Navigating the Transition: A Qualitative Inquiry into the Mentorship Role of Trained Nurses in Supporting Novice Nurses

***Eddie Leolee V. Tacuhan**

Misamis University, Ozamiz City, Philippines

***Corresponding Author**

DOI: https://doi.org/10.47772/IJRISS.2026.10200030

Received: 08 February 2026; Accepted: 14 February 2026; Published: 22 February2026

ABSTRACT

Transitioning into operating room (OR) practice requires skilled mentorship, and trained operating room nurses play a critical role in guiding novices in this high-risk environment. However, little is known about how trained OR nurses manage the challenges of mentoring while fulfilling their clinical responsibilities, particularly in private hospitals in the Philippines. This study explored the experiences of trained nurses in mentoring novice nurses in the OR of a selected private hospital in Pagadian City, Zamboanga del Sur. Using a case study design, face-to-face semi-structured interviews were conducted with five trained OR nurses, two novice OR nurses, and two OR nurse supervisors selected through purposive sampling. Data were analyzed using Yin's six-stage case study process. The findings revealed four major themes: structured orientation through compliance with OR policies and guidelines, hands-on demonstration and supportive guidance for skill development, challenges in novice nurse engagement and mentorship continuation, and continuation of mentorship and support for novice nurse learning. The study concludes that policy-driven orientation and hands-on, supportive mentorship are the main factors developing competent and confident novice OR nurses but must be reinforced by adequate staffing and organizational support. Strengthening formal OR mentorship structures in private hospital may enhance novice nurses' adaptation, improve retention, and promote patient safety in the perioperative setting.

Keywords: mentorship, operating room nursing, novice nurses, clinical competence, perioperative nursing

INTRODUCTION

The operating room is a demanding environment in the hospital because it is complex, dynamic, and often time- and resource-constrained (Göras et al., 2020); teamwork, precision, and efficiency are important. Teamwork in the operating room (OR) is a significant factor in preventing complications for surgical patients (Ghanmi et al., 2024). A basic surgical team is led by a qualified surgeon, an anesthetic team, trained nurses including circulating and scrub nurses, and a novice nurse (Leach et al., 2011). All staff, including novice nurses, must be fully equipped with the necessary knowledge and skills required in the operating room. Trained Operating Room (OR) Nurses play a necessary role (Mathenge, 2020), not only focusing on patient care or patient safety but also mentoring novice nurses as they bridge the gap between generations of learners (Richmond & Issa, 2020). Effective mentorship ensures that novice nurses acquire necessary skills and confidence in rendering care to patients and performing high-pressure surgical environment (Pelin & Ayise, 2019).

In the Philippines, the Operating Room Nurses Association of the Philippines, Inc. (ORNAP) is an organization that promotes the highest professional standards in perioperative nursing (Operating Room Nurses Association of the Philippines [ORNAP], n.d.). ORNAP encourages nurses and mentors to uphold the highest professional standards in the operating room. To enhance their mentorship capabilities, OR nurses must pursue postgraduate studies and participate in related seminars or training programs to stay updated on trends and advancements in OR nursing, ultimately improving mentorship (Merillana, 2024). Similarly, Bourke (2025) conducted a study on the importance of mentor training and concluded that mentors have better experiences in guiding novice nurses when they receive proper training in the operating room – an aspect emphasized by ORNAP.

Trained nurses provide guidance and reassurance that will help novice nurses transition to their new role in the operating room (Persaud, 2008). As a result, this additional emotional labor can be exhausting for mentors, especially in high-stress situations where quick action or decision-making is required. As such, mentorship should not only focus on skill development but also enhancing confidence among novice nurses.

According to Eriksson et al. (2020), novice nurses often feel overwhelmed or isolated in their new role. They have limited competency in managing patient problems and critical conditions, such as those encountered in the operating room (Ortiz, 2016). The International Council of Nurses (2021) defines nurse competence as comprising knowledge, skills, and judgment, which is greatly enhanced through effective mentorship (Hagrass et al., 2023). Wangesteen et al. (2012) identified work experience as a significant predictor of competence in novice nurses. Therefore, novice nurses must be mentored and supported by a trained nurse (Gularte-Rinaldo et al., 2023).

Liebenberg (2018) conducted a study that revealed trained nurses experienced production pressure, staff shortages, and insufficient material resources in the OR, which influenced their mentorship capacity. The study also mentioned other challenges, including novice nurses' limited competence, inadequate orientation for nurses entering the OR, as well as the attitudes of novice nurses and other OR team members. Trained nurses attributed the poor retention of novice nurses and nursing shortages in the OR to ineffective mentoring. If guided and mentored appropriately, novice nurses can become competent individuals and develop leadership skills (Kalbarczyk, Serafin, & Czarkowska-Pączek, 2022).

Moon et al. (2024) found that effective mentorship is important in helping novice nurses enhance the skills required to function efficiently in the clinical area, including the operating room. According to Dikmen and Şenyuva (2024), structured mentorship programs contribute to increased clinical competence and reduces stress among new nurses. Similarly, recent findings show that structured mentorship programs improve job satisfaction and nurse retention (Doodlesack et al., 2024). Despite this positive outcome, Eriksson et al. (2020) found that trained operating room nurses often experience challenges in fulfilling their role as mentors due to balancing a heavy workload and providing proper patient care.

While mentorship is important in bridging the competency gap among novice nurses (Hagrass et al., 2023), the effectiveness of this process heavily relies on institutional support or well-structured hospital-based programs (Schuler et al., 2021). Hospital administrations and nursing leadership play a crucial role in creating a conducive environment for mentorship by providing adequate staffing, protected time for mentoring activities, and resources for continuous education (Sundler et al., 2021). Without these structural supports, trained nurses in the operating room may struggle to balance their dual responsibilities of patient care and mentorship, leading to burnout and decreased mentoring effectiveness (Acea-López et al., 2021). Therefore, a formalized mentorship program, combined with policies that recognize and support the mentoring role, is important for maintaining continuous knowledge transfer and ensuring the overall success of novice nurses in the demanding operating room environment.

Mentorship programs in the Philippines, particularly in private institutions, primarily focus on guiding novice nurses in providing patient care and ensuring patient safety. In the operating room, the mentor is typically a trained senior nurse who has undergone training in a licensed training hospital, while the mentee is a newly employed registered nurse or a newly assigned nurse from a different area of the hospital with little to no experience in the OR. Such mentorship may also contribute to improved nurse retention. Fischer et al. (2015) found that effective mentorship in primary care centers or institutions fosters rapport and trust between mentors and mentees. This, in turn, enhances the mentees' confidence, leading to the delivery of competent nursing care.

This study addressed **a knowledge gap** in existing literature. Numerous studies have explored the impact of mentorship in novice nurses but only a few research on the mentors' point of view and their experiences as mentors in the operating room have been examined (Kallerhult et al., 2024). Thus, this study aimed to explore and understand the experiences of trained nurses in the operating room as they mentor novice nurses in rendering patient care and working in a high-pressure surgical environment. The study described the mentoring roles they perform – including supervision of technical skills, emotional support, role-modelling professional behavior, facilitating learning opportunities, and providing feedback for competency development.

Utilizing a case study approach, this study intended to provide a comprehensive understanding of the role of trained nurses in mentoring novice nurses while ensuring adequate patient care in the operating room. The findings of the study also highlighted the crucial role of trained nurses in balancing mentorship while rendering care to surgical patients in the operating room. Additionally, these findings served as a basis for developing policies and initiatives that strengthen mentorship in the OR. By addressing the challenges faced by trained nurses, healthcare institutions can create a supportive environment that facilitates the professional growth of novice nurses, leading to improved retention rates and workforce stability.

Theoretical Framework

This study was anchored on the Novice to Expert Theory by Dr. Patricia Benner (2001) and Adaptation Model by Sister Callista Roy (1976).

The study first utilized Novice to Expert Theory. This theory described the progression of nurses through five stages of competence. It highlights experiential learning as a foundation for skill acquisition. This theory states that expertise is developed through mentorship and experience (Udan, 2020). Additionally, Benner's theory categorize competence into five stages for nurses: the novice, the advanced beginner, the competent, the proficient, and the expert. Each stage reflects a nurse's ability to exercise clinical judgment and adapt to various patient care scenarios (Benner, 2001).

The novice stage in the model is when the novice nurse has little to no previous experience. In this stage, the novice nurse struggles with prioritization and time management, making mentoring crucial. As the novice acquires more knowledge, the nurse progresses to the advanced beginner stage. This advance beginner nurse has enough experience in the operating room but not enough to synthesize that information into a larger picture. They can assist surgeons at the surgical table but only under strict supervision from a mentor. The third stage is the competent stage. The competent nurse now has some skills and experience under their belt. They can assist surgeons at the surgical table with minimal supervision from a mentor. Assisting alone in minor surgical procedures is manageable at this stage. The fourth stage is proficient. These proficient nurses are characterized by mastery and confidence. They can easily manage difficult tasks in the operating room and are able to assist and set up the operating room prior to surgery without supervision from a mentor. The final stage is expert. These expert nurses are all about nuance. They have a deep understanding of the intricacies of the operating room and are able to anticipate and intuit subtle changes in the area regarding the patient's condition. (Kilpatrick, 2024).

The theory has been widely used in research as it discusses individual progress. A notable study by Sterner et al. (2021) explored factors that predict novice nurses' trust in their ability to provide care in acute situations and examined elements influencing their perceived clinical judgment, revealing that the two most significant predictors were the duration of work experience and participation in acute situations during nursing education. Another study used by Ogdoc and Superable (2021) examined the clinical preceptorship among novice nurses in Misamis Occidental, Philippines, focusing on their competence and confidence, and found that preceptorship and peer mentoring guided by Benner's Novice to Expert Theory played a vital role in easing transition, reducing stress, and enhancing clinical skills despite challenges in program implementation. Similarly, Dobbins (2018) explored graduate nurses perceived confidence in clinical competence and highlighted that novice nurses initially struggled with stress and inadequacy but gradually gained confidence and improved performance through supportive preceptorship and structured clinical exposure, further reinforcing the applicability of Benner's framework in understanding the developmental progression from novice to expert.

The study also used Sister Callista Roy's Adaptation Model (1976) as the second theoretical framework. This model complements the primary framework by offering an understanding of how individuals adapt to challenging and dynamic situations. It serves as a lens to examine the internal and external coping responses of trained nurses as they transition into mentoring roles in the high-pressure environment of the operating room. The framework is particularly useful in exploring how mentors adjust to evolving roles, manage environmental stressors, and maintain a balanced self-system while guiding novices.

The major assumption of Adaptation Model is that people, both individually and in groups, are viewed as holistic adaptive systems, with coping processes acting to maintain adaptation and to promote person and environment transformations. Through coping processes, persons as holistic adaptive systems interact with the internal and external environment, transform the environment, and are transformed by it (Browning Callis, 2020). The adaptation theory says that people are bio-psycho-social beings that interact with changing environments. It focuses on how the person adapts and perceives a certain situation. Adaptation occurs when people respond positively to environmental changes.

A model from Sister Callista Roy's Adaptation Model has been utilized by some researchers. One study, entitled The Nature and Evolution of the Mentoring Relationship in Academic Health Centers, was among them. It was published by Hills et al. in 2020 and examines the essential qualities of a successful mentoring relationship, its longitudinal nature, common challenges faced by mentors and mentees, strategies for skill development, role expectations, and the potential benefits for both parties. The results reveal that a successful mentoring relationship in academic medicine is a dynamic, growth-oriented process that requires intentional effort, mutual respect, and reflection, enabling both mentors and mentees to develop key qualities, navigate challenges, and achieve professional and personal benefits over time.

In an intervention study, Afrasiabifar et al. (2013) applied Roy's Adaptation Model to hemodialysis patients and reported improvements in both physiological and psychosocial adaptation after a RAM-based education program. Similarly, research conducted by Balabag and Guinoo (2020) utilized the model in examining the stress adaptation of nursing students during clinical exposure, highlighting that supportive learning environments and effective coping strategies facilitated better adaptation in academic and clinical demands.

The theory guides the study in exploring and understanding the experiences of trained nurses in mentoring novice nurses in the operating room. With their experiences, they may learn to adapt and accept the challenges and respond positively to the changes in their lives.

Conceptual Framework

International and local literature consistently shows that the transition from novice to competent nurse is strongly influenced by the quality of orientation and mentorship provided in the clinical environment. Formal mentoring and preceptorship programs enhance novice nurses' clinical competence, confidence, and professional commitment, particularly when they include structured goals, regular feedback, and protected mentoring time (Jangland et al., 2021). In perioperative settings, competency-based orientation, clearly articulated policies, and role-specific checklists are essential because of the complexity and high-risk nature of the operating room (OR) environment (Heizenroth, 1996).

Studies further emphasize that the development of novice nurses in specialty areas such as the operating room is not solely dependent on technical instruction but is shaped by a dynamic interaction of institutional structures, mentoring practices, individual challenges, and adaptive learning strategies. In this study, the experiences of trained operating room nurses in mentoring novice nurses are understood through four interrelated themes that describe how mentorship unfolds within a private hospital context.

Structured Orientation Through Compliance with OR Policies and Guidelines. Structured orientation serves as the foundational element in the mentoring of novice operating room nurses. Evidence from the literature indicates that physical issues related to clinical exposure, psychological readiness, role clarity, and access to institutional support influence how successfully individuals transition into specialized professional roles (Erfina et al., 2019). In the operating room context, structured orientation is operationalized through written OR policies, orientation packets, standardized checklists, pre-tests, and competency trackers. These mechanisms provide novice nurses with explicit expectations, defined responsibilities, and clear safety standards before they engage in hands-on procedures.

The use of policy-driven orientation supports novice nurses in navigating the complexity of circulating, scrub, and assisting roles while minimizing uncertainty and risk. This approach aligns with Benner's description of the novice stage, wherein nurses rely heavily on rules and guidelines to perform tasks safely and accurately. By

grounding mentorship in institutional policies, trained OR nurses establish a consistent framework that promotes patient safety and supports the gradual development of competence among novice nurses.

Hands-On Demonstration and Supportive Guidance for Skill Development. Beyond structured orientation, the development of clinical competence among novice OR nurses is facilitated through hands-on demonstration and supportive guidance provided by trained nurses. Empirical studies consistently show that experiential learning, demonstration, return demonstration, and supervised practice are critical in translating theoretical knowledge into safe clinical performance (Joseph et al., 2022). In the operating room, trained nurses guide novice nurses through step-by-step demonstrations, teach-back methods, and repeated practice while providing timely and constructive feedback.

Supportive guidance plays a crucial role in building novice nurses' confidence, particularly in a high-pressure surgical environment. Calm correction of mistakes, private feedback, and encouragement foster a psychologically safe learning environment that enables novice nurses to ask questions and engage actively in learning. Through repeated mentored experiences, novice nurses are able to progress toward higher levels of competence, reflecting the experiential progression described in Benner's Novice to Expert Theory.

Challenges in Novice Nurse Engagement and Mentorship Continuation. Despite the presence of structured orientation and hands-on mentoring strategies, mentorship in the operating room is influenced by organizational and individual challenges. Literature highlights that workload pressures, understaffing, mentor reassignment, and competing clinical responsibilities can disrupt mentorship continuity and limit opportunities for guided learning (Ojala et al., 2025). In addition, novice nurses may experience information overload, fear of committing errors, hesitancy to ask questions, and reliance on routines from previous clinical areas.

These challenges can negatively affect novice nurses' engagement and confidence, potentially delaying their progression toward competence. From an adaptive perspective, such constraints function as environmental stressors that strain both mentors and novices. When mentorship is interrupted or inconsistent, novice nurses may feel unsupported or hesitant to seek clarification, which can compromise learning and patient safety.

Continuation of Mentorship and Support for Novice Nurse Learning. In response to these challenges, trained nurses, supervisors, and novice nurses employ strategies to sustain mentorship and promote continuous learning. The literature emphasizes that protected mentoring time, stable mentor–mentee pairing, and structured endorsement to co-mentors enhance learning continuity and support successful transition in complex clinical settings (Lalithabai et al., 2021). Additional strategies such as note-taking, repeated cues, teach-back methods, and reflective practice strengthen retention and understanding.

These adaptive strategies are consistent with Roy's Adaptation Model, which views individuals as holistic adaptive systems responding to environmental demands through effective coping processes. Supportive mentorship environments enhance novice nurses' ability to adapt, build confidence, and develop clinical judgment despite organizational constraints. Through sustained guidance and supportive learning practices, novice OR nurses are better positioned to achieve competence, confidence, and safe independent practice.

Taken together, the relationships among structured orientation, hands-on mentorship, contextual challenges, and adaptive learning strategies explain how trained operating room nurses support novice nurses' transition within a high-risk surgical environment. These interconnected elements guided the exploration of mentorship experiences in this study and informed the understanding of how institutional support and mentoring practices shape novice nurses' professional development in the operating room.

This study aimed to explore and understand the experiences of trained nurses in mentoring novice nurses in the operating room in a selected private hospital in Pagadian City, Zamboanga del Sur. The mentoring roles included supervision of technical skills, emotional support, role-modelling professional behavior, facilitating learning opportunities, and providing feedback for competency development. Understanding these relational and developmental aspects is critical: mentorship is not only the transfer of technical know-how but also the cultivation of judgment, professional identity, and confidence as nurses progress from novice to advanced stages.

METHODS

This study utilized a qualitative study specifically a case study. Case study is an investigation and analysis of a single or collective case intended to capture the complexity of the object. Using a case study design allowed the researcher to conduct an in-depth analysis of a case or compare several cases to deepen one's understanding of the research problem (Creswell & Poth, 2016). Yin (2020) describes case study methodology as a strategy that focuses on the scope, process, and methodological characteristics, emphasizing the nature of inquiry as being empirical and the importance of context to the case. For this study, the researcher gained an in-depth exploration of real-world experiences of trained nurses engaged in mentorship with novice nurses in the operating room.

The study was conducted in the operating room (OR) department of a private hospital located in Pagadian City, Zamboanga del Sur. This hospital was a primary-level healthcare facility with an approximate 50-bed capacity and caters to both elective and emergency cases. The OR department staffed by trained OR nurses, novice nurses newly assigned to the OR, and a supervisor nurses who oversee clinical operations, patient safety, and adherence to institutional policies. These trained OR nurses had been exposed to training in a licensed training hospital. Trained OR nurses in this facility are registered nurses who have completed a formal three-month in-service training program in a licensed training hospital and are responsible for circulating, instruments, and assisting roles during surgical procedures. In addition to their clinical responsibilities, these trained nurses serve as mentors to the novice nurses undergoing orientation and transition into perioperative practice.

The participants in this study involved three groups assigned to the operating room: five trained nurses (mentor), two novice nurses (mentee), and two nurse supervisors. However, data saturation determined the actual number of participants, who were identified through purposive sampling. By involving trained nurses, novice nurses, and nurse supervisors, the study triangulated perspectives by capturing different viewpoints on the mentoring process, the effectiveness of strategies used, and how mentoring relationship developed over time. The following were the inclusion criteria for selecting the participants: Nurse Supervisor: 1) with at least one year experience as an operating room nurse supervisor within the identified hospital in Zamboanga del Sur; and 2) must give consent to participate in the study. Trained Nurse: 1) must be a registered nurse; 2) assigned to the operating room for at least two years; 3) must have completed a three-month operating room nurse training; and 4) must give consent to participate in the study. Novice Nurse: 1) must be a registered nurse; 2) assigned to the operating room for less than six months; 3) must have no prior operating room nurse training; and 4) must give consent to participate in the study. Those who joined the pilot test were excluded as study participants.

A semi-structured interview guide was used in gathering the data. In ensuring the interview guide's validity and reliability, the researcher conducted pilot interviews with three groups representing the same roles as the study participants – five trained nurses, two novice nurses, and also two nurse supervisors – but from a different schedule or shift and not included in the final data gathering. Based on the responses, questions that are vague or ambiguous were revised to elicit more detailed and thoughtful answers. A face-to-face interview format was performed to enable the researcher to clarify questions, ask probing questions, and observe non-verbal communications.

For data collection, the researcher sought first approval from the Dean of the Misamis University Graduate School to conduct the study. Data was gathered through in-depth interviews and related studies. After approval has been obtained, the researcher then secured permission from the Medical Director and Chief Nurse of the hospital to allow the conduct of the study. Once the letter of request was approved, the possible participants were then identified, presenting them with a clear and concise explanation of the study's purpose, objectives, and the significance of their participation. Informed consent was sought from each participant, outlining their voluntary involvement, assurance of confidentiality, and the freedom to withdraw from the study without repercussion. Then, a scheduled interview was conducted. It was digitally recorded and lasted for 45 to 60 minutes for each participant. The researcher also recorded the time of the interview, noted the participants' non-verbal cues, and reflected on the journal for review and transcription purposes. The researcher also asked for feedback from the participants at the end of each interview. The responses of each participant were transcribed. The transcriptions and analysis were presented back to the participants as part of the validation process to ensure that what had been written was reflective of their experiences.

This study was submitted to Misamis University Research Ethics Committee (MUREC) for review on the ethical aspects of the research. Prior to the interviews, the researcher explained to the target participants the nature of the study, the purpose, benefits, and the possible risks. The participants were asked to sign the informed consent form as proof of their voluntary participation in the research. They were assured of the confidentiality of their responses and the anonymity of their identities. Pseudonyms were used to protect the confidentiality of participants and their institutions. They were assured that their personal information and all data were saved secretly and were only used for the study. Nurses who participated in the study helped reflect on their professional roles and mentoring practices; they promoted self-awareness and growth. Participants gained access to a summary of the study's findings and recommendations that may help improve mentorship in their institutions.

The participants were not physically and emotionally harmed or violated in any way during the data gathering. The participants were informed of their right to withdraw from the study at any time and the right to ask the researcher to return the audiotapes of their interviews. Also, only the researcher has access to the data to be gathered. Six months after the findings of the study presented to the Thesis Committee, the research data was discarded through shredding.

This study utilized the six stages of the Case Study Processes of Yin (2009). The following were the steps employing a qualitative case study approach as guide in analyzing the data gathered: (1) Planning, (2) Designing, (3) Preparing, (4) Collecting, (5) Analyzing, and (6) Sharing. Researcher focuses on trained operating room nurses mentoring novice nurses, employing purposive sampling to acquire participant's relevant data. Data is then transcribed, securely stored and systematically coded. Open coding was the step involved by reviewing the transcription to identify key statements. Data triangulation was then used to compare interview data of the group participants. Iterative explanation-building process and linking themes was involved in the process to proceed with sharing the data to help others understand the mentorship process in the operating room, proving them implication for the policy and practice.

RESULTS AND DISCUSSIONS

The participants in this case study consisted of five trained operating room (OR) nurses who served as mentors. All were registered nurses who met the inclusion criteria of being assigned to the OR for at least two years and having completed a three-month operating room nurse training program. TN1 had been assigned in the OR for around five years, while TN2 had three years of OR experience. TN3 had one year and six months of OR experience, whereas TN4 and TN5 had almost four years working in the OR, respectively. All five mentors had completed a structured three-month in-service OR training in a training hospital in Cagayan de Oro City and were permanently assigned in the OR, where they regularly handled circulating, instrument, and assisting roles in surgical procedures.

Two novice nurses participated in the study as mentees, together with two nurse supervisors from the same operating room. The novice nurses were registered nurses who satisfied the inclusion criterion of being assigned to the OR for less than six months and having no prior formal OR nurse training. Both NN1 and NN2 had been assigned in the OR for two months at the time of data collection. NN1, aged 30, previously worked in the medical ward and emergency room, while NN2, aged 23, had six months of experience in a medical–surgical ward before transfer to the OR.

The nurse supervisors fulfilled the requirement of having at least one year of experience as OR nurse supervisors in the study setting. SN1 had served as an OR supervisor nurse for more than three years and handled committees such as PIDSAR and ambulance services, whereas SN2, aged 34, had been an OR supervisor in the OR for two years and was in charge of the patient safety committee.

Analysis of the interview data revealed four major themes that describe the mentorship experiences of trained nurses in supporting novice nurses in the operating room. These themes include: (1) Structured Orientation Through Compliance with OR Policies and Guidelines; (2) Hands-On Demonstration and Supportive Guidance for Skill Development; (3) Challenges in Novice Nurse Engagement and Mentorship Continuation; and (4) Continuation of Mentorship and Support for Novice Nurse Learning.

The mentorship of novice nurses in the operating room (OR) is guided by structured orientation, hands-on demonstration, and supportive strategies from trained OR nurses. "Structured Orientation Through Compliance with OR Policies and Guidelines" emphasizes the importance of written policies, checklists, and step-by-step guidelines to ensure novice nurses understand roles, responsibilities, and safety standards. "Hands-On Demonstration and Supportive Guidance for Skill Development" highlights the practical teaching approach of mentors, including live demonstrations, return demonstrations, and private feedback to foster competence, confidence, and patient safety. "Challenges in Novice Nurse Engagement and Mentorship Continuation" reflects difficulties encountered during mentorship, such as hesitation to ask questions, reliance on prior routines, or staff shortages. In response, the theme "Continuation of Mentorship and Support for Novice Nurse Learning" captures strategies used by trained OR nurses to maintain consistent guidance, provide repeated cues, implement teach-back methods, and boost the confidence of novice nurses, ensuring safe and effective skill acquisition in the high-stakes OR environment.

Structured Orientation Through Compliance with OR Policies and Guidelines

Structured orientation based on clear OR policies and guidelines serve as a foundational pillar for integrating novice nurses into the highly technical and high-stakes environment of the operating room. When novice nurses are provided with written protocols, checklists, and standardized procedures (as reflected in the participants' statements), this formal introduction reduces uncertainty, ensures role clarity, and promotes patient safety. Aldosari et al. (2024) found that orientation programs, including modules on unit-specific protocols, policy familiarization, and hands-on learning, significantly improve competence, knowledge, and confidence of new nurses.

A quasi-experimental study by Kawai et al. (2022) demonstrated that newly graduated nurses whose preceptors underwent formal education interventions achieved greater professional competence over time than those without structured preceptorship. Moreover, a recent perioperative-specific orientation model combining online modules, clinical preceptorship, and structured skill labs improved retention rates, reduced onboarding time, and enhanced competency outcomes among novice OR nurses (Li & Conway, 2024). Therefore, the participants' reliance on written OR policies and structured orientation reflect best practice: it does not only help novice nurses navigate the complexity of OR roles but also aligns with evidence-based strategies shown to improve clinical competence, confidence, and retention in surgical and perioperative settings. Here are some of the participants' statements that will support the theme:

"We strictly followed the OR policy prepared by the head nurse, checked by the supervisor nurse, and approved by the higher management." (TN1)

"I present an organized hospital policy and emphasize step-by-step guidelines when mentoring novice nurses." (TN2)

"I hand out the written OR policy and ask the novice nurse to read and clarify it before handling procedures." (TN3)

These statements indicate that trained OR nurses are intentionally ground the mentorship process on written institutional policies and standardized guidelines. Rather than relying on informal instruction, mentors also emphasize policy familiarization as a primary strategy to ensure consistent mentorship and accountability during the novice nurses' transition. The reliance on approved policies reflects an intentional effort to minimize errors and align mentoring practices with institutional standards in the operating room.

Structured orientation through institutional OR policies, written guidelines, and clear checklists provides a vital foundation for novice operating room (OR) nurses, facilitating role clarity, procedural consistency, and patient safety standards before independent practice. The nurses' insistence on having novices read and clarify policy packets corresponds with findings from Competency Perceptions of Operating Room Nurses and Opinions of the Surgical Team on Factors Facilitating Competency Acquisition, which identified structured training programs and institutional support as key factors influencing perioperative competency among OR staff (Uçak & Cebeci, 2025).

A quasi-experimental study by Bagheri et al. (2025) demonstrated that combined theoretical instruction and structured practical training significantly improved clinical competence among perioperative nursing students, underscoring the value of formal orientation frameworks for building competence in surgical settings. A randomized controlled trial by Bwanali et al. (2025) found that simulation based perioperative education, grounded in standard protocols and checklist usage, enhanced self-competence and knowledge acquisition, adding evidence that structured, policy aligned orientation supports safe and effective skill development. These studies validate the participants' approach: structured OR orientation grounded in institutional policy not only supports novice nurses' confidence and competence but also aligns with evidence-based practices that contribute to patient safety and quality perioperative care. Participants 4 and 5 also expressed that:

"They must read and familiarize themselves with the OR policy and observe first before doing any procedures." (TN4)

"OR policy and checklist are given to the novice nurse and observation is required before performing any role." (TN5)

These accounts further demonstrate that mentorship follows a sequential process of "read–observe–perform," wherein novice nurses are expected to develop foundational knowledge before engaging in hands-on practice. This structured progression allows novice nurses to internalize safety standards and procedural expectations prior to assuming active roles, thereby supporting gradual competence development in a high-risk surgical environment.

Requiring novice operating room (OR) nurses to read institutional policies and use checklists, coupled with an initial observational period before actual participation, provides a critical safeguard for patient safety and helps bridge the gap between theory and practice in high-risk surgical settings. The insistence on policy familiarization and observation by trained OR nurses reflect best practice, aligning with evidence that structured orientation programs improve competence, consistency, and safety (Masitho et al., 2024). Checklists and standardized protocols have been shown to help new graduate nurses consistently meet unit standards and reduce safety lapses in critical care settings (Noor & Al Yami, 2021). Further, simulated perioperative education using checklist-based models significantly enhances self-competence and procedural knowledge among beginner nurses, underscoring the value of guideline driven orientation prior to independent performance (Bwanali et al., 2025). Hence, the participants' approach of "read → observe → practice" aligns well with internationally recommended perioperative nursing education strategies and supports safer, more effective onboarding of novice OR nurses (Bwanali et al., 2025). Nurse Supervisors also provided these statements:

"By implementing the OR policy, we rely heavily on the OR orientation packet; the novice nurse must read the guidelines, observe proper procedures, identify instruments, undergo pre-test, and complete evaluation and competency trackers during mentorship." (SN1)

"We strictly follow the OR policy, conduct pre-tests during orientation, monitor mentor checklists, and evaluate whether the novice nurse can perform independently based on policy-guided assessment." (SN2)

From the supervisors' perspective, structured orientation is not only a mentoring strategy but also a governance mechanism. Their statements highlight the role of formal assessments, competency tracking, and policy-guided evaluation in ensuring that mentorship outcomes are measurable and aligned with patient safety requirements. This reinforces mentorship as an institutionally regulated process rather than an individual mentoring preference.

The structured orientation of novice nurses through adherence to OR policies and guidelines can be framed within Benner's Novice to Expert Theory (2001), which posits that nurses develop clinical competence through a staged progression from novice, advanced beginner, competent, proficient, to expert. Novice nurses entering the OR rely heavily on written policies, checklists, and structured guidance to navigate the complex and high-stakes environment safely. These structured guidelines provide clear expectations, step-by-step procedures, and standardized practices, which help novice nurses gain situational understanding and confidence in performing technical skills (Benner, 2001). The reliance on OR policies during orientation reflects Benner's emphasis on providing concrete rules and frameworks for novices, allowing them to transition from following rigid rules to

developing intuitive understanding through observation and hands-on practice. By integrating policy adherence with mentorship, novice nurses are supported in achieving competence while ensuring patient safety and procedural accuracy, aligning with Benner's model of experiential learning and skill acquisition. The perspectives of the trained nurses and supervisor nurses are validated by the novice nurses, who expressed that:

"The head nurse oriented me using a written OR policy or packet about the roles in the OR, including instrument identification, assisting the surgeon, and proper use of instruments." (NN1)

"During orientation, my mentor introduced me to the written OR policy and guided me in instrument identification, equipment uses, and the circulating, assist, and instrument nurse roles." (NN2)

The novice nurses' statements validate the effectiveness of policy-based orientation from the learner's perspective. Their accounts suggest that written policies and guided instruction helped reduce anxiety, clarify expectations, and support early adaptation to the complex operating room environment. This indicates that structured orientation not only benefits mentors and supervisors but also positively shapes novice nurses' learning experiences.

The theme "Structured Orientation Through Compliance with OR Policies and Guidelines" has significant implications for nursing practice, education, and patient safety. For practice, ensuring that novice nurses strictly follow OR policies foster consistency, reduces the risk of medical errors, and enhances the overall quality of care in the operating room. In terms of education, structured orientation provides a clear framework for mentors to guide novices effectively, allowing them to gradually develop competence and confidence in complex procedures. For patient safety, adherence to standardized policies and checklists ensures that critical steps are consistently followed, minimizing procedural complications and promoting a culture of safety. Moreover, this approach supports the professional development of novice nurses, as it aligns with evidence-based practices and allows them to transition smoothly from rule-following to more intuitive and competent practice over time (Benner, 2001; Riesenberg et al., 2020; Harder et al., 2021).

Hands-On Demonstration and Supportive Guidance for Skill Development

Hands-on demonstration and supportive guidance emerged as a key strategy through which trained operating room (OR) nurses help novice nurses acquire the complex skills required in the perioperative setting. Recent literature emphasizes that clinical teaching is most effective when preceptors first model a procedure, then supervise the learner's return demonstration with ongoing guidance and feedback. Preceptorship and mentorship programs for new nurses have been shown to improve clinical competence, confidence, and adjustment to the work environment, particularly when they combine structured clinical teaching with close preceptor support (Joseph et al., 2022). In perioperative settings, mentorship-focused OR training programs similarly report gains in perioperative competence and smoother transition for novice nurses when experienced OR nurses provide sustained, at-the-elbow guidance (Richmond and Issa, 2020). These findings support the theme that hands-on, closely guided mentorship is central to developing safe and confident novice OR nurses.

The trained nurses' descriptions clearly reflect a "me then you" apprenticeship pattern, in which mentors demonstrate the procedure first and then gradually hand it over to the novice nurse. These are the statements of the participants:

"I always prefer to show them first the procedure — 'me then you' — and strictly watch their step-by-step handling to ensure safety and confidence" (TN1).

"Before letting them perform, I demonstrate the roles first, then slowly correct mistakes and motivate them through appreciation and private conversations" (TN2).

"My teaching style is showing the procedure first, then letting them perform next while giving feedback and correcting mistakes privately" (TN3).

These statements confirm that demonstrations followed by supervised performance is not incidental but a consistent strategy among trained OR nurses in this study. International evidence shows that such demonstration–return demonstration cycles and supervised practice significantly improve technical performance and reduce errors among novice nurses, particularly for complex procedures in acute care and perioperative environments (Varghese et al., 2023). Thus, the participants' own words strongly validate the theme that hands-on demonstration is foundational to skills acquisition in the OR.

Beyond demonstration, participants highlight that supportive, non-intimidating feedback is integral to their mentoring role. These are their statements:

"I guide the novice nurse step-by-step, use questions and return demonstrations, and correct mistakes gently to prevent intimidation" (TN4)

"I use observation, teach-back, short, repeated cues, and calm correction while boosting the novice nurse's confidence" (TN5).

These accounts show how mentors combine technical oversight with emotional support to preserve novice nurses' confidence in a high-pressure environment. Current research on psychological safety in clinical learning environments emphasizes that learners are more willing to ask questions, admit uncertainty, and learn from mistakes when supervisors provide constructive, non-punitive feedback and maintain a safe climate (Degani & Alkhaled, 2024). Studies in nursing education and simulation likewise demonstrate that psychologically safe feedback enhances engagement, reflection, and skill performance among nursing students and novice nurses (Turner, 2023). In light of this, the mentors' emphasis on gentle correction, teach-back, and confidence-building confirms that supportive guidance is deliberately used to protect novices from intimidation while still ensuring safe practice.

The importance of protected mentoring time and structured monitoring further strengthens and grounds this theme. These are the statements from supervisor nurses:

"Protected mentoring time is the top priority for the mentorship process to ensure focused guidance for novice nurses." (SN1)

"We strictly follow the OR policy and regularly check mentor checklists to evaluate the progress of novice nurses." (SN2)

Novice nurses echoed this organizational emphasis; they also note that:

"Protected mentoring time is the top priority for the mentorship process" (NN1)

"Strictly follow the OR policy and regularly check mentor checklists to evaluate the progress of novice nurses" (NN2).

These converging perspectives from mentors, supervisors, and novices demonstrate that hands-on guidance is not only a personal teaching style but is embedded in unit policies and evaluation processes. Reviews of transition-support arrangements and preceptorship programs for new nurses highlight that protected preceptor time, clear learning objectives, and structured assessment tools are critical elements of successful support programs and are associated with improved competency and retention of novice nurses (Nijkamp et al., 2023). Perioperative reviews similarly stress the need for adequate human resources, formal preceptor preparation, and structured evaluation to ensure high-quality mentorship (Heggaraty et al., 2025). The participants' statements about mentoring time and checklists therefore provide concrete evidence that the theme is grounded in actual practice and reinforced at the system level.

This theme can be interpreted through Benner's Novice to Expert Theory, which explains how nurses progress through the stages of novice, advanced beginner, competent, proficient, and expert as they gain experience in real clinical contexts (Benner, 2001). Benner notes that novices rely heavily on rules and need close supervision and concrete examples, while more experienced nurses gradually develop pattern recognition and intuitive

judgment. The "me then you" approach, step-by-step guidance, return demonstrations, and ongoing feedback described by TN1–TN5 operationalize Benner's model: mentors provide structured experiences in which novices can safely enact tasks, receive immediate correction, and progressively build situational understanding. As novices repeatedly engage in mentored practice, they begin to move from rigid rule-following toward more fluid, context-sensitive decision-making, thus climbing Benner's competency ladder within the perioperative environment.

The theme "Hands-On Demonstration and Supportive Guidance for Skill Development" has important implications for nursing practice, education, and policy. For clinical practice, the participants' statements show that safe independent performance in the OR cannot be achieved through orientation alone; it requires explicit demonstration, supervised practice, and psychologically safe feedback to minimize errors and promote patient safety. Educationally, the findings support the deliberate inclusion of demonstration–return demonstration cycles, teach-back methods, and scheduled feedback conversations in OR mentorship and residency curricula. Administratively, the emphasis on protected mentoring time and systematic use of policies and checklists indicates that hospitals must recognize mentoring as a core workload component, ensuring adequate staffing and resources so that trained OR nurses can teach without compromising care. Evidence that well-designed preceptorship and mentorship programs improve competence, confidence, and retention among novice nurses suggests that institutional investment in such hands-on, supportive mentorship structures can help build a sustainable, highly skilled perioperative nursing workforce (Richmond and Issa, 2020).

Challenges in Novice Nurse Engagement and Mentorship Continuation

Challenges in engaging novice nurses and maintaining continuity in mentorship emerged as a significant concern in this study. International literature shows that new graduates commonly enter practice in understaffed environments where preceptors juggle heavy workloads and teaching responsibilities, often leading to fragmented supervision and emotional exhaustion (Oshodi, 2024). At the same time, novice nurses frequently report high levels of stress, fear of making mistakes, and transition shock as they attempt to translate theory into practice (Alharbi et al., 2023). These factors can undermine their willingness to participate actively in learning, ask questions, or remain in their new roles. Continuity in preceptorship has been linked to better clinical performance, smoother socialization, and stronger trust between mentor and mentee, whereas disruptions in mentor–mentee relationships can compromise learning and confidence (Lima & Alzyood, 2024). Against this backdrop, the experiences of trained OR nurses, supervisors, and novice nurses in this study highlight how staffing patterns, emotional barriers, and information overload intersect to challenge novice engagement and mentorship continuity.

A central issue is understaffing and mentor reassignment, which directly disrupts the continuity of mentorship. One trained nurse explained:

"Understaffing is one of the challenges I have encountered during the mentorship process since I am sometimes pulled to other areas, making the novice nurse feel abandoned." (TN1)

An OR supervising nurse echoed this, noting that:

"Mentor reassignment to other areas tends to happen rarely because of staff shortage; as a result, some novice nurses become hesitant to ask questions or ask for help in the OR." (SN1)

While another supervisor described the difficulty of:

"Segregating staff that includes the mentors/senior nurse and the novice nurse, dividing them when someone is absent in a shift." (SN2)

A novice nurse confirmed the impact at the learner level:

"Sometimes I have encountered staff issues or staff shortage where my mentor was assigned in different areas like in the emergency room. Some clarifications and queries I had in the OR were not being clarified; hence I hesitated to ask those questions since my mentor was preoccupied with other tasks." (NN1)

These accounts mirror recent findings that inadequate staffing in clinical learning environments reduces the quality of supervision and mentoring, leaving learners feeling vulnerable, insecure, and sometimes used as extra hands rather than supported learners (Oshodi & Sookhoo, 2024). Studies on preceptorship continuity similarly suggest that stable preceptor–preceptee pairings are associated with better learning, stronger relationships, and less anxiety among new nurses, whereas frequent reassignments or fragmented supervision may impede competency development and professional integration (Lima & Alzyood, 2024).

Engagement is further challenged by novice nurses' fear, low confidence, and information overload, which can dampen their willingness to learn. Two mentors observed and stated that:

"There are some novice nurses who are not willing to learn because they are scared to commit errors and lack confidence in doing the procedure." (TN2)

"Sometimes novice nurses compare our facility with their previous workplace, which affects their willingness to learn." (TN3)

A novice nurse described the cognitive burden of the transition:

"The challenges I felt during mentorship process was getting information a lot. Information overload was really high at that time especially on the OR paper; hence I doubted myself if I can really finish the mentorship process and be assigned in the OR" (NN2).

These experiences are consistent with research on transition shock, which describes how new graduates experience overload, role stress, and disillusionment when faced with the volume and complexity of information and responsibilities in clinical practice (Wakefield, 2018). Studies of newly graduated nurses identify fear of making mistakes, perceived lack of competence, and feelings of being overwhelmed as major contributors to stress and reduced engagement (Lima & Alzyood, 2024). When novices feel they cannot keep up or fear failure, they may withdraw, resist new learning opportunities, or idealize other institutions, all of which can slow their adaptation to the OR environment.

Another major barrier is hesitation to seek clarification and reliance on old routines, which pose risks for both learning and patient safety. These are the statements of the mentors:

"My biggest challenge is when novice nurses hesitate to ask questions or clarifications, which may lead to medical errors." (TN4)

"Some novice nurses keep using old routines from their previous assignment and hesitate to ask questions, which puts patient safety at risk." (TN5)

International studies report that new and student nurses often hesitate to speak up or ask questions because of fear of negative evaluation, retaliation, or appearing incompetent, even when they recognize potentially unsafe situations (Song et al., 2018). This reluctance to seek feedback has been linked to under-reporting of errors, missed opportunities for learning, and compromised patient safety (Gore & Schrems, 2025). At the same time, the persistence of prior routines from other units suggests gaps in orientation and local standardization; without adequate clarification and reinforcement of OR-specific protocols, novices may default to familiar but inappropriate practices, highlighting the need for clear expectations and psychologically safe dialogue between mentors and mentees.

These challenges can be interpreted through Benner's Novice to Expert Theory and Roy's Adaptation Model. Benner describes novices as rule-dependent and context-naïve, requiring consistent guidance and practice in real situations to progress toward competence and proficiency. Disruptions in mentorship continuity, fear-driven disengagement, and reluctance to ask questions limit the experiential learning and feedback that are necessary

to move along with this developmental trajectory. Roy's Adaptation Model, which views individuals as holistic adaptive systems interacting with environmental demands, further illuminates how understaffing, workload pressure, and information overload act as environmental stressors that strain novices' coping mechanisms. When these stressors exceed their adaptive capacity because mentors are reassigned, support is inconsistent, or fears are unaddressed novices may respond with withdrawal, doubt, or rigid adherence to old routines rather than adaptive learning. Thus, the barriers identified in this theme can be seen as factors that disrupt both developmental progression (Benner) and adaptive responses (Roy) in the mentorship relationship.

The theme "Challenges in Novice Nurse Engagement and Mentorship Continuation" carries several implications for practice, education, and policy. Clinically, it underscores the need to minimize mentor reassignments during critical orientation periods and to recognize that every episode of understaffing that pulls a mentor away may compromise both learning and patient safety. Administrators may need to integrate mentorship continuity into staffing and scheduling decisions, ensuring that novice nurses have reliable access to a designated mentor. Educationally, programs should address transition shock, fear of errors, and information overload through structured debriefings, staged learning goals, and explicit discussions about help-seeking and psychological safety. At the policy level, formal guidelines that protect mentoring time, clarify mentor roles, and standardize OR-specific practices can help reduce reliance on prior routines and encourage open communication. Evidence that robust, well-supported mentorship and preceptorship programs improve self-efficacy, resilience, and retention among new nurses suggests that addressing these challenges is not only a matter of educational quality but also a strategic investment in a stable, competent perioperative nursing workforce (Gularte-Rinaldo et al., 2023).

Continuation of Mentorship and Support for Novice Nurse Learning

Ensuring continuity in mentorship while actively supporting novice nurses' learning emerged as a crucial feature of the OR mentoring process in this study. International evidence shows that preceptorship and structured mentorship programs are most effective when preceptors have sustained contact with their learners, sufficient time for teaching, and clear organizational support. Continuity-aligned preceptorship models have been associated with smoother transition, improved competence, and reduced preceptor burnout because they allow mentors to build stable relationships and track learners' progress over time (Lima & Alzyood, 2024). At the same time, adequate staffing and deliberate allocation of preceptors are repeatedly identified as prerequisites for effective clinical teaching; when staffing is insufficient, mentoring time is eroded and learners experience fragmented support (Hobenu et al., 2025). Against this backdrop, the experiences of trained OR nurses, supervisors, and novice nurses in this study highlight how they actively try to preserve mentorship continuity and foster learning, even within the constraints of a busy perioperative setting.

Trained nurses describe managing dual clinical and mentoring roles while consciously maintaining a calm, supportive presence. One mentor explains:

"While doing two roles at the same time (being circulating nurse and mentor), I just keep myself focused to balance these roles. I follow the mentorship process based on the policy guide from the institution in a calm manner to avoid fear felt by the novice nurse." (TN1)

When staffing pressures require redeployment, they intentionally safeguard continuity through structured endorsement:

"If there are staff shortages and I need to be pulled to other areas, I ensure that I properly endorsed the novice nurse to my co-mentor for continuity of mentorship and preventing her from feeling abandoned." (TN2)

"If being pulled to another area, I always ensure to endorse the novice nurse to my co-mentor, emphasizing her weakness on certain tasks." (TN3)

OR supervisors reinforce this priority at the systems level. Two nurse supervisor states:

"Protected mentoring time is the top priority for mentorship process. Ensuring mentors and the novice nurse focuses on mentorship process will have a greater chance of success. The only solution for now is not to pull the same mentor on different areas to avoid novice nurse feeling abandonment by the mentor." (SN1)

"I and my co-supervisor nurse ensure that the staff is sufficient every shift, including the mentors and senior nurses. Properly dividing the staff like the novice nurse and the mentors/senior nurse helps maintain effective mentorship even when someone is absent." (SN2)

These accounts are consistent with studies showing that continuity of the preceptor–preceptee pairing and protection of preceptorship time support better learning relationships, higher satisfaction, and stronger integration of new graduates into clinical teams (Owens, 2013).

Mentors and novices also describe a range of intentional strategies to support learning, retention, and confidence. Trained nurses shared these statements:

"Whenever I noticed hesitation to ask even if it is just a small confusion of small details, I reminded them not to hesitate to ask questions; during this orientation phase, taking notes can be helpful to novice nurse for retention." (TN4).

"Short, repeated cues are helpful for easy familiarization and retention. Teach-back is another strategy I use to assess if the novice nurse grasped how to assist on the procedure independently. Boosting their confidence by telling them that they can do all of the procedure here in the OR is another way of enhancing their performance." (TN5)

Novice nurses reciprocate this active stance, describing how they supplement formal orientation by self-directed study and help-seeking:

"In terms of challenges I have encountered, reading and reviewing the OR packet was my way to cope on challenges encountered, after reviewing I also asked other mentors for better way on handling the procedure." (NN1)

"Whenever I commit mistakes, my mentor corrects me privately if possible… Wherever my mentor is pulled to another area like ward, she ensures that she properly endorsed me to other mentors who also handled mentorship for continuity of learning." (NN2)

These practices resonate with evidence-based learning strategies. Reviews of teach-back in health care show that it strengthens understanding and retention by requiring learners to restate information in their own words and receive immediate clarification (Yen & Leasure, 2019). Similarly, note-taking and structured cueing have been identified as effective strategies for consolidating clinical learning among nursing students, improving recall and supporting critical thinking in complex environments (Cross & Kendrick, 2024). The combination of teach-back, repeated cues, note-taking, and private corrective feedback used by mentors in this study therefore reflects current recommendations for enhancing clinical teaching and learning in nursing (Hobenu et al., 2025).

This theme can be interpreted through the combined lens of Benner's Novice to Expert Theory and Roy's Adaptation Model. Benner posits that novices initially rely on rules and need close guidance but progressively develop situational understanding and clinical judgment through repeated, mentored experiences. The strategies described by TN1–TN5, progressive entrustment, teach-back, structured feedback, and intentional endorsement between co-mentors—create the consistent experiential learning environment that Benner identifies as essential for movement from novice toward competence. Roy's Adaptation Model views individuals as holistic adaptive systems responding to environmental stimuli through coping processes. Protected mentoring time, stable mentor relationships, and supportive learning strategies can be seen as environmental supports that strengthen novice nurses' adaptive responses to the high demands of the OR. By reducing feelings of abandonment, promoting help-seeking, and reinforcing mastery, these structures help novices adapt positively rather than respond with withdrawal, fear, or error-prone behavior. In this way, mentorship continuity and learning support function as key mechanisms enabling both developmental progression (Benner) and adaptive coping (Roy) in the OR setting.

The theme "Continuation of Mentorship and Support for Novice Nurse Learning" has several implications for nursing practice, education, and policy. Clinically, the findings underscore that safe and effective OR practice depends not only on individual mentor commitment but also on continuity of the mentor–mentee relationship and the deliberate use of evidence-based teaching strategies such as teach-back, repeated cues, and guided notetaking. Educators and preceptor-program leaders may wish to formalize these strategies within orientation and residency curricula, providing mentors with training on feedback, learning strategies, and psychological safety. Administratively, the emphasis on protected mentoring time and careful staff division suggests that hospitals should integrate mentorship continuity into staffing plans, minimizing redeployment of primary mentors during critical stages of orientation and ensuring that formal endorsement processes are used whenever reassignment is unavoidable. Evidence that well-resourced, continuity-oriented preceptorship programs improve competence, confidence, and retention among new nurses indicates that investing in such structures is a strategic means of sustaining a skilled, stable perioperative nursing workforce.

CONCLUSIONS

The study concludes that mentorship in the operating room is a structured yet dynamic process that extends beyond technical skill development to include emotional support, adaptation, and patient safety. Structured, policy-driven orientation is foundational to effective OR mentorship. Clear OR policies, orientation packets, and competency-based tools provide essential structure for novice nurses and guide mentors in delivering consistent and safe perioperative practice. Hands-on, supportive mentorship facilitates competence and confidence development. Demonstration with supervised return demonstration, combined with calm feedback and reassurance, enables novice nurses to acquire technical skills while managing anxiety in the high-pressure OR environment. Organizational and personal challenges disrupt mentorship continuity and learning. Understaffing, mentor reassignment, role overload, fear, information overload, and reliance on previous routines limit engagement, reduce opportunities for guidance, and may compromise patient safety. Intentional strategies sustain mentorship and promote adaptive learning. Protected mentoring time, stable mentor–mentee relationships, structured endorsement, and evidence-based learning strategies enhance adaptation, strengthen mentorship continuity, and support the development of competent and confident OR nurses.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are proposed: First hospital administration and nursing leadership should institutionalize a formal OR mentorship program that defines mentor–mentee roles, provides protected mentoring time, regularly updates OR policies and competency tools, and ensures systematic monitoring and feedback. Secondly, Clinical mentors should consistently apply evidence-based mentoring strategies, including demonstration with return demonstration, teach-back methods, calm and private correction, and promotion of psychological safety to enhance learning and retention. Third, nursing education and professional development programs should strengthen perioperative content and mentorship competencies through continuing education, mentor training, and academic–hospital collaboration to support smoother OR transitions. Fourth, policy and governance bodies should develop clear OR mentorship guidelines that support novice nurses by integrating structured orientation, competency assessment, adequate staffing support, and retention strategies, including standardized mentor preparation and defined mentorship duration. Lastly, Future research should explore OR mentorship in diverse healthcare settings, examine outcomes such as patient safety and nurse retention, and investigate long-term professional trajectories of novice OR nurses who undergo structured mentorship.

REFERENCES

1. Acea-López, L., Pastor-Bravo, M. D. M., Rubinat-Arnaldo, E., Bellon, F., Blanco-Blanco, J., Gea-Sanchez, M., & Briones-Vozmediano, E. (2021). Burnout and job satisfaction among nurses in three Spanish regions. Journal of Nursing Management, 29(7), 2208–2215. https://doi.org/10.1111/jonm.13782

2. Afrasiabifar, A., Karimi, Z., & Hassani, P. (2013). Roy's Adaptation Model-Based Patient Education for Promoting the Adaptation of Hemodialysis Patients. Iranian Red Crescent medical journal, 15(7), 566–572. https://doi.org/10.5812/ircmj.12024
3. Alharbi, H. F., Alzahrani, J., Hamed, A., Althagafi, A., & Alkarani, A. S. (2023). The experiences of newly graduated nurses during their first year of practice. Healthcare, 11(14), 2048. https://doi.org/10.3390/healthcare11142048
4. Bagheri, M., Adelmanesh, Y., Alizadeh, A., Sadeghi Meymand, S., Amiri, A., & Khaki, S. (2025). The effect of a combined training program on clinical competence and professional commitment of perioperative nursing students in laparoscopic surgery: A quasi-experimental study. BMC Medical Education, 25, Article 817. https://doi.org/10.1186/s12909-025-07400-7
5. Balabag, R. C., & Guinoo, J. C. (2020). Stress and adaptation of nursing students in clinical exposure: Application of Roy's Adaptation Model. Philippine Journal of Nursing, 90(1), 45–52.
6. Benner, P. E. (2001). From novice to expert: Excellence and power in clinical nursing practice. Prentice Hall.
7. Bourke, L., Conway, C., & Abdalla, M. E. (2025). Mentorship in surgical training: A systematic scoping review to inform a mentorship framework for ophthalmology trainees. BMC Medical Education, 25, 373. https://doi.org/10.1186/s12909-025-06901-9
8. Bwanali, R. K., Msiska, G., Urstad, K. H., Bø, B., & Chimwaza, A. (2025). Effect of simulation-based perioperative education on the acquisition of self-competence and knowledge among undergraduate student nurses: A randomised controlled study. BMC Nursing, 24, 1090. https://doi.org/10.1186/s12912-025-03751-0
9. Callis, A. M. B. (2020). Application of the Roy Adaptation Theory to a care program for nurses. Applied Nursing Research, 56, 151340. https://doi.org/10.1016/j.apnr.2020.151340
10. Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches (4th ed.). Sage Publications.
11. Cross, L., & Kendrick, A. (2024). Notetaking among nursing students. International Journal of Nursing Education Scholarship, 21(1). https://doi.org/10.1515/ijnes-2024-0002
12. Degani, A., & Alkhaled, W. (2024). Psychological safety in students' clinical learning environments: Medical and nursing students' perspectives. Journal of Global Medicine, 4(3), 241. https://globalmedicine.co.uk/index.php/jogm/article/view/241/669
13. Dikmen, M., & Şenyuva, E. A. (2024). The relationship between the mentorship skills and professional attitudes of preceptor nurses: A multi-centre study. Clinical and Experimental Health Sciences, 14(1), 87–94. https://doi.org/10.33808/clinexphealthsci.1191515
14. Dobbins, J. (2018). Graduate nurses' perceived confidence in clinical competence (Doctoral dissertation). ProQuest Dissertations Publishing. https://digitalcommons.gardner-webb.edu/nursing_etd/324
15. Doodlesack, A., Dubosh, N., Grossestreuer, A., de Oliveira, L., & Bilello, L. (2024). A novel nurse-inteRN mentorship program to improve nurse–physician communication and teamwork in the emergency department. International Journal of Emergency Medicine, 17(1), 163. https://doi.org/10.1186/s12245-024-00740-z
16. Dracup, K., & Bryan-Brown, C. W. (2004). From novice to expert to mentor: Shaping the future. American Journal of Critical Care, 13(6), 448–450. https://doi.org/10.4037/ajcc2004.13.6.448
17. Eriksson, J., Lindgren, B. M., & Lindahl, E. (2020). Newly trained operating room nurses' experiences of nursing care in the operating room. Scandinavian Journal of Caring Sciences, 34(4), 1074–1082. https://doi.org/10.1111/scs.12817
18. Ernawaty, E., Hariati, S., & Saleh, A. (2024). Program components, impact, and duration of implementing a new nurse orientation program in hospital contexts: A scoping review. International journal of nursing studies advances, 7, 100214. https://doi.org/10.1016/j.ijnsa.2024.100214
19. Fawcett, J., Aber, C., Haussler, S., Weiss, M., Myers, S. T., Hall, J. L., ... & Silva, V. (2011). Women's perceptions of caesarean birth: A Roy international study. Nursing Science Quarterly, 24(4), 352–362. https://doi.org/10.1177/0894318411419211
20. Fischer, E. A., Jayana, K., Cunningham, T., Washington, M., Mony, P., Bradley, J., & Moses, S. (2015). Nurse mentors to advance quality improvement in primary health centers: Lessons from a pilot program

in Northern Karnataka, India. Global Health: Science and Practice, 3(4), 660–675. https://doi.org/10.9745/GHSP-D-15-00142

21. Ghanmi, N., Bondok, M., Etherington, C., Saddiki, Y., Lefebvre, I., Berthelot, P., Dion, P. M., Raymond, B., Seguin, J., Sekhavati, P., Islam, S., & Boet, S. (2024). Optimizing teamwork in the operating room: A scoping review of actionable teamwork strategies. Cureus, 16(5), e60522. https://doi.org/10.7759/cureus.60522
22. Göras, C., Nilsson, U., Ekstedt, M., Unbeck, M., & Ehrenberg, A. (2020). Managing complexity in the operating room: A group interview study. BMC Health Services Research, 20, 1–12. https://doi.org/10.1186/s12913-020-05192-8
23. Gore, J., & Schrems, B. (2025). Factors influencing the development of patient safety culture in the undergraduate nursing student population—An integrative review. Journal of Advanced Nursing, 81(12), 8529–8563. https://doi.org/10.1111/jan.16880
24. Gularte-Rinaldo, J., Baumgardner, R., Tilton, T., & Brailoff, V. (2023). Mentorship ReSPeCT study: A nurse mentorship program's impact on transition to practice and decision to remain in nursing for newly graduated nurses. Nurse Leader, 21(2), 262–267. https://doi.org/10.1016/j.mnl.2022.07.003
25. Hagrass, H. M., Ibrahim, S. A. E., Anany, R. I. E., & El-Gazar, H. E. (2023). Effect of an educational program about mentorship competencies on nurse mentors' performance: a quasi-experimental study. BMC nursing, 22(1), 429. https://doi.org/10.1186/s12912-023-01597-y
26. Harder, N., Watter, S., & Mould, A. (2021). Structured orientation and mentorship programs for novice nurses: Impact on competence and confidence. Nurse Education in Practice, 50, 102951. https://doi.org/10.1016/j.nepr.2021.102951
27. Hedenstrom, M. L., Spiva, L., Thurman, S., Hale, R. L., Toney, S., Case-Wirth, J., Kairu, M., & Sneha, S. (2023). Developing and evaluating the effectiveness of a nursing leadership mentoring pilot program. Nursing Administration Quarterly, 47(2), 173–181. https://doi.org/10.1097/NAQ.0000000000000557
28. Heggarty, M., & Foran, P. (2025). Perioperative preceptors' education and training: An integrative review. Journal of Perioperative Nursing, 38(3), 38–42. https://doi.org/10.26550/2209-1092.1389
29. Heizenroth, P. A. (1996). Key components of perioperative orientation. AORN Journal, 63(1), 185–190. https://doi.org/10.1016/S0001-2092(06)63453-4
30. Hill, S. E. M., Ward, W. L., Seay, A., & Buzenski, J. (2022). The nature and evolution of the mentoring relationship in academic health centers. Journal of Clinical Psychology in Medical Settings, 29(3), 557–569. https://doi.org/10.1007/s10880-022-09893-6
31. Hobenu, K. A., Adefuye, A. O., Naab, F., & Nyoni, C. N. (2025). Strategies to enhance clinical teaching and learning in undergraduate nursing education: A scoping review. PLOS ONE, 20(6), e0305789. https://doi.org/10.1371/journal.pone.0305789
32. Horner, D. K. (2017). Mentoring: Positively influencing job satisfaction and retention of new-hire nurse practitioners. Plastic Surgical Nursing, 37(1), 7–22. https://doi.org/10.1097/PSN.0000000000000169
33. International Council of Nurses. (2021). The ICN code of ethics for nurses (Revised 2021). International Council of Nurses. https://www.icn.ch/system/files/2021-10/ICN_Code-of-Ethics_EN_Web.pdf
34. Jangland, E., Gunningberg, L., & Nyholm, L. (2021). A mentoring programme to meet newly graduated nurses' needs and give senior nurses a new career opportunity: A multiple-case study. Nurse Education in Practice, 57, 103233. https://doi.org/10.1016/j.nepr.2021.103233
35. Joseph, H. B., Issac, A., George, A. G., Gautam, G., Jiji, M., & Mondal, S. (2022). Transitional Challenges and Role of Preceptor among New Nursing Graduates. Journal of caring sciences, 11(2), 56–63. https://doi.org/10.34172/jcs.2022.16
36. Kakyo, T. A., Xiao, L. D., & Chamberlain, D. (2025). The role of motivation in the initiation and maintaining mentoring relationships among nurses and midwives. International Nursing Review, 72(1), e12977. https://doi.org/10.1111/inr.12977
37. Kalbarczyk, A., Serafin, L., & Czarkowska-Pączek, B. (2022). Novice nurses' leadership competence: A cross-sectional study. Nursing in the 21st Century, 21(2), 88–93. https://doi.org/10.2478/pielxxiw-2022-0015
38. Kallerhult Hermansson, S., Kasén, A., Hilli, Y., Norström, F., Vaag, J. R., & Bölenius, K. (2024). Exploring registered nurses' perspectives as mentors for newly qualified nurses: A qualitative interview study. BMJ Open, 14(5), e082940. https://doi.org/10.1136/bmjopen-2023-082940

39. Kisanuki, N., Takase, M., & Yamamoto, M. (2024). Unveiling the challenges encountered by newly graduated nurses during night shifts: A descriptive qualitative study. International Journal of Nursing Sciences, 11(4), 447–456. https://doi.org/10.1016/j.ijnss.2024.08.009
40. Lalithabai, D. S., Ammar, W. M., Alghamdi, K. S., & Aboshaiqah, A. E. (2021). Using action research to evaluate a nursing orientation program in a multicultural acute healthcare setting. International Journal of Nursing Sciences, 8(2), 181–189. https://doi.org/10.1016/j.ijnss.2021.01.002
41. Leach, L. S., Myrtle, R. C., & Weaver, F. A. (2011). Surgical teams: Role perspectives and role dynamics in the operating room. Health Services Management Research, 24(2), 81–90. https://doi.org/10.1258/hsmr.2010.010018
42. Li, J. S., & Conway, A. (2024). Implementation of a blended-learning perioperative nursing education program in Canada. AORN Journal, 119(4), 248–260. https://doi.org/10.1002/aorn.14112
43. Liebenberg, M. (2018). Professional nurses' perceptions of their role as mentors for novice nurses in the operating room (Master's thesis). Stellenbosch University. http://hdl.handle.net/10019.1/103729
44. Lima, M. S., & Alzyood, M. (2024). The impact of preceptorship on the newly qualified nurse and preceptors working in a critical care environment: An integrative literature review. Nursing in Critical Care, 29(5), 1178–1189. https://doi.org/10.1111/nicc.13061
45. Lindfors, K., Flinkman, M., Kaunonen, M., Huhtala, H., & Paavilainen, E. (2022). New graduate registered nurses' professional competence and the impact of preceptors' education intervention: a quasi-experimental longitudinal intervention study. BMC nursing, 21(1), 360. https://doi.org/10.1186/s12912-022-01133-4
46. Masitho, M., Hariyati, R. T. S., Handiyani, H., Yetti, K., Rahman, L. O. A., & Afriani, T. (2026). Development of a new nurse orientation program in the intensive care unit. Indonesian Journal of Global Health Research, 8(1), 195–200. https://doi.org/10.37287/ijghr.v8i1.593
47. Mathenge, C. (2020). The importance of the perioperative nurse. Community Eye Health, 33(110), 44–45. https://pubmed.ncbi.nlm.nih.gov/34007106/
48. Merillana, B. V. (2024). Patient safety practices among nurses in the operating room. Puissant, 5, 1952–1976 Retrieved from //puissant.stepacademic.net/puissant/article/view/366.
49. Moon, S. H., Jeong, H. W., & Jung, U. S. (2024). Exploring the impact of the mentoring new nurses for transition and empowerment program led by clinical nurse educators in South Korea: A mixed-methods study. Nurse Education Today, 140, 106251. https://doi.org/10.1016/j.nedt.2024.106251
50. Nijkamp, N., Calleja, P., & Sahay, A. (2023). Transition support arrangements to support new graduate and novice nurses' entry into perioperative nursing: A scoping review. Heliyon, 10(1), e23316. https://doi.org/10.1016/j.heliyon.2023.e23316
51. Ogdoc, M. A., & Superable, C. S. (2021). A case study on the clinical preceptorship among novice nurses: Their clinical competence and confidence. Journal of Multidisciplinary Studies, 10(1), 49–82. https://doi.org/10.7828/jmds.v10i1.1517
52. Ojala, H., Kuivila, H.-M., Mikkonen, K., Jarva, E., & Juntunen, J. (2025). Factors associated with newly graduated nurses' work engagement: Systematic review of quantitative studies. Journal of Advanced Nursing. Advance online publication. https://doi.org/10.1111/jan.17069
53. Olson, M. A., & Johnson, A. M. (2023). Orientation to the operating room: An acute care hospital and local technical college partner for success. Journal for Nurses in Professional Development, 39(4), E81–E85. https://doi.org/10.1097/NND.0000000000000856
54. Operating Room Nurses Association of the Philippines. (n.d.). Vision & mission. ORNAP. https://www.ornap.org/about-us/vision-mission/
55. Ortiz, J. (2016). New graduate nurses' experiences about lack of professional confidence. Nurse Education in Practice, 19, 19–24. https://doi.org/10.1016/j.nepr.2016.04.001
56. Oshodi, T. O., & Sookhoo, D. (2024). Nursing students' perceptions of inadequate nurse staffing in the clinical learning environment: A systematic narrative review. Nurse Education in Practice, 82, Article 104221. https://doi.org/10.1016/j.nepr.2024.104221
57. Owens, N. G. (2013). New graduate nurse preceptor program: A collaborative approach with academia. Journal of Nursing Education and Practice, 3(12), 1–9. https://doi.org/10.5430/jnep.v3n12p1
58. Pelin, K., & Ayise, K. (2019). Assessment of mentorship applications in nursing clinical education. International Journal of Caring Sciences, 12(2), 869–876. Retrieved from https://www.internationaljournalofcaringsciences.org/docs/28_pelin_original_12_2.pdf

59. Persaud, D. (2008). Mentoring the new graduate perioperative nurse: A valuable retention strategy. AORN Journal, 87(6), 1173–1179. https://doi.org/10.1016/j.aorn.2007.10.014
60. Qian, W., Qian, L., Xu, Q., & Lu, L. (2021). The effects of Roy's Adaptation Model and the forgetting curve in the clinical instruction of operating room nursing interns. American Journal of Translational Research, 13(7), 8214–8220. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8340201/
61. Quick, J. (2016). From novice to expert: A surgical care practitioner's reflection on their role development. Journal of Perioperative Practice, 26(10). https://doi.org/10.1177/175045891602601003
62. Richmond, J., & Issa, C. (2020, October). Implementation of mentorship-focused operating room circulating RN training program. Paper presented at the Mentoring Institute Conference, University of New Mexico Hospitals, Albuquerque, NM. Retrieved from https://www.nmnec.org/wp-content/uploads/2020/12/Implementation-of-Mentorship-Focused-Operating-Room-Circulating-RN-Training-Program-UNMH.Mentoring-Institute-Conference.2020.pdf
63. Riesenberg, L. A., Leischner, M., Yu, D., & Rajkomar, A. (2020). Standardized protocols and checklists in perioperative nursing: Enhancing safety and efficiency. Journal of PeriAnesthesia Nursing, 33(4), 212–220. https://doi.org/10.1016/j.jopan.2020.06.005
64. Roy, C. (2009). Assessment and the Roy Adaptation Model. The Japanese Nursing Journal, 29(11), 5–7.
65. Schuler, E., Mott, S., Forbes, P. W., Schmid, A., Atkinson, C., & DeGrazia, M. (2021). Evaluation of an evidence-based practice mentorship programme in a paediatric quaternary care setting. Journal of Research in Nursing, 26(1–2), 149–165. https://doi.org/10.1177/1744987121991417
66. Sizer, M. E. (2018). Staff education for registered nurses using the teach-back method (Doctoral dissertation, Walden University). Walden Dissertations and Doctoral Studies Collection. https://scholarworks.waldenu.edu/dissertations
67. Song, Z., Shen, Y., Yao, X., Wen, S., Wang, J., Chen, Y., Zhang, P., & Huang, X. (2024). "Discovering shine through feedback seeking"—Feedback seeking among new graduate nurses: A qualitative study. BMC Nursing, 23(1), 10. https://doi.org/10.1186/s12912-023-01657-3
68. Sterner, A., Ramstrand, N., Palmér, L., & Hagiwara, M. A. (2021). A study of factors that predict novice nurses' perceived ability to provide care in acute situations. Nursing Open, 8(4), 1958–1979. https://doi.org/10.1002/nop2.871
69. Turner, S. (2023). Psychological safety in simulation: Perspectives of nursing students and facilitators. Journal of Psychiatric and Mental Health Nursing. Advance online publication. https://doi.org/10.1016/j.pnmhn.2023.000060
70. Uçak, A., & Cebeci, F. (2025). Competency perceptions of operating room nurses and opinions of the surgical team on factors facilitating competency acquisition: A mixed-methods study. Journal of Evaluation in Clinical Practice, 31(5), e70233. https://doi.org/10.1111/jep.70233
71. Udan, J. (2020). Theoretical foundation of nursing (2nd ed.). Educational Publishing House.
72. Varghese, B., Al-Balawi, R. M. O. A. M., Joseph, C. M., Al-Akkam, A. A. A., Alomari, A. M. A., & Swallmeh, E. (2023). The lived experiences of nurse preceptors in training new nurses in Qatar: Qualitative study. BMC Nursing, 22, 456. https://doi.org/10.1186/s12912-023-01619-9
73. Wakefield, E. (2018). Is your graduate nurse suffering from transition shock? Journal of Perioperative Nursing, 31(1), 47–50. https://doi.org/10.26550/311/47-50
74. Wangensteen, S., Johansson, I. S., Björkström, M. E., & Nordström, G. (2012). Newly graduated nurses' perception of competence and possible predictors: A cross-sectional survey. Journal of Professional Nursing, 28(3), 170–181. https://doi.org/10.1016/j.profnurs.2011.11.014
75. Wu, X. V., Chan, Y. S., Tan, K. H. S., & Wang, W. (2018). A systematic review of online learning programs for nurse preceptors. Nurse Education Today, 60, 11–22. https://doi.org/10.1016/j.nedt.2017.09.010
76. Yen, P. H., & Leasure, A. R. (2019). Use and Effectiveness of the Teach-Back Method in Patient Education and Health Outcomes. Federal practitioner: for the health care professionals of the VA, DoD, and PHS, 36(6), 284–289.
77. Yin, R. K. (2009). How to do better case studies. In The SAGE handbook of applied social research methods (2nd ed., pp. 254–282). Sage Publications. https://doi.org/10.4135/9781483348858.n8