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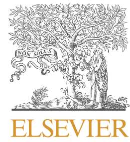

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Review

A conceptual analysis of facilitation to improve clinical outcomes in critical care units

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A R T I C L E I N F O

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A B S T R A C T

Objectives: Effective facilitation is crucial to improve critical care outcomes in life-threatening conditions through improved teamwork, caring, decision-making, and problem-solving. The meaning of facilitation remains unprecise in a critical care context despite its frequent usage in nursing education and clinical practice. This study aimed to report a thorough concept analysis to clarify the meaning of facilitation in the critical care context by formulating attributes, antecedents, and consequences and providing model cases related to facilitation.

Methods: This analysis was performed by searching online sources published from 1999 to 2023. EBSCOhost, CINAHL, PubMed, and Google Scholar databases were searched using online search engines. The analysis also included the manual search of books, thesaurus and dictionaries that showed relevance to facilitation. Walker and Avant's eight-step approach was applied to explore and analyze the meaning of facilitation in critical care units.

Results: A total of 68 articles were included in the analysis of this study. Eleven attributes, six antecedents, and seven consequences related to facilitation were formulated. The attributes included dynamic, interactive processes, creating a positive environment, mobilizing resources, assistance, student-centered, shared goals, collaboration, engagement, participation, and feedback. Antecedents were facilitator qualities, motivation, a positive learning environment, student-facilitator relationship, time availability, and specified learning outcomes. The consequences of facilitation were identified as follows: change, professional development, competency, quality development, increased job satisfaction, staff retention, and self-confidence.

Conclusions: The findings from the analysis indicated that effective facilitation results in nurses and critical care staff developing competency, caring, critical thinking, and independence. Therefore, clinical outcomes in critical care environments are improved through teamwork, decision-making, and problem-solving in life-threatening situations.

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What is known?

- There are theoretical models of facilitation in education, psychology, and business. However, the meaning of facilitation is still unclear when used in critical care units.
- Facilitation to improve clinical outcomes involves communication, teamwork, leadership, decision-making, and problem-solving.

What is new?

- The theoretical definition of facilitation to improve clinical outcomes in a complex, fast-paced critical care environment using teamwork, decision-making, problem-solving, communication, and leadership.
- The consequences of effective facilitation include change, professional development, competency, quality development, increased job satisfaction, staff retention, and increased self-confidence.

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1. Introduction

Facilitation originated in the 17th century, and it originated in *facilis* (Latin), *faciliter* (French), and *facilitare* (Italian), all three words meaning easy [1]. Burrows and Rodgers [2,3] stated that facilitation is a significant tool for supporting learning processes, inventing new ideas, resolving problems, and making critical decisions. Facilitation is defined as a process of strategizing learning and making things easier for people by providing support to assist them in changing their thinking and working [4]. There are multiple definitions for facilitation in different disciplines. Yet, the concept still needs to be more precise and challenging to define in the critical care context. Understanding the concept of facilitation in critical care units can improve clinical outcomes through teamwork, decision-making, and problem-solving.

Critical care settings are complex, fast-paced environments admitting high-acuity patients. These dynamic clinical environments in critical care units provide unique opportunities for knowledge and skill acquisition [5,6]. The utilization of resources, such as the Facilitator Decision-Making Model, assists facilitators in guiding nurses and critical care staff on the processes of making flexible decisions based on the urgency of the problem. This model includes four approaches: the context of the decision, the content of the decision, the type of decision, and how the decision will be facilitated [7]. Lighthal and Vazquez-Guillamet [8] mentioned that critical care units are characterized by the unpredictability of life-threatening situations, requiring nurses and critical care nurses to be vigilant in making rapid judgments in high-risk and dynamic situations. Adaptive facilitation strategies, such as real-time, problem-solving and flexible decision-making, are important in critical care environments. Nurses and critical care staff should have experience in making accurate, appropriate, and timely decisions to save the lives of critically ill patients. Failure to make these decisions can lead to wrong diagnoses and medical errors, resulting in poor patient clinical outcomes [7,8].

Facilitation is a dynamic learning process that reduces the gap between evidence and practice in health service organizations [9]. There are various theoretical models of facilitation in different fields, like education, psychology, and business. Applying these models in critical care environments can enrich the understanding of facilitation and create new facets of facilitation in improving critical care outcomes. The social facilitation framework defines facilitation as a social process whereby individuals function better in the presence of others. The incorporation of critical elements of facilitation, such as effective communication, interactive problem-solving, relationship-building, and effective leadership, contributes to effective and successful facilitation [10]. Good interpersonal and communication skills enhance collaboration between the facilitators, nurses, and critical care staff in clinical practice [11]. A team-based approach enables facilitators to implement changes. The changes include developing newly formed teams to increase awareness of the need for change and to assist in the implementation strategies of developing a plan to establish the change. Facilitating techniques such as Six Sigma can enhance change to improve quality and reduce medical errors through teamwork and communication. This can result in good clinical outcomes [10]. Facilitators, nurses, and critical care staff are responsible for supporting a change process in critical care units by participating in decision-making as they share similar visions [12]. Despite the multitude of responsibilities of facilitators in critical care units, the meaning of the concept of facilitation needs to be clarified to optimize its usage in critical care units. Facilitation remains complex, ambiguous, and confusing for clinical facilitators in critical care environments.

The effectiveness of facilitation in critical care units can be based on the Humanistic Theory pioneered by Carl Rogers, which focuses on a person-centered approach. The theory uses the humanistic belief that nurses and critical care staff have the capacity for growth and self-actualization by emphasizing reflective listening, empathy, and acceptance. Facilitators should create a non-judgmental environment for self-exploration and self-recovery, a therapeutic learning environment where nurses and critical care staff feel valued, appreciated, and respected. Facilitators clarify questions to improve their self-esteem and increase their ability to cope with the consequences of their timely decisions [10,13]. Group facilitation is essential in critical care units to achieve shared goals and make decisions in clinical practice. Facilitators encourage effective group collaboration and participation in identifying problems, decision-making, and problem-solving [14].

If the meaning of the concept of facilitation is clear, it could guide facilitators in addressing the challenges involved in delivering evidence-based, person-centered care in the critical care environment. Facilitators integrate theoretical knowledge and practical skills by coaching nurses and critical care staff to increase collaboration, effective communication, good time management, and facilitation of change and learning [15–17]. The nurses and critical care staff are encouraged to practice and reflect on the experiences learned from simulations, workshops, and role-play scenarios. Facilitation improves professional performance and strengthens skills such as leadership, management, and quality care [18]. Various facilitation methodologies, such as simulations, demonstrations, lectures, reflective learning, and role-play scenarios, should be tailored to critical care situations. Joyce et al. added activities such as handover, feedback, in-service training, and performing medical rounds to facilitate knowledge and skills in critical care units [5]. These educational approaches are incorporated into daily practice to maintain quality patient care. Clarifying what facilitation involves will likely enhance the use of various educational approaches in critical care settings to ensure that facilitators enhance the critical thinking skills of nurses and critical care staff [19]. The Nursing Act (No. 33 of 2005) supports that nurses and critical care staff allocated to critical care units should display high levels of knowledge, skills, and competency. The Act stipulates the roles of facilitators in developing caring, competency, and independence [20].

Despite facilitation being a phenomenon, a process, and a strategy used by various organizations, it needs to be clarified to define facilitation in the critical care context [1]. This study clarifies the definition of facilitation as it is applied in a complex, fast-paced, critical-care context characterized by critically ill patients connected to life-saving machines. A concept analysis of facilitation in critical care environments was undertaken to develop a theoretical definition and contribute to the body of knowledge on applying facilitation in nursing practice [21]. This concept analysis is important to avoid ambiguities related to the meaning of the concept of facilitation by bridging the literature deficiency gap.

2. Methods

Walker and Avant's eight-step approach was applied to clarify and analyze the concept of facilitation to improve clinical outcomes in critical care units [21]. The eight steps are selecting a concept, determining the purposes of the analysis, identifying all uses of the concept, determining the defining attributes, identifying a model case along with borderline, related, and contrary cases, identifying antecedents and consequences, and defining empirical referents [21].

2.1. Selecting a concept

The process of concept analysis started with selecting a concept. The concept of facilitation needed to be clarified when utilized in critical care units. The analysis clarified and defined facilitation to improve clinical outcomes in critical care units through teamwork, problem-solving, and decision-making.

2.2. Determining the aims or purposes of the analysis

The aim of the concept analysis was to describe and clarify the meaning of facilitation in the critical care environment. A theoretical definition of facilitation was developed to explain how facilitators perform facilitation in critical care units. The analysis aims to show the importance of facilitation in providing practical help and support to nurses and critical care staff to improve clinical outcomes through teamwork, decision-making, and problem-solving.

2.3. Identifying all uses of the concept facilitation

The first author searched and completed the content analysis. An extensive, broad search was undertaken for online literature in databases such as Google Scholar, CINAHL, PubMed, and EBSCOhost. Databases were searched using terms such as “facilitation”, “facilitators”, “facilitating”, “critical care”, “intensive care units”, “critical care nurses” and “concept analysis”. Boolean search using AND, OR, and the phrase facilitation AND healthcare was applied. The inclusion criteria were health-related articles published in English, full-text, and peer-reviewed. Qualitative, quantitative and all types of reviews were included in the analysis. Exclusion criteria were articles written in languages other than English, articles not peer-reviewed and published in non-academic journals, The search yielded 68 sources published between 1999 and 2023. Other sources used included books, thesaurus, and dictionaries that were manually searched. The Preferred Reporting Items for Systemic Reviews and Meta-Analysis (PRISMA) guidelines, as illustrated in Fig. 1, were considered [22].

Walker and Avant suggest using dictionaries, thesaurus, and available literature to define facilitation and identify its uses in critical care units [20]. Several dictionaries, books, thesaurus, and articles were consulted to explain the concept of facilitation. Oxford Learner’s Dictionary, Vocabulary.com, and the American Heritage Dictionary of the English Language define the concept of facilitation as ease, assist, expedite, and simplify [23–25]. However, Dictionary.com and Cambridge University Press & Assessment describe facilitation as offering help to others to solve without getting directly involved in the process and discussion [26,27]. Merriam-Webster Dictionary defines facilitation as increasing the intensity of a response by repeated stimulation [28].

Other definitions of facilitation were explored in the subject literature. According to Heyns et al., facilitation is a person-centered strategy characterized by collaboration, inclusion, and participation to change the workplace culture [15]. Van Loon and Larsen explain that facilitation creates ownership through personal involvement and assisting the group to achieve a shared objective [29]. Critical care nurses set their own pace and are self-motivated, resulting in group processes through intentional work before, during, and after a specific facilitated session. Roget’s Hyperlinked Thesaurus defines facilitation as easing, smoothing, furtherance, advancement, promotion, forwarding, speeding, and expedition [30].

Facilitation is executed mainly in clinical practice and educational institutions, and its meaning is ambiguous when applied in critical care environments, which are known for their complexity and life-threatening dilemmas. Facilitation aims to achieve goals by providing practical help and support to critical care nurses allocated in critical care environments. Facilitation focuses on developing and empowering individuals and teams [31]. Facilitators use many implementation approaches to support changes in practice within an organization. Support-oriented facilitation aims to support group effectiveness and individuals and teams during the implementation of change [32]. The facilitators performing facilitation in critical care ensure that critical care nurses value teamwork and patient-centered care [33].

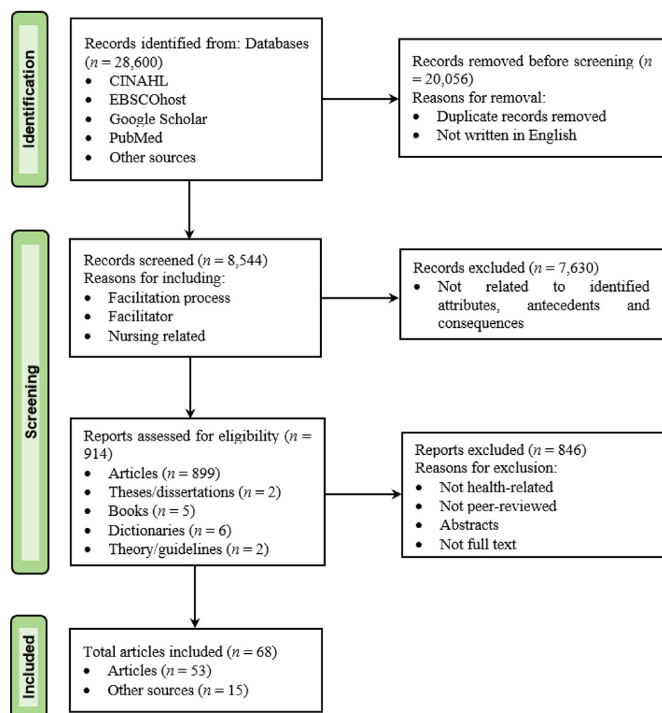

Fig. 1. Flow chart of the study selection process of the concept analysis.

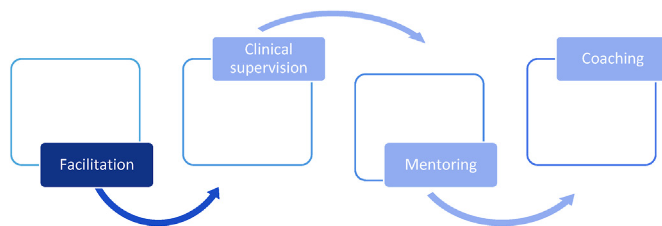

Fig. 2. Related concepts of facilitation.

Other concepts used interchangeably with facilitation are clinical supervision, mentoring, and coaching, as indicated in Fig. 2. The literature indicates the difference between these concepts in clinical practice. Clinical supervision is the formal provision of guidance, support, and feedback by a qualified healthcare professional to ensure learning and that supervisees work effectively. It involves observing and directing the execution of tasks and ensuring everything is done correctly and safely. Training is case-focused, and supervision includes quality control, maintaining and facilitating the supervisees’ competence and capability, and helping supervisees work effectively to provide safe and appropriate patient care [34,35]. Cleary and Horsfall list the similarities between mentoring and clinical supervision. Mentoring is a deeper, more long-term relationship focusing on support and socialization in the

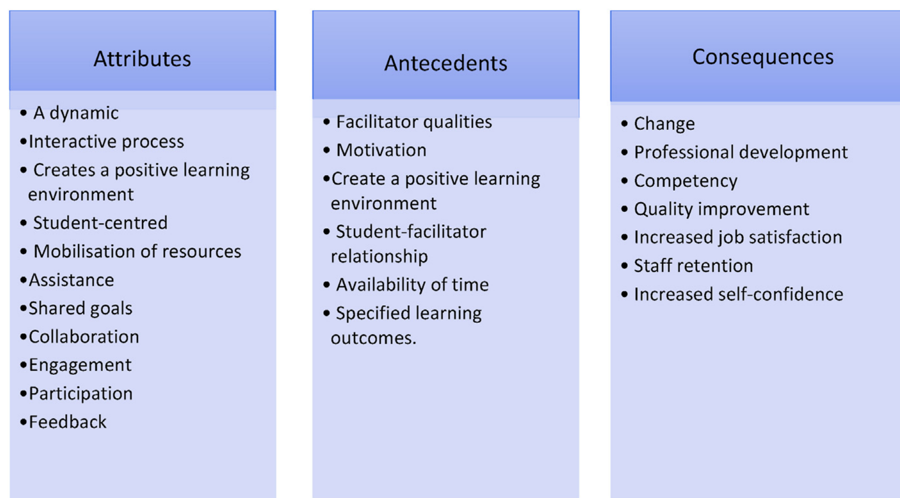

Fig. 3. Antecedents, attributes, and consequences of facilitation.

profession, while coaching focuses on action-oriented performance outcomes [36].

2.4. Determining the defining attributes

Attributes are the characteristics and uniqueness of the concept of facilitation. Extensive utilization of literature searches indicated the terms mainly used with the concept [21]. Analyzing sources identified the following attributes of facilitation: it is a dynamic, interactive process, creates a positive environment, mobilizes resources, assists, is student-centered, and involves having shared goals, collaborating, being engaged, participating, and providing feedback. The attributes are listed in Fig. 3.

According to the health promotion theory, facilitation is a dynamic, interactive process that promotes health by creating a positive environment and mobilizing resources, as well as identifying and bridging obstacles in the promotion of health [37]. Facilitation roles are essential for helping others develop their solutions rather than providing answers [38]. The concept of facilitation focuses on helping a group reach a shared goal and achieve desired results by being fully aware of the setting and dialogue. Facilitators assist critical care nurses in collaborating, developing relationships, and communicating with clinical nurses, nurse educators, and preceptors. Collaborative facilitation assists critical care nurses in achieving clinical nursing competence [39]. The clinical facilitator effectively facilitates the facilitation process to engage all stakeholders and applies a student-centered approach to enhance students' theoretical and practical learning. At the same time, students are expected to take charge of their learning to improve their competencies and to develop caring and critical care abilities [40]. The critical care nurses are engaged to enhance their learning outcomes by narrowing the gaps between the critical care nurses' actual and desired performance. The facilitator encourages nurse and critical care staff feedback, participation, and focus while allocated in clinical practice on areas of improvement [41].

2.5. Identifying model case

This section provides illustrative examples, such as model, borderline, and contrary cases, to elucidate the attributes of facilitation. The model case explains the attributes related to facilitation, a borderline case indicating not all the attributes of facilitation, while the contrary case is an example when the concept of facilitation is absent. These examples explain the practical implications of facilitation in different scenarios. The construction of a model, as well as borderline and contrary cases, are described below.

A model case illustrates and supports all the identified attributes of the concept of facilitation and provides an example of using a concept and exemplifying the attributes. Cases are described in the literature, constructed by research, and represent real-life examples. A model case includes all the critical attributes of the concept to make it practical and understandable [21,42,43].

Mr Ram is a 45-year-old male patient admitted to the trauma intensive care unit (ICU) with multiple gunshot wounds and underwent a laparotomy to prevent abdominal compartment syndrome. His abdomen was left open, and he requires frequent laparotomies. Mr James, a registered nurse acting as a clinical facilitator, received a complaint from the theatre staff that Mr Ram came to the theatre with a leaking colostomy bag, which contaminated the abdominal dressing. Mr Ram was septic and was started on antibiotics post-operatively. Mr James called a meeting to communicate and give feedback to nursing and critical care staff about the complaints from theatre staff (interaction). He arranged an in-service training session for the care of colostomy bags. Mr James allocates or delegates (delegation of tasks, process) trained professional nurses to assess patients during handover. Tasks are allocated according to their capabilities and scopes of practice. Mr James assigns mentors to newly appointed staff for the continuity of learning (creating a positive environment and a student-facilitator relationship). Mr James received compliments from theatre staff that Mr Ram went for another relook laparotomy, and his colostomy bag and abdominal dressing were intact and not leaking. His septic markers improved, and there was no sign of infection. His abdomen was closed due to a lack of sepsis (improved patient outcomes). Mr James arranged another feedback meeting to inform the nurses and critical care staff about the compliments from the theatre staff. Mr James involved all the staff members, including the operational manager, in writing quality improvement guidelines and policies on managing colostomy bags and open abdomen (participation, engagement).

This model case indicated the improved clinical outcomes of Mr Ram, which were achieved through teamwork, communication, timely decision-making, and problem-solving. This resulted in quality patient care and the prevention of further complications.

2.6. Identifying a borderline case

Borderline cases contain most, but not all, of the attributes in the model case [21]. Mr James, a clinical facilitator in Trauma ICU, was involved in accreditation with the South African Nursing Council to inspect competencies and assess whether Trauma ICU conforms to quality standards. The results indicated poor record keeping, especially with the patient's informed consent forms. James arranged in-service programs to teach about the legality and completion of the consent forms (communication and feedback). The attendance register was marked, and poor attendance was noted. Several in-service programs were arranged, but the nurses and critical care staff did not comply with attending the educational programs. Workshops were organized to encourage them to attend. Simulations and role-plays were performed tailored to scenarios regarding incomplete and mitigations related to incomplete consent forms. James inspected the patients' records, and the results showed improvements in completing consent forms despite poor attendance at conferences and in-service programs.

This borderline case indicated the importance of communication and staff commitment in facilitation to improve the patients' outcomes. The records are improving despite the commitment of the nursing staff to attend and participate in the workshops. Mr James should consider other options to increase compliance. Options include nursing staff writing reports on their reasons for poor attendance or introducing evaluation competencies on completion of consent forms.

2.7. Identifying a contrary case

Contrary cases depict what a concept is not [21]. The dietician responsible for the Trauma ICU indicated that patients with open abdomen are malnourished. She reported that nursing staff are not adhering to feeding protocols. The enteral feeds are not being commenced timeously and are not being recorded correctly in the intake and output charts. This problem was raised during a multidisciplinary meeting where Mr James gave the nursing staff feedback. There needed to be better attendance at the conference. The nursing staff who attended the meeting indicated a need for more feeding pumps and administration sets. Shortages of nursing staff in the ICU resulted in a lack of supervision, mentoring, and orientation. The problems continued due to non-compliance with attending meetings, a shortage of equipment, and a shortage of staff.

The contrary scenario showed that the patients' outcomes were poor due to non-compliance in attending meetings, lack of supervision, mentoring, and lack of resources.

2.8. Ethical considerations

Permission was requested, and approval was obtained from the Faculty of Health Sciences Research Ethics Committee (REC-01-67-2017) and Higher Degrees Committee of the University of Johannesburg (HDC-01-47-2017) and Gauteng Department of Health (GP-2017RP30-306).

3. Results

The results section thoroughly analyses the concept of facilitation in critical care environments by covering its uses, related concepts, attributes, antecedents, construction cases, and the consequences of facilitation. The operational definition and the empirical deferents of facilitation were explored. This study integrates the theoretical framework of Walker and Avant's concept analysis approach by providing a structured methodology for identifying and analyzing the attributes, antecedents, consequences, and related aspects of facilitation [21]. Model, borderline, and contrary cases provide concrete examples to illustrate the attributes and variations of facilitation in critical care. These cases help readers to contextualize the concept and understand its practical implications.

3.1. Defining antecedents of the concept

Antecedents are the necessary skills required before an event, which is the concept of facilitation [21]. Factors contributing to facilitation in critical care include facilitator qualities, Motivation, positive learning environment, student-facilitator relationship, time availability, and specified learning outcomes. These attributes indicate the facilitator's qualities are essential in improving performance in clinical practice, creating a positive environment for learning, which results in effective facilitation, which in turn leads to improved clinical outcomes.

3.1.1. Facilitator qualities (knowledge and skills)

Facilitators involved in facilitation in a critical care environment require particular qualifications to provide evidence-based, quality patient care for critically ill patients in order to improve the clinical outcomes of patients [44]. The SANC requires specialized nurses to have high-technology skills for monitoring, caring for, and treating critically ill patients in the ICU. Facilitators' competencies, knowledge, and skills are enhanced through the attendance of in-service training programs in clinical practice [45]. Facilitator qualities required in critical care settings should include interpersonal skills, such as approachability and respect. These qualities foster interpersonal relationships by encouraging student engagement and feelings of belonging by nurses and critical care staff [46].

3.1.2. Motivation (passion)

The passion or Motivation of facilitators in critical care environments positively affects their career interest, commitment to facilitation, and their job performance in performing facilitator roles in critical care [15,47].

3.1.3. Commitment

Committed facilitators engage in communication and mutual relationships with nurses and critical care staff to improve clinical outcomes in critical care units [48].

3.1.4. Creating a positive learning environment

Sweet and Broadbent mention that a positive learning environment involves positive facilitator feedback to motivate nurses and critical care staff [46]. An environment with adequate resources for learning is required to ensure patient safety [49]. A conducive learning environment with various learning opportunities, continuous clinical supervision, and support for critical care nurses is needed. However, shortages of specialty critical care nurses act as a barrier to creating a positive practice environment [44]. Clinical facilitators offer professional support and encourage teamwork among critical care nurses throughout their placement in critical care units [50].

3.1.5. Student-facilitator relationship

The student-facilitator relationship affects student learning. Facilitators' attitudes and communication positively or negatively influence the facilitation process [49]. Trust and trusting relationships in nursing education form the foundation of safety. Facilitators establish educator-student trust relationships with nurses and critical care staff by being supportive and approachable. Facilitators become role models and portray professional credibility by

demonstrating trustworthiness attributes [51].

3.1.6. Availability of time

Allocating sufficient time is essential in facilitating critical care nurses in clinical practice [11]. The facilitator's availability, flexibility in creating teachable moments, and spending time to facilitate learning and teaching in critical care units are multidimensional antecedents that provide continuous support and guidance to critical care nurses. The facilitator regularly contacts the critical care nurses and engages them in pursuing allocated learning outcomes [46].

3.1.7. Specified learning outcomes

Critical care nurses are expected to achieve learning outcomes in clinical practice. The facilitators are responsible and accountable for providing learning opportunities that ensure that critical care nurses' learning outcomes in clinical practice areas are achieved [20].

3.2. Identifying the consequences of facilitation

This section identifies and discusses the consequences of facilitation in critical care settings by providing a thorough understanding of the outcomes associated with effective facilitation, as indicated in Fig. 3. The consequences of the concept of facilitation refer to the outcome of the antecedents and the defining attributes [21]. The consequences of effective facilitation include the following: change, professional development, competency, quality development, increased job satisfaction, and staff retention and self-confidence.

3.2.1. Change

Facilitators are change agents who advocate for nurses and critical care staff and provide continuous support in clinical practice. The clinical facilitator is a role model who creates care environments and role models technology knowledge in critical care settings [15,32]. The facilitators improve the knowledge and skills of the nurses and critical care staff, enabling change to happen in clinical practice, therefore improving clinical outcomes.

3.2.2. Professional development

Facilitators create nourishing and supportive relationships by empowering nurses and critical care staff [52]. Knowledge and skills are developed through training and reflection, and critical care nurses are empowered to manage challenging situations in critical care units [53]. Facilitators are involved in the professional development of staff by providing educational activities, identifying nursing staffing needs, and providing opportunities to acquire and implement knowledge and skills for caring, critical thinking, and decision-making [54].

3.2.3. Competency

McKellar et al. confirm that facilitation is a fundamental component of nursing that develops critical care nurses' competency by increasing knowledge and skills [55]. Facilitators assist, guide, and support nurses and critical care staff to achieve expected learning outcomes [50]. This results in nurses and critical care staff becoming independent and able to make decisions in critical care units [56].

3.2.4. Quality improvement

Clinical facilitators positively impact the quality of the clinical learning environment and the development of clinical competencies [11]. Nurses and critical care staff better understand patients' condition through facilitation [57]. Continuous facilitation of nursing staff assists critical care nurses in coping with a complex ICU environment and enhancing their skills to provide quality, safe patient care [58].

3.2.5. Increased job satisfaction and retention of staff

Facilitation increases the job satisfaction of nurses and critical care staff. Facilitators encourage and reinforce teamwork. The facilitator in critical care units ensures that medical errors are reduced, good records are kept, job satisfaction is high and absenteeism is low, staff are retained, patient satisfaction is increased, and mortality rates are reduced [47,59].

3.2.6. Increased self-confidence

Nurses and critical care nurses develop self-confidence, critical thinking ability, clinical competency, and abilities related to decision-making and judgment [56].

3.3. Defining empirical referents of facilitation

Empirical referents are the instruments that measure the defining attributes [21]. These are measurable indicators showing that facilitation improves critical care unit clinical outcomes. The context of the analysis occurs in critical care units where interventions will be implemented to improve patient outcomes. The facilitator provides nurses and critical care staff with the knowledge to support them in achieving the outcomes. Facilitation is a process the facilitator uses to assist others in changing their attitudes, skills, or behaviors.

4. Discussion

This study provides a comprehensive concept analysis of facilitation in a critical care environment. In critical care units, facilitation roles are shared among nurse educators, professional nurses, and clinical preceptors in the ICU environment [7]. Facilitation is crucial in critical care units to guide and support nurses and critical care staff to achieve better clinical outcomes. This can reduce stress associated with a lack of knowledge and skills in complex, unpredictable critical care units where nurses and critical care staff are dealing with life-threatening situations. The model, borderline, and related cases were explained in detail to clarify facilitation in critical care units, resulting in improved and poor clinical outcomes. The theoretical models in different disciplines, such as education and psychology, were discussed. Rogers' humanistic theory can be applied in critical care units to ensure a person-centered approach. Facilitators can utilize this theory when training nurses and critical care staff to ensure person-centered training. This approach builds trust and is advantageous in improving clinical outcomes. Nurses feel valued, respected and supported [13]. The Facilitator Decision-Making Model can be beneficial for timely decision-making, and nurses and critical care staff manage to solve the problems in critical care units [7]. The Theory of Experiential Learning indicates that nurses and critical care units learn from lived experiences [18]. The social facilitation framework creates social relationships amongst critical care staff and multi-disciplinary teams. Teamwork is effective in improving clinical outcomes through communication, decision-making, and problem-solving [18]. The effectiveness of facilitation can result in change and improve clinical outcomes in critical care units by increasing collaboration among critical care staff and improving communication and leadership. The Experiential Learning Framework is beneficial in facilitating learning in critical care units through simulations, workshops, role-playing, meetings, and handover reports [18]. The definition of facilitation remains ambiguous in critical care units, where nurses and critical care staff are facilitated to learn skills in complex, fast-paced critical

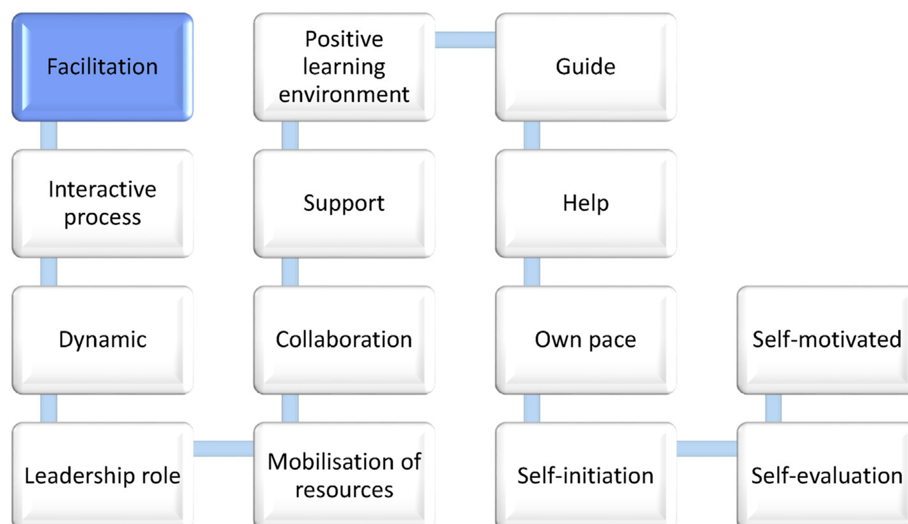

Fig. 4. The operational definition of facilitation.

care environments, admitting patients with critical, unstable conditions. Mathisen et al. confirm that critical care settings are complex and have a unique organizational culture, and multifaceted barriers affect the success of implementing the practice of facilitation [11]. This study's findings indicate that the literature is deficient in clarifying the concept of facilitation in the critical care setting. Therefore, this study aimed to conduct a concept analysis to describe and clarify the meaning of facilitation in critical care environments. Ruggeri et al. mentioned that understanding the definition of facilitation is the first step in building a strong theoretical foundation [60]. Definitions in dictionaries, thesaurus, and subject literature were compared, and an operational definition of facilitation was developed. The researcher proposes conducting comparative studies to evaluate the effectiveness of different facilitation techniques within critical care environments. This can help identify best practices and potentially universal facilitation strategies most effective in high-stress healthcare settings. The findings indicated that concepts such as clinical supervision, mentoring, and coaching were used interchangeably with the concept of facilitation. Clarification of these concepts will assist facilitators in understanding the deeper meaning of the concepts as compared to facilitation. The facilitators are allocated to supervise nurses and critical care staff to ensure a positive learning environment. Creating a positive learning environment influences the achievement of the learning outcomes [47,61].

Analysis of various sources identified 11 attributes: dynamic, interactive process, positive environment, mobilization of resources, assisting, student-centered, shared goals, collaboration, engagement, participation, and feedback. The creation of a positive environment is needed in critical care units to facilitate nurses and critical care staff to learn through the utilization of various methods such as simulation and meetings. Critical care nurses appreciate input as part of the facilitation process in clinical practice, as it encourages self-reflection and self-evaluation to close the gap between real-life and desired performance [62].

Seven identified antecedents of facilitation are facilitator qualities, Motivation, positive learning environment, student-facilitator relationship, availability of time, and specified learning outcomes. Facilitation is a fundamental component of nursing education, which assists and guides nurses and critical care staff in pursuing the learning outcomes in the clinical environment to develop clinical competency [52,55]. The facilitators are allocated to supervise nurses and critical care staff to ensure a positive learning environment. Creating a positive learning environment influences the achievement of the learning outcomes [63,64]. The facilitators have the qualities and experience to build the critical care nurses' competencies and confidence [61,62]. Muthathi et al. confirmed that, in South Africa, facilitation is essential and plays an integral part in clinical practice by assisting nurses and critical care staff in applying theory and skills in real-life situations [17,65,66].

The following are the consequences of facilitation: change, professional development, competency, quality development, increased job satisfaction and staff retention, and increased self-confidence. Training through facilitation improves critical care nurses' knowledge and skills, enabling them to engage more with their patients and resulting in increased patient satisfaction. Burgess et al. report that quality standards are improved through direct observation and feedback by critical care nurses and critical care nurses [41]. Facilitation utilized effectively can improve the clinical outcomes of patients, improve quality patient care, and increase job satisfaction. Effective facilitation can result in effective communication and effective leadership. Encouraging nurses and critical care staff through facilitation can increase staff retention and increase collaboration with the multi-disciplinary team, which will lead to better patient outcomes.

Nursing and critical care staff should be trained in effective communication, teamwork, and leadership. Training can be done in workshops and conferences. Simulations and role-play scenarios in these workshops should be tailored to critical care situations to ensure applicability. Facilitators should focus their training on evidence-based practices to improve clinical outcomes through teamwork, communication, leadership skills, timely decision-making, and problem-solving. Facilitators should reinforce the importance of collaboration with other multi-disciplinary teams and provide critical care staff with continuous feedback. Reinforcing the importance of collaboration amongst nurse educators, registered nurses, clinical facilitators, and clinical preceptors is recommended to enhance facilitation in the critical care context. There is a need to review critical care protocols and to teach the critical nursing staff about these protocols. The standardized procedures, policies, and protocols should reinforce the importance of facilitation in improving clinical outcomes. The facilitators should

also be offered training at the workshop to ensure the critical care staff receives up-to-date information on managing ICU conditions. Quality improvement plans for patients should be written and encourage evaluation of competencies.

5. Theoretical definition

The subject literature defines facilitation as a leadership role and a dynamic, interactive process whereby a facilitator creates a positive learning environment through collaboration with group members by mobilizing resources such as tools and activities to help, guide, and support nurses and critical care nurses to increase effective decision-making, problem-solving and critical thinking and achieve their goals. Facilitation is characterized by personal involvement, self-initiation, and pervasiveness, and members set their own pace of learning. The operational definition of facilitation is simplified in Fig. 4.

6. Theoretical validity

Theoretical validity is the degree of developing a concept analysis that conforms with the theoretical definition. Definitions of facilitation were explored in depth using dictionaries, thesaurus, and subject literature. Validation was ensured using epistemological, pragmatic, linguistic, and logical principles [66].

7. Conclusions

This study clarifies the meaning of facilitation in a critical care context using the eight steps of Walker and Avant. Databases, books, dictionaries and thesaurus were used to search the literature to theoretically define facilitation in critical care units. Facilitation is described as a leadership role and a dynamic, interactive process whereby a facilitator creates a positive learning environment through collaboration with group members by mobilizing resources such as tools and activities. This process is aimed at helping, guiding, and supporting critical care nurses and nursing staff to increase effective decision-making and problem-solving and guiding them to achieve their goals. Different theories from other disciplines were applied to show effective facilitation contributes to improved clinical outcomes. Attributes, antecedents, and consequences of facilitation were outlined, and examples of model cases, borderline cases, and contrary cases were utilized to indicate how facilitation is applicable in real-life situations. The concept analysis of facilitation focused on theoretically analysing the concept, and empirical verification still needs to be performed.

CRediT authorship contribution statement

Mpho G. Chipu: Methodology, Data curation, Investigation, Validation, Writing – original draft, Writing – review & editing, Conceptualization. **Charlené Downing:** Conceptualization, Methodology, Validation, Supervision, Writing – review & editing.

Data availability statement

Data sharing does not apply to this review, as no data sets were generated or analyzed during the current study.

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Declaration of competing interest

The authors declare that they have no other competing interest.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijnss.2024.10.008.

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