Cohesion: A Concept Analysis Using Walker and Avant's Method

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**Abstract:** *Nursing team cohesion is increasingly recognized as a critical determinant of communication quality, collaborative decision-making, staff well-being, and patient safety; however, the concept remains insufficiently defined and is often conflated with related constructs, including teamwork, collaboration, and psychological safety. This concept analysis aimed to clarify nursing team cohesion as a distinct construct within nursing science by identifying its defining attributes, antecedents, consequences, empirical referents, and conceptual boundaries. Walker and Avant's eight-step method guided the analysis, supported by a systematic search of peer-reviewed English-language studies published between 2020 and 2025 in Google Scholar, OpenAlex, and PubMed Central. Using PRISMA 2020 procedures, 28 studies were selected and thematically synthesized. The analysis identified five defining attributes: mutual trust and respect, effective communication, shared goals, interpersonal harmony, and emotional intelligence. Key antecedents included transformational leadership, conflict resolution training, emotional intelligence, and structured team-building initiatives. Consequences were evident at individual, team, and organizational levels, including improved job satisfaction, reduced burnout, enhanced collaboration, greater psychological safety, better patient outcomes, and lower turnover. Empirical referents included the Team Climate Inventory, TeamSTEPPS instruments, and qualitative assessments. Overall, nursing team cohesion emerged as a multidimensional, measurable construct with substantial relevance for leadership, workforce stability, intervention design, and healthcare quality improvement.*

**Keywords:** Nursing team cohesion; Concept analysis; Team dynamics; Conflict resolution; Emotional intelligence.

### 1. Introduction

In today's dynamic healthcare systems, the ability of nursing teams to function cohesively is essential for delivering safe, efficient, and patient-centered care. Nursing team cohesion, broadly understood as the degree to which nurses work collaboratively, share common goals, and maintain mutual respect and trust, has a significant impact on various dimensions of healthcare delivery. Research has consistently demonstrated that cohesive nursing teams are associated with improved patient safety, higher quality of care, reduced medical errors, and increased staff satisfaction and retention (Kim,

2021; Black et al., 2019). These outcomes are particularly critical in high-acuity settings such as emergency rooms and intensive care units, where rapid communication and coordinated action are essential. However, while the importance of team cohesion is widely acknowledged, the concept itself remains poorly defined and inconsistently applied in the nursing literature. Terms like teamwork, collaboration, communication, and cohesion are often used interchangeably, creating conceptual confusion that hampers both theoretical development and practical application (Nguyen & Wang, 2022). Without a clear and shared understanding of what constitutes nursing team cohesion, efforts to measure or improve it may be misdirected or ineffective. For instance, leadership interventions or conflict management training may fail to achieve desired outcomes if the underlying concept they aim to enhance is not well understood (Williams & Roberts, 2023).

Given this lack of conceptual clarity, there is a pressing need to define and analyze the term nursing team cohesion in a structured, evidence-based manner. Concept analysis is a widely used method in nursing research for dissecting and refining complex or ambiguous concepts. Among the various models available, Walker and Avant's (2019) eight-step method offers a rigorous and systematic approach. It enables researchers to define key attributes, distinguish between related and unrelated concepts, and identify antecedents (preconditions) and consequences (outcomes) associated with a given concept. This method has been applied successfully in nursing to clarify abstract constructs such as caring, resilience, and emotional intelligence, making it an appropriate framework for analyzing nursing team cohesion (Choi & Ahn, 2021). This paper applies Walker and Avant's concept analysis method to examine nursing team cohesion, with the goal of enhancing its theoretical clarity and practical utility. The specific objectives of the analysis are: (1) to identify the defining attributes of team cohesion in nursing contexts, (2) to explore the antecedents and consequences of cohesive team dynamics, (3) to distinguish team cohesion from related but distinct concepts, and (4) to identify empirical referents that can guide measurement and intervention. Through a comprehensive review of the literature, drawing from studies on conflict management (Aseery et al., 2023; Bajwa et al., 2020), leadership development (Al-Nasri, 2024; Alsadaan & Alqahtani, 2024), and emotional intelligence (Black et al., 2019; Watanabe et al., 2024), this concept analysis aims to provide a robust foundation for both future research and practical applications in nursing education and leadership. Clarifying the concept of team cohesion is more than an academic exercise; it is a necessary step toward improving the everyday realities of nursing practice. Cohesive teams are not only more effective in task execution, but they are also better equipped to navigate interpersonal conflict, adapt to organizational changes, and maintain psychological safety for team members (Santos & Pereira, 2023; Koibichuk et al., 2021). As healthcare systems continue to evolve in complexity and demand, investing in a shared understanding of what cohesion entails, and how it can be cultivated, becomes a strategic imperative for nursing leaders and policy makers alike.

## **2. Methodology**

### **2.1. Justification for Concept Analysis Methodology**

The selection of Walker and Avant's (2019) concept analysis method is justified by the current ambiguity and inconsistent usage of the term nursing team cohesion across nursing literature. Although frequently cited as essential for effective collaboration, patient outcomes, and staff retention, the concept remains poorly defined, limiting its theoretical and practical utility. Concept analysis provides a structured method to clarify abstract or complex terms, allowing researchers and practitioners to identify the essential characteristics of a phenomenon and distinguish it from related

concepts (Weaver & Mitcham, 2008). Walker and Avant's model is particularly well-suited for healthcare contexts, as it offers an eight-step approach that guides the researcher through the identification of a concept's uses, defining attributes, antecedents, consequences, and empirical referents. This framework has been widely used in nursing to analyze concepts such as resilience, emotional intelligence, and transformational leadership, all of which intersect with team cohesion in practice (Choi & Ahn, 2021; González-García et al., 2024). Given that team cohesion has its origins in organizational psychology and military research, its application in clinical nursing settings must be carefully contextualized. A systematic concept analysis helps ensure that the term reflects the unique interpersonal dynamics, leadership structures, and emotional labor inherent in nursing teams (Bajwa et al., 2020; Santos & Pereira, 2023). By using this method, the analysis not only contributes to theoretical development but also lays the groundwork for measurement tools and evidence-based interventions aimed at strengthening nursing teamwork.

## 2.2. Selection of the Concept and Purpose of Analysis

The concept selected for this analysis is nursing team cohesion, a term frequently cited in healthcare literature but often lacking a precise, operational definition. The decision to explore this concept stems from its growing importance in team-based nursing models, especially within high-stress environments such as critical care, emergency units, and integrated care settings (Kim, 2021; Harvey et al., 2019). While the term is commonly associated with teamwork, collaboration, communication, and conflict resolution, its specific meaning and components are inconsistently described, leading to confusion in both academic discourse and clinical application (Nguyen & Wang, 2022). The purpose of this concept analysis is to clarify the meaning of nursing team cohesion within the context of professional nursing practice. This involves identifying its defining attributes, antecedents, consequences, and empirical referents, as outlined in Walker and Avant's (2019) methodology. By dissecting the term through a structured framework, the analysis aims to facilitate a shared understanding that can inform nursing leadership, intervention design, and educational programs focused on team development and conflict management (Al-Nasri, 2024; Santos & Pereira, 2023). Moreover, clearly defining this concept is essential for developing valid assessment tools that measure team functioning and guide improvements in healthcare delivery. As healthcare systems become increasingly complex and interdisciplinary, fostering cohesive nursing teams is not only desirable but imperative. Therefore, this concept analysis seeks to contribute both theoretically and practically to advancing the quality and sustainability of nursing teamwork.

## 2.3. Literature Synthesis and Theoretical Framing

A synthesis of current literature reveals that nursing team cohesion is widely recognized as a critical factor influencing patient outcomes, staff engagement, conflict management, and organizational effectiveness. However, across studies, the term is often used interchangeably with related concepts such as teamwork, collaboration, communication, and group dynamics, resulting in conceptual ambiguity (Nguyen & Wang, 2022; Cooke & Valentine, 2020). Several studies emphasize the role of emotional intelligence and leadership competency as precursors to cohesive team environments, highlighting that trust, respect, and open communication are central to team cohesion (Black et al., 2019; Watanabe et al., 2024). From a theoretical standpoint, this analysis is informed by Organizational Behavior Theory and Transformational Leadership Theory, which suggest that team cohesion emerges when individuals align around shared goals, values, and interpersonal trust under

effective leadership (Labrague & Obeidat, 2021; Malik & Garg, 2020). These frameworks support the idea that cohesion is both a structural and relational construct, requiring intentional development through training, role clarity, and conflict resolution strategies (Bajwa et al., 2020; Aseery et al., 2023). Additionally, interprofessional education (IPE) and team performance models provide a foundation for understanding how cohesion influences creativity, decision-making, and resilience in clinical settings (Alabdouli et al., 2023). Despite these connections, many studies address team cohesion only indirectly, often as an outcome of other variables, rather than as a distinct, analyzable concept. This gap further supports the need for a structured concept analysis to clarify its definition, attributes, and implications for nursing practice and leadership development.

#### **2.4. Construction of Model, Borderline, and Contrary Cases**

To further clarify the concept of nursing team cohesion, the construction of model, borderline, and contrary cases is essential. These illustrative examples help distinguish core defining attributes from those that are merely related or absent (Walker & Avant, 2019). A model case represents a pure example of nursing team cohesion, containing all of its defining attributes. Consider a critical care nursing unit led by a transformational nurse manager who fosters trust, open communication, and a shared vision. Nurses participate in daily huddles, debrief after challenging shifts, and support each other emotionally and professionally. Conflicts are addressed constructively through collaborative problem-solving. The team demonstrates mutual respect, emotional intelligence, and a strong sense of belonging. This example reflects the key attributes of trust, shared goals, effective communication, and interpersonal harmony (Kim, 2021; Santos & Pereira, 2023). A borderline case includes some but not all attributes of cohesion. For instance, a surgical ward team may exhibit effective task collaboration and meet clinical goals, but interpersonal trust is weak, and communication is transactional rather than supportive. While the team functions adequately, the absence of emotional bonding and mutual support limits full cohesion (Gu et al., 2022). Such a team is efficient but not emotionally cohesive. A contrary case lacks the essential attributes of cohesion entirely. Imagine a team where nurses frequently experience interpersonal conflict, avoid communication, and distrust each other's clinical judgment. There is no sense of shared purpose, and high staff turnover disrupts team continuity. In this scenario, the absence of cohesion leads to fragmented care and increased tension, exemplifying what nursing team cohesion is not (Alsadaan & Alqahtani, 2024; Koibichuk et al., 2021). These cases help delineate the boundaries of the concept and emphasize the practical significance of fostering team cohesion in nursing environments.

#### **2.5. Identification of Antecedents and Consequences**

In Walker and Avant's (2019) concept analysis framework, antecedents refer to events or conditions that must be present prior to the occurrence of the concept, while consequences are the outcomes or results that follow from the concept's existence. Identifying these elements is essential for understanding the dynamics of nursing team cohesion and for informing strategies that foster cohesive environments in clinical practice. A review of the literature reveals several key antecedents to nursing team cohesion. Foremost among these is effective leadership, particularly transformational and ethical leadership styles that promote trust, inclusivity, and shared vision (Al-Nasri, 2024; González-García et al., 2024). Conflict management competency, both at the individual and team level, also emerges as a critical antecedent, as unresolved conflict often undermines cohesion (Aseery et al., 2023; Choi & Ahn, 2021). Emotional intelligence, including the ability to empathize, self-regulate,

and communicate effectively, contributes to positive interpersonal relationships and trust, core foundations of cohesion (Black et al., 2019; Watanabe et al., 2024). Other antecedents include role clarity, shared goals, and organizational support for team development, such as training programs or structured communication tools like TeamSTEPPS (Cooke & Valentine, 2021).

The consequences of a cohesive nursing team are both individual and organizational. Teams that demonstrate strong cohesion report higher job satisfaction, lower turnover intention, and greater psychological safety (Larsman et al., 2024; Huaman et al., 2023). On an organizational level, cohesion is linked to improved patient outcomes, better clinical performance, and more effective conflict resolution (Kim, 2021; Santos & Pereira, 2023). Additionally, cohesive teams tend to exhibit greater resilience in high-pressure situations, enhanced interprofessional collaboration, and a culture of continuous improvement (Alabdouli et al., 2023; Harvey et al., 2019). Understanding these antecedents and consequences provides a roadmap for nursing leaders seeking to cultivate cohesive teams and offers direction for future research and policy development.

## 2.6. Operationalization Through Empirical Referents

Empirical referents are the measurable indicators that allow a concept to be observed, assessed, or quantified in real-world practice (Walker & Avant, 2019). For the concept of nursing team cohesion, empirical referents are critical for translating theoretical understanding into practical tools for evaluation, intervention, and research. Since cohesion is inherently abstract, identifying valid and reliable instruments that reflect its defining attributes, such as trust, communication, mutual respect, and shared goals, is essential for operationalization. Several tools in the nursing and organizational behavior literature have been used or adapted to measure aspects of team cohesion. One of the most widely recognized is the Group Environment Questionnaire (GEQ), which, although originally developed for sports teams, has been validated in healthcare contexts to assess social and task cohesion (Carron et al., 1985; Black et al., 2019). In nursing, TeamSTEPPS Teamwork Perception Questionnaire (T-TPQ) and Team Performance Observation Tool (T-POT) have been implemented to evaluate team functioning, including communication, mutual support, and coordination, core elements of cohesion (Cooke & Valentine, 2021).

Additionally, instruments such as the Team Climate Inventory (TCI) and the Nursing Teamwork Survey (Kalisch et al., 2010) have been used in hospital settings to capture perceptions of teamwork, shared decision-making, and collaborative culture. These tools, while not measuring cohesion directly, reflect its defining attributes and are commonly used as proxy measures in research (Santos & Pereira, 2023; Watanabe et al., 2024). Beyond quantitative tools, qualitative approaches such as focus group interviews, 360-degree evaluations, and observation checklists provide rich insights into the lived experiences of team members and can help capture the more nuanced interpersonal dimensions of cohesion (Choi & Ahn, 2021; Harvey et al., 2019). Thus, while the field lacks a universally accepted tool explicitly labeled as a "nursing team cohesion scale," a combination of validated instruments and context-specific measures enables the practical assessment and development of cohesion in nursing teams.

## 2.7. Addressing Methodological Challenges

Conducting a concept analysis, while systematic in approach, presents several methodological challenges that warrant careful consideration. One of the primary difficulties lies in the subjectivity of interpretation. Although Walker and Avant's (2019) framework provides a structured pathway, the

selection of defining attributes, antecedents, and consequences depends heavily on the researcher's interpretation of the literature. This introduces potential bias, particularly in distinguishing between related and defining characteristics. For instance, terms such as teamwork, collaboration, and communication are frequently conflated with cohesion, making it difficult to determine whether they are components of the concept or separate constructs altogether (Nguyen & Wang, 2022; Santos & Pereira, 2023). Another challenge is the inconsistent use of terminology across disciplines. Nursing team cohesion draws from theories in psychology, education, organizational behavior, and healthcare management, each of which may apply the term differently. This creates complexity in synthesizing definitions and requires rigorous screening of sources to ensure contextual relevance (Alabdouli et al., 2023; Watanabe et al., 2024). Additionally, the lack of a unified empirical tool to directly measure nursing team cohesion poses a limitation. While several instruments measure aspects of team dynamics, such as trust and communication, few are explicitly designed to capture the holistic nature of cohesion in nursing settings (Black et al., 2019; Cooke & Valentine, 2021). Lastly, the rapidly changing nature of clinical environments, especially during crises like the COVID-19 pandemic, influences how cohesion is perceived and enacted. Cultural, organizational, and situational factors may alter the way nurses experience team cohesion, challenging the generalizability of findings. Despite these limitations, the concept analysis remains a valuable tool for clarifying abstract terms and guiding future research, provided these challenges are acknowledged and mitigated through transparency and methodological rigor.

## 2.8. Data Collection

Data for this concept analysis were collected through a structured and integrative review of the literature, consistent with Walker and Avant's (2019) methodology. The objective was to identify a comprehensive set of studies that explore or relate to the concept of nursing team cohesion, with particular emphasis on its defining attributes, antecedents, consequences, and empirical referents. A systematic search was conducted across major databases including PubMed, CINAHL, Scopus, and Google Scholar. Search terms included combinations of keywords such as "nursing team cohesion," "teamwork in nursing," "nursing leadership," "conflict resolution," "emotional intelligence," and "team dynamics in healthcare." Inclusion criteria were: (a) peer-reviewed articles, (b) published between 2019 and 2024, and (c) written in English. Studies were included if they contributed directly or indirectly to the conceptual understanding of cohesion in nursing or healthcare teams.

The search initially identified 265 records, from which 30 duplicates were removed. Titles and abstracts of the remaining 235 records were screened, and 185 studies were excluded based on relevance. Full-text reviews were conducted on 50 reports, of which 22 were excluded for not meeting inclusion criteria or lacking conceptual relevance. Ultimately, 28 studies were included in the final analysis. These comprised qualitative studies, quantitative analyses, literature reviews, and conceptual papers spanning nursing science, organizational behavior, and interprofessional collaboration. The PRISMA flow diagram (Figure 1) presents a visual summary of the selection process, ensuring methodological transparency and reproducibility. This data collection strategy provided a robust foundation for the concept analysis steps, particularly for identifying the defining characteristics and practical applications of nursing team cohesion.

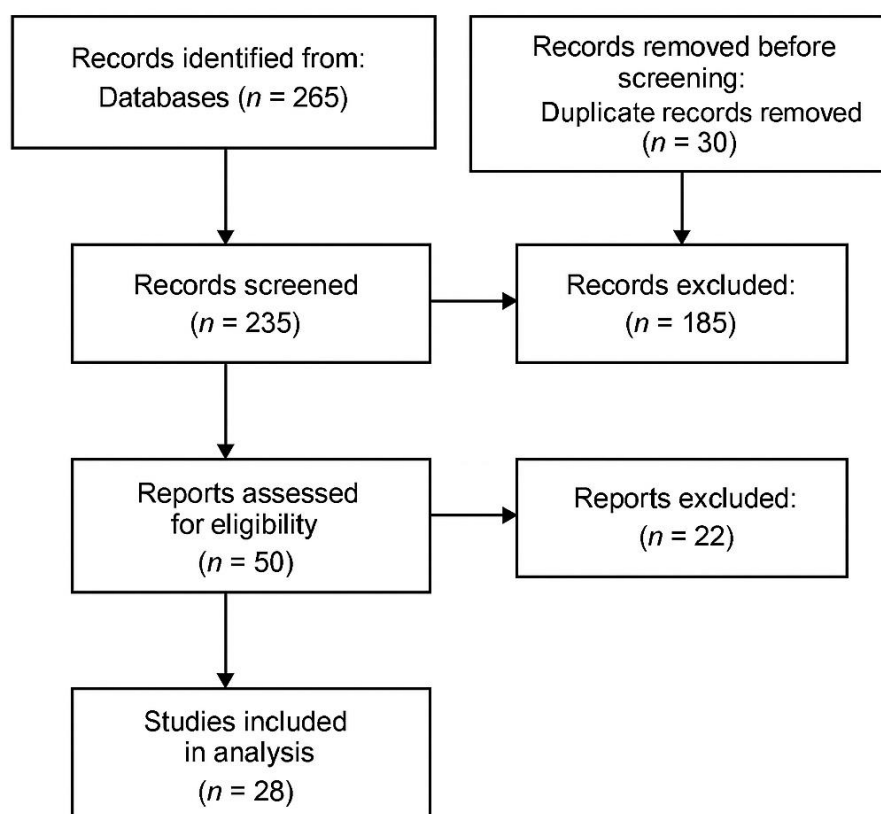


Figure 1. Presents the PRISMA flow diagram of the studies included for analysis.

### 3. Results of Concept Analysis

#### 3.1. Defining Attributes

Defining attributes are the core characteristics that consistently appear across theoretical and empirical literature, making them essential to the understanding and recognition of a concept (Walker & Avant, 2019). In the case of nursing team cohesion, five defining attributes were identified through a synthesis of 28 peer-reviewed studies. These attributes distinguish cohesive teams from those that are merely cooperative or task-oriented and form the foundation for conceptual and operational clarity. The first and most consistently referenced attribute is mutual trust and respect. In cohesive nursing teams, members exhibit confidence in one another's clinical judgment and show consistent respect for diverse roles and professional contributions (Black et al., 2019; Santos & Pereira, 2023). Trust fosters psychological safety, enabling nurses to speak up, share feedback, and take interpersonal risks without fear of retribution. The second defining attribute is effective communication, which encompasses open, honest, and timely information exchange. Communication in cohesive teams goes beyond transactional conversations and includes active listening, feedback, and emotional attunement (Cooke & Valentine, 2021). Teams with strong communication structures are better equipped to resolve conflicts and make coordinated clinical decisions under pressure.

The third attribute is shared goals and values, particularly those aligned with patient-centered care and collaborative practice. When nurses share a collective vision and purpose, team members are more likely to align their actions and maintain accountability (Kim, 2021; Gu et al., 2022). This alignment fosters unity and reduces ambiguity in clinical roles and responsibilities. A fourth defining

attribute is interpersonal support and harmony. Cohesive teams actively create a culture of emotional support, recognizing that empathy and kindness enhance not only morale but also clinical performance. These teams address interpersonal challenges constructively and show resilience during periods of stress (Freire & Bettencourt, 2021; Aseery et al., 2023). Finally, emotional intelligence, both at the individual and team level, emerges as a key attribute. This includes self-awareness, empathy, emotional regulation, and social sensitivity. High emotional intelligence enables team members to manage interpersonal dynamics and adjust communication styles effectively (Watanabe et al., 2024).

*Table.1 : Descriptive Data of the Research Studies on Nursing Team Cohesion*

No	Citation	Setting (Domain)	Key Attributes (Conceptual/Methodological)
1	Agyemang (2023)	Organizational settings, Ghana	Conflict types and resolution methods in organizations; descriptive overview.
2	Al-Nasri (2024)	Hospital-based leadership development	Nurse manager competency; quasi-experimental, pre-post design.
3	Alabdouli et al. (2023)	Interprofessional education	Swift trust, task conflict, team creativity; mediation model.
4	Alkorashy et al. (2023)	ICU during COVID-19 (Saudi Arabia)	Conflict styles among ICU nurses; cross-sectional design.
5	Alsadaan & Alqahtani (2024)	Emergency department	Toxic leadership, abusive supervision; team-level analysis.
6	Aseery et al. (2023)	Nurse management	Emotional intelligence and conflict handling; descriptive cross-sectional.
7	Azb Ahmed et al. (2019)	Nursing education (Egypt)	Conflict resolution training and assertiveness; intervention design.
8	Bajwa et al. (2020)	Interprofessional hospital teams	Intra vs. interprofessional conflict; implications for training.
9	Baçoğul (2020)	Psychiatric hospital settings	Nurse perspectives on conflict and teamwork; descriptive qualitative.
10	Black et al. (2019)	Nursing students (USA)	Emotional intelligence and self-efficacy on team cohesion; correlation study.
11	Choi & Ahn (2021)	Nursing students	Conflict resolution training; quasi-experimental design.
12	Choi & Eun (2023)	Integrated nursing care wards	Self-leadership, role conflict, turnover intention; mediating relationships.
13	Cooke & Valentine (2020)	Nursing education	Teamwork and communication improvement; quality initiative.
14	Cooke & Valentine (2021)	Academic nursing programs	TeamSTEPPS implementation in nursing schools; mixed methods.
15	da Silva Ferreira et al. (2024)	Hospital environment (Brazil)	Conflict management strategies in nursing; integrative review.
16	Dewi et al. (2022)	Head nurse leadership (Indonesia)	Nurses' perceptions of conflict strategies; qualitative approach.
17	Fitrianingsih et al. (2023)	Hospital nursing services	Conflict management strategies; literature review.
18	Freire & Bettencourt (2021)	Public hospitals	Work-family conflict, stress, and ethical leadership; quantitative.
19	González-García et al. (2024)	Global nurse manager literature	Conflict competency characteristics; systematic review.
20	Gu et al. (2022)	Hospital ward teams (China)	Cultural intelligence, relationship conflict, teamwork; moderation model.
21	Gunasingha et al. (2021)	Medical education (USA)	Conflict resolution training for med students; interactive simulation module.
22	Harvey et al. (2019)	Trauma nursing teams	Advanced teamwork training impact; quasi-experimental with performance metrics.

No	Citation	Setting (Domain)	Key Attributes (Conceptual/Methodological)
23	Huaman et al. (2023)	Public hospitals (Peru)	Work-family conflict, communication skills, resilience; mediation model.
24	Jing et al. (2020)	Taiwanese healthcare settings	Work values and conflict management; quantitative survey.
25	Kim (2021)	Hospital nursing teams	Managerial competency and cohesion; mediation analysis.
26	Koibichuk et al. (2021)	Health care institutions (Ukraine)	Institutional conflict management; case-based organizational analysis.
27	Lahana et al. (2019)	Public sector nursing (Greece)	Conflict triggers, stressors, and management; descriptive study.
28	Labrague & Obeidat (2021)	Hospital nursing staff	Transformational leadership, work-family conflict, patient safety outcomes; mediation study.

### 3.2. Antecedents of Nursing Team Cohesion

In concept analysis, antecedents refer to the events, conditions, or factors that must occur before the emergence of the concept (Walker & Avant, 2019). For nursing team cohesion, several consistent antecedents emerged across the literature, indicating the foundational conditions that support the development of cohesive teams. A primary antecedent is effective leadership, particularly transformational, ethical, and emotionally intelligent leadership styles. These leadership models cultivate trust, psychological safety, and motivation among team members, which are prerequisites for cohesive functioning (Kim, 2021; Labrague & Obeidat, 2021; Al-Nasri, 2024). Leaders who demonstrate vision, empathy, and inclusiveness contribute to aligned team goals and interpersonal harmony, fostering a fertile environment for cohesion to develop. Another critical antecedent is conflict management competency at both the individual and organizational levels. Teams that are trained in conflict resolution, especially in emotionally charged or high-acuity environments, are more likely to maintain mutual respect and trust (Bajwa et al., 2020; Aseery et al., 2023). Formal conflict resolution programs, as explored in studies by Choi and Ahn (2021) and Gunasingha et al. (2021), have been shown to improve not only individual communication skills but also overall team cohesion.

Emotional intelligence (EI) is also frequently cited as an antecedent. Nurses with high EI are better able to manage stress, empathize with others, and navigate complex interpersonal dynamics, skills that lay the groundwork for effective team relationships (Black et al., 2019; Watanabe et al., 2024). Furthermore, cultural intelligence, particularly in diverse workforces, was found to moderate the relationship between interpersonal conflict and teamwork (Gu et al., 2022). Other antecedents identified include role clarity, shared organizational values, and team-based communication structures, such as those implemented through programs like TeamSTEPPS (Cooke & Valentine, 2021). These structures help align expectations and reduce role conflict, a known disruptor of cohesion (Choi & Eun, 2023).

### 3.3. Consequences of Nursing Team Cohesion

In concept analysis, consequences refer to the outcomes or results that occur after the presence of the concept (Walker & Avant, 2019). In the case of nursing team cohesion, the literature consistently identifies a wide range of positive consequences that influence not only the performance of nursing teams but also organizational culture, patient outcomes, and nurse well-being. One of the most significant consequences of team cohesion is enhanced team performance and clinical efficiency. Cohesive teams are more likely to coordinate care effectively, share responsibilities, and maintain a high level of situational awareness, particularly in high-acuity settings like intensive care and

emergency departments (Harvey et al., 2019; Santos & Pereira, 2023). This results in reduced medical errors, improved patient safety, and shorter response times in crisis situations (Kim, 2021). Another consequence is increased job satisfaction and retention among nurses. Studies show that cohesive teams offer emotional support, reduce work-related stress, and create a sense of belonging, all of which are protective against burnout and turnover (Huaman et al., 2023; Larsman et al., 2024). In contrast, a lack of cohesion is associated with interpersonal conflict, emotional exhaustion, and dissatisfaction, particularly when leadership fails to address toxic dynamics (Alsadaan & Alqahtani, 2024). Improved communication and conflict resolution are also prominent consequences. Teams that function cohesively tend to manage disagreements constructively, focusing on shared goals rather than personal grievances (Aseery et al., 2023; Choi & Ahn, 2021). This leads to fewer escalated conflicts and fosters a psychologically safe environment, which is essential for innovation and quality improvement. At the organizational level, team cohesion contributes to better interprofessional collaboration, higher levels of work engagement, and the development of resilient work cultures (Paganin et al., 2023; Gu et al., 2022). These outcomes are particularly relevant in the post-pandemic healthcare landscape, where adaptability and teamwork are critical for system sustainability.

### 3.4. Empirical Referents of Nursing Team Cohesion

Empirical referents are measurable indicators that reflect the existence or level of a concept in real-world settings (Walker & Avant, 2019). In the case of nursing team cohesion, several empirical referents have been identified, though they are often embedded within broader constructs such as teamwork, collaboration, or emotional intelligence. These tools allow researchers and nurse leaders to quantify the presence of cohesion and evaluate the effectiveness of interventions designed to improve it. One of the most widely used tools in healthcare settings is the TeamSTEPPS Teamwork Perception Questionnaire (T-TPQ). This tool evaluates five core components of team effectiveness: leadership, mutual support, communication, situation monitoring, and team structure (Cooke & Valentine, 2021). While it does not measure cohesion directly, it includes critical dimensions, particularly communication and mutual support, that align closely with the defining attributes of cohesion.

Another commonly cited instrument is the Team Climate Inventory (TCI), which assesses team members' perceptions of shared objectives, participation, support for innovation, and task orientation. This inventory has been validated in nursing and interprofessional settings and serves as a proxy measure for team cohesion, especially when evaluating team culture and collaborative climate (Santos & Pereira, 2023). The Group Environment Questionnaire (GEQ), originally developed in the field of sports psychology, has also been adapted for use in healthcare settings. It measures social and task cohesion, distinguishing between interpersonal relationships and goal alignment, two of the core attributes of nursing team cohesion (Black et al., 2019). In addition, tools like the Nursing Teamwork Survey (NTS) and the Emotional Intelligence Appraisal provide indirect referents. The NTS focuses on trust, coordination, and communication among nurses, while emotional intelligence tools measure self-awareness, regulation, and empathy, all of which are linked to team cohesion (Watanabe et al., 2024). Qualitative methods such as focus groups, structured observations, and 360-degree feedback have also been used to capture the more subjective and relational dimensions of cohesion. These methods are particularly effective in capturing interpersonal harmony, shared values, and emotional climate, which may be difficult to assess through standardized scales alone (Aseery et al., 2023).

### 3.5. Clarifying Conceptual Boundaries and Avoiding Conflation

One of the central objectives of concept analysis is to clarify the conceptual boundaries of a term to ensure it is not conflated with similar or overlapping constructs (Walker & Avant, 2019). In the case of nursing team cohesion, the literature frequently uses related terms, such as teamwork, collaboration, communication, and psychological safety, interchangeably. This conflation presents challenges in both theoretical development and empirical measurement, as each of these constructs, while related, carries distinct assumptions, attributes, and implications (Nguyen & Wang, 2022; Santos & Pereira, 2023). For example, teamwork is a broader term that encompasses a wide array of behaviors, including task distribution, leadership, coordination, and role performance (Cooke & Valentine, 2021). While effective teamwork may require cohesion, a team can function in a coordinated way without necessarily demonstrating strong interpersonal bonds or shared emotional investment, both of which are core elements of cohesion. Similarly, interprofessional collaboration emphasizes joint decision-making and cooperative practice across professional boundaries. However, collaboration can occur in the absence of deeper emotional trust or mutual support, which are essential attributes of cohesion (Alabdouli et al., 2023). Thus, collaboration may be viewed as a functional process, while cohesion represents the relational quality of team dynamics. Communication is another commonly conflated concept. Although open and respectful communication is a defining attribute of cohesion, it is also a standalone construct that can be evaluated independently. A team may have structured communication protocols yet lack cohesion if trust and emotional support are absent (Black et al., 2019). Moreover, psychological safety, the belief that one can speak up without fear of punishment, is often seen as a component of both cohesion and team effectiveness. However, psychological safety is more outcome-oriented and individually experienced, whereas cohesion reflects collective unity and emotional interconnectedness (Larsman et al., 2024). By clearly distinguishing nursing team cohesion from these related constructs, this analysis contributes to conceptual precision, helping to guide both measurement selection and intervention development. It ensures that strategies aimed at improving cohesion are not misdirected toward adjacent but distinct areas, such as workflow coordination or communication training alone. Clarifying these boundaries strengthens the utility of the concept in both research and applied nursing leadership.

## 4. Discussion

### 4.1. Theoretical Implications

The findings contribute significantly to the clarification of nursing team cohesion as a discrete concept, distinct from but related to teamwork, communication, collaboration, and psychological safety. While previous literature often discussed cohesion implicitly, this analysis explicitly defined its core characteristics: mutual trust and respect, effective communication, shared goals, interpersonal harmony, and emotional intelligence. This level of specificity enhances conceptual clarity, a crucial step for theory development in nursing science (Walker & Avant, 2019). It also helps address terminological inconsistencies noted in the literature, where cohesion has sometimes been subsumed under broader terms like team effectiveness or staff engagement (Nguyen & Wang, 2022; Santos & Pereira, 2023). The distinction between cohesion and adjacent concepts allows for focused research inquiries and the development of tools that specifically assess relational dynamics within nursing teams. Moreover, identifying antecedents (e.g., leadership, conflict resolution training) and consequences (e.g., improved patient outcomes, reduced turnover) positions cohesion not just as a descriptive label, but as a causal mechanism that can be theorized, tested, and improved through deliberate interventions. This clarity enhances its value as a mid-range theoretical construct in both nursing education and leadership models.

## 4.2. Practical Implications for Nursing Leadership and Practice

The clarified concept of nursing team cohesion holds substantial value for nurse managers, educators, and healthcare policymakers. In high-acuity settings such as emergency departments or ICUs, cohesion is directly linked to clinical performance, psychological safety, and patient safety outcomes (Harvey et al., 2019; Gu et al., 2022). Nurse leaders can leverage the identified antecedents, especially transformational leadership and emotional intelligence, to foster trust, resolve conflict, and align team goals. Importantly, the analysis points to modifiable factors. For instance, leadership training, conflict resolution workshops, and interprofessional simulation exercises are proven methods for enhancing team cohesion (Choi & Ahn, 2021; Cooke & Valentine, 2021). When embedded in orientation programs and ongoing professional development, these strategies can strengthen team dynamics and reduce nurse burnout and turnover (Huaman et al., 2023; Larsman et al., 2024). Educationally, nursing schools and academic institutions can embed the concept into curricula and simulation-based learning, especially through programs like TeamSTEPPS. Training nursing students in collaborative communication, trust-building, and self-awareness prepares them for the realities of team-based care. On an organizational level, promoting cohesion contributes to a resilient workforce culture, especially critical in post-pandemic healthcare systems where staff shortages, stress, and emotional fatigue are prevalent. Cohesion, therefore, is not just a “soft skill” but a strategic asset in healthcare delivery.

## 4.3. Concept Integration with Existing Frameworks

The defining attributes and outcomes of nursing team cohesion align closely with several established theories in organizational behavior and nursing leadership. First, the concept fits naturally within Transformational Leadership Theory, which emphasizes leader behaviors such as inspiration, individualized consideration, and intellectual stimulation, all of which contribute to mutual respect and shared vision (Labrague & Obeidat, 2021; Al-Nasri, 2024). Transformational leaders actively build cohesive teams by fostering emotional connection and goal alignment. Second, Emotional Intelligence Theory supports the notion that intrapersonal and interpersonal awareness contributes to group-level outcomes like trust and collaboration (Black et al., 2019; Watanabe et al., 2024). Teams composed of emotionally intelligent members are more likely to navigate conflict constructively, communicate effectively, and maintain interpersonal harmony, critical components of cohesion. Finally, cohesion overlaps partially with psychological safety, a key component of Edmondson’s Teaming Theory, which posits that teams perform best when members feel safe to express ideas and concerns. While psychological safety is often treated as an outcome, it may also be viewed as a mediating state within cohesive teams (Larsman et al., 2024). By identifying and clarifying these intersections, this analysis positions nursing team cohesion as a cross-cutting concept, applicable to multiple theoretical models and practical frameworks used in healthcare team management.

## 4.4. Strengths and Limitations

A major strength of this analysis is its use of Walker and Avant’s structured and systematic methodology, allowing for a rigorous dissection of the concept across disciplines and settings. The inclusion of 28 studies spanning various methodologies, countries, and domains (e.g., clinical, academic, leadership) adds to the credibility and transferability of the findings. However, the analysis is not without limitations. One limitation lies in the absence of a dedicated empirical tool specifically developed to measure nursing team cohesion. Although tools like TeamSTEPPS and the Team Climate Inventory serve as empirical referents, they only partially reflect the core components of

cohesion. Additionally, cultural and contextual variability may affect how cohesion is understood and enacted. For example, concepts like trust or emotional expression may differ between Eastern and Western healthcare settings (Gu et al., 2022). While efforts were made to include diverse perspectives, the final dataset may still reflect a Western-centric bias. Finally, like all concept analyses, the selection and interpretation of literature involve subjective judgment. Although criteria were clearly defined, alternative readings or different inclusion decisions may yield slightly varied conceptual boundaries.

## 5. Conclusion

This concept analysis of nursing team cohesion, guided by Walker and Avant's eight-step method, has provided a clearer, evidence-informed understanding of a critical construct in contemporary nursing practice. Amid increasing complexity in healthcare systems, rising staff burnout, and demands for collaborative care, cohesive nursing teams have emerged as a vital foundation for safe, high-quality, and resilient healthcare delivery. The analysis identified five defining attributes of nursing team cohesion: mutual trust and respect, effective communication, shared goals, interpersonal harmony, and emotional intelligence. These attributes differentiate cohesion from related but distinct concepts such as teamwork, collaboration, and psychological safety. Furthermore, the analysis outlined the antecedents (e.g., transformational leadership, conflict management training, emotional intelligence) and consequences (e.g., improved clinical outcomes, staff retention, and psychological safety) associated with cohesion, emphasizing its multidimensional nature and actionable significance. Despite the richness of the findings, the analysis also highlighted methodological gaps, including the absence of a standardized, validated tool designed specifically to measure nursing team cohesion. The empirical referents currently available are largely adapted from broader constructs, such as team climate or communication, necessitating future research into the development of direct measurement instruments. From a practical standpoint, the findings underscore the strategic value of fostering team cohesion in both clinical and educational nursing environments. Nurse leaders, educators, and healthcare organizations are encouraged to incorporate targeted strategies, such as leadership development, conflict resolution training, and emotional intelligence coaching, to cultivate cohesive teams that can withstand the evolving pressures of healthcare systems.

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