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Handoff Communication Among Senior Nursing Students: A Phenomenological Study

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HANDOFF COMMUNICATION AMONG SENIOR NURSING STUDENTS: A PHENOMENOLOGICAL STUDY

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Abstract

Despite discussions in health care regarding poor communication and its link to patient safety, it was revealed in the literature that many student nurses are inadequately prepared to conduct handoff communication. Student nurses have difficulty in this area due to limited or no experience with the handoff process, which jeopardizes patient safety. The purpose of this research study was to understand how senior nursing students make meaning of their lived experiences with handoff communication. The guiding research question for this study is: How do senior nursing students make meaning of their lived experiences with handoff communication during the change-of-shift report in the clinical practicum? Lave's situated cognition theory and Kolb's experiential learning theory are the two theories that support the conceptual framework of this study. A qualitative phenomenological inquiry using the hermeneutical approach was used to explore and interpret the student nurses' experience with handoff communication. Purposeful sampling was used to recruit nine senior nursing students enrolled in their final clinical practicum. Four major themes and nine subthemes were revealed in this study: (a) active participation, (b) understanding handoff communication, (c) insufficient training and practical experience, and (d) confidence with the shift report. The results of this study illuminated the experiences of nine senior nursing students' learning and practical experience with the change-of-shift handoff report during clinical practicum.

Table of Contents

List of Tables

List of Figures

Chapter One

Problem and Domain of Inquiry

Communication in nursing is an essential part of a nurse's responsibility to efficiently and safely manage patients. An important type of communication that nurses and other health professionals engage in is handoff communication. Handoff is crucial for planning patient care, patient evaluation, and patient management (McCloughen, O'Brien, Gillies, & McSherry, 2008). The lack of efficiency with handoff communication among nurses and other health care professionals has been problematic. The loss of information during handoff communication can be injurious to a patient. Interruptions in care, treatment delays, wrong treatment provided, medication errors, unnecessary readmissions, and increased financial burden to health care systems are all problems that can arise due to information loss during handoffs. There is an increased risk to patients due to inaccurate information being passed on, missing information, information not passed on in a timely manner, and misinterpretation of the information by the receiver (Blouin, 2011; Controlled Risk Insurance Company [CRICO], 2015; Groves, Manges, & Scott-Cawiezell, 2016; Joint Commission, 2007, 2017a; Richter, Scheck McAlearney, & Pennell, 2016; Welsh, Flanagan & Ebright, 2010; World Health Organization [WHO], 2007).

Handoff communication is a patient safety priority (Richter et al., 2016). In a comparative survey of hospital data from the staff of 680 hospitals on patient safety culture, Famolaro et al. (2016) reported that handoffs and transitions are areas that need

improvement among health care professionals. Specific issues addressed in this report were information that was not passed on during unit-to-unit transfers, loss of information during shift changes, problems with information exchange across hospital units, and problems with shift change report and its effect on patients. During handoffs and transitions, 53% of respondents reported that information is lost during a change of shift, while 48% perceived shift change as a problematic time for hospitalized patients (Famolaro et al., 2016).

Communication among nurses regarding ongoing patient management is critical. During the process of caring for patients, nurses change. This change involves the transfer of patient care from one nurse to another. The new nurse assumes the responsibility for the care of a patient at the change of shift: This occurs multiple times throughout a workday (Patton et al., 2017; Staggers & Jennings, 2009). There are three potential reasons why transitions of care between nurses may not be effective: first, interruptions during the report, second no standard reporting process among nurses, and, third, novice nurses are unsure of what critical information should be passed on to avoid interruptions in care (Benson, Rippin-Sisler, Jabusch, & Keast, 2007; Blouin, 2011; Gephart, 2012).

Inefficiencies in handoff communication among health care providers have been a focus of global discussions. Organizational issues attributed to poor handoff communication include inefficient team training, communication skills training, and lack of role models. Common problems related to poor communication during handoff results from inappropriate communication channels, poorly communicated information, misinterpretation, timing-related issues, and interference during communication (Joint Commission, 2007; WHO, 2009). Organizations, such as the Institute of Medicine (IOM), and regulatory bodies, such as the Joint Commission, have listed handoff communication

as a priority for providing quality, efficient, and safe care to all patients (Joint Commission, 2014; Kohn, Corrigan, & Donaldson, 2000). In the Kohn et al. (2000) report *To Err is Human,* the IOM addressed the untoward effects that medication errors have on patients and its link to poor communication.

Handoff communication occurs at various points of patient management, including unit-to-unit transfers, emergency room and operating room transfers, and nurse-to-nurse transfers. Other areas where handoff communication occurs include facility-to-facility discharge, coverage during lunch breaks, and transfer of care from one nursing provider to another at shift change (Chard & Makary, 2015; Collins, 2017; Lim & Pajarillo, 2016; Watson, Manias, Geddes, Della, & Jones, 2015). Communication among nurses involves peer-to-peer communication, interprofessional communication with other health care providers, such as the pharmacists, social workers, physical therapists, case managers, and physicians all of whom play an integral part in planning and care management of patients.

Effective communication is essential to adequately and safely manage patients in hospitals and other health care settings. Preparing nurses with the skill of handoff communication is a recommendation outlined by the IOM (Kohn et al., 2000). Despite this advice, the profession of nursing lacks a standard handoff communication process for training nurses. Many medical and nursing programs in the United States do not integrate handoff communication into the curriculum. There is no consistent approach or standardized training programs for teaching communication skills to nursing or medical students. This lack of attention to the issue of handoff communication should be the focus of academic and clinical educators. The improvement of clinical practice and patient protection measures are critical in preventing harm to patients (Collins, 2014; Eggins,

Slade, & Geddes, 2016; Gordon & Findley, 2011; Kesten 2011; Lee, Mast, Humbert, Bagnardi, & Richards, 2016; Liston, Tartaglia, Evans, Walker, & Torre, 2014; Saag et al., 2017; Wohlauer et al., 2012).

In addressing communication inefficiencies within the profession of nursing, it is necessary that changes be made regarding how communication skills are taught to nursing students. Preparing future nurses to communicate effectively should be a top priority for clinical and academic administrators. This issue requires the incorporation of handoff communication in the nursing curriculum by providing opportunities for laboratory and clinical experiences for students in training (Riesenberg, Leitzsch, & Cunningham, 2010). A lack of preparation with handoff communication can be detrimental. Inefficient and poor handoff communication among nurses compromises patient safety. Failing to communicate critical information about patients is considered an error: It is an expectation that students develop proficiency with communication in the clinical setting (Collins, 2014; Kohn et al., 2000).

According to the Joint Commission (2014), many adverse effects and sentinel events that occur in the health care setting can be avoided when health care professionals employ good communication techniques. Many sentinel events are the direct result of poor communication among provider-to-provider and provider-to-family members. Evaluation of sentinel events by the Joint Commission from 1995 to 2006 included a report that the lack of proper communication among health professionals was the principal cause of sentinel events (Joint Commission, 2007). Focusing on the issue of handoff communication efficiency and patient safety requires tackling this issue with both practicing nurses and student nurses.

Ascano-Martin (2008) stated that students who are not formally prepared with handoff communication struggle with understanding what information is essential to pass on during the change-of-shift report and to other health professionals. This lack of preparation can result in a lack of self-confidence, missing information during the change-of-shift report, inefficiency with the handoff process, and increased anxiety. The potential for unprepared nurses to harm patients is significant and can be lessened with proper training (Ascano-Martin, 2008; Brown, Rasmussen, Baldwin, & Wyeth, 2012). Providing handoff communication opportunities during the nurses' clinical practicum provide the students with the communication skills and tools that are needed to transition to the role of professional nurse (Malone, Anderson, & Manning, 2016).

In the clinical practicum, a supportive environment for students is provided to foster role socialization and allows the student nurse to take on increased responsibility with patient management (Bourbonnais & Kerr, 2007). Providing this opportunity to nursing students affords them the opportunity to engage in this process through experiential learning, enhances critical thinking, and enables students to connect theoretical and practical knowledge (Skaalvik, Normann, & Henriksen, 2010). During the clinical practicum, the student is provided an opportunity to engage in more advanced patient management. One such skill is conducting the end-of-shift report. In conducting the shift report, the student nurse reflects on the occurrences of the shift, determines which information should be passed on, and prepares the student nurse for discussion with other nurses, patients, and their families (Randell, Wilson, & Woodward, 2011). Change of shift reporting is a time when errors increase due to ineffective communication and miscommunications (Saag et al., 2017). For this reason, handoff communication should be

an essential part of student nurse training.

This dissertation research study is the first step in understanding how senior nursing students in the practicum setting at a large university in the southeastern United States experience handoff communication in the clinical setting. Evaluating the perspectives of student nurses is essential and provides information about the students' experience and determines if the handoff training the students received affected their ability to conduct handoff during their clinical practicum. In this dissertation research study, the experiences and perceptions of student nurses with the handoff communication process during the senior nursing practicum were evaluated. There is a gap in the literature regarding student nurses and their experiences with handoff communication.

Problem Statement

Change of shift occurs in the hospital setting two to three times each day depending on the work schedules. Each shift change requires the transmission of information–handoff–about the patients and any follow-up care that is pertinent (Runy, 2008). Student nurses are not adequately prepared to provide handoff communication in the clinical setting. Many students have little or no exposure to handoff communication during training. Some students obtain exposure to practical communication skills and handoff communication in didactic lectures, clinical simulation, and clinical practice (Collins, 2014). In the literature, it was reported that some nurses attain their experience with handoff communication on hire in their first nursing position. Student nurses should be able to effectively give and receive a handoff report in the clinical setting at various points of care. Determining student nurses' exposure to handoff communication during clinical practicum provided information regarding the student nurses' experiential learning and

perceptions with handoff communication during shift report (Collins, 2014; Joint Commission, 2014; Lim & Pajarillo, 2016). Evaluating whether students were prepared to conduct handoff communication by the time they participate in clinical practicum provided information that fills gaps in the literature regarding student nurses and the handoff process, as well as their preparedness with this skill as they prepare to transition to professional nursing practice.

Purpose of the Study

The purpose of this qualitative phenomenological study was to understand how senior nursing students make meaning of their lived experiences with handoff communication (change-of-shift report) during clinical practicum. In conducting this research, a better understanding of how senior nursing students learn about the components of a nursing shift report and their practical experience with handoff communication in the clinical setting are provided.

Several overarching factors necessitated the undertaking of this study, namely, ensuring patient safety, safe provision of care by student and novice nurses, student nurse preparation, and proficiency with the handoff process. In studying this issue from the perspective of the student, the information garnered will lead to enhancements in student nurses' learning and educational processes.

Research Question

Research Question

The research question follows: How do senior nursing students make meaning of their lived experiences with handoff communication during the change-of-shift report in the clinical practicum?

Significance of the Study

In this phenomenological dissertation study, information was elicited from senior nursing students regarding their experiences and perceptions with handoff communication during the clinical practicum. According to Hanson, Balmer, and Giardino (2011), it is necessary to obtain subjective information to find truths about phenomena to understand lived experiences as perceived by student nurses in clinical practice. Thus, being aware of the phenomenon (handoff communication) requires the researcher's understanding of both the theoretical and practical experiences (Gergen, Josselson, & Freeman, 2015) as perceived by the student nurse. Preparing student nurses for safe clinical practice includes several components, one of which is effective handoff communication. Students should participate in experiential learning in clinical training to support the development of their clinical proficiency, to protect patients, and to provide quality care to all patients.

This study was necessary to ascertain information necessary to assist in de-escalating the number of new graduate nurses and nursing students having difficulty with handoff communication in clinical practice (Collins, 2014). Conducting this study provided information that directly impacts the way students learn about handoff communication and address issues that hinder adequate preparation of student nurses mastering handoff communication. The result of this study will lead to better academic and clinical preparation of student nurses mastering handoff communication.

Nursing Education

The staff at the Joint Commission (2014) recommended that training relating to handoff communication start with prelicensure nursing students. The processes that are in place in some nursing programs are not adequate and will not suffice in meeting the

requirements to prepare nursing students to conduct safe and efficient handoff communication (Lee et al., 2016). Evaluating senior nursing students' experiences with handoff communication during the change of shift provided information about how this experience impacts the students and how they perceive the process. Studying handoff communication in the clinical setting provided useful information for curricular changes to improve the practices in use at the time of this study.

Providing students with learning opportunities in the classroom, simulation lab, and clinical practice provide experiential learning with handoff communication (Collins, 2014; Lee et al., 2016). This enables the students to develop a mastery of this critical communication skill. Providing experiential learning with handoff is a way to simultaneously teach students about communication and patient safety, shape students' understanding of what is needed to ensure effective communication, as well as building relationships with interprofessional team members for the management of patients. Changes are necessary in the academic and clinical setting to develop a structured process to teach students about handoff communication in order to meet the educational needs of students.

Nursing Practice

According to James (2013), the global estimate of premature patient deaths that are preventable totals more than 400,000 annually. Factors attributed to patient harm include shift handoffs and staffing-related issues (James, 2013). Estimates of adverse events and deaths in the United States due to patient harm by health care providers are over 6 million for injuries and 187,000 fatalities (Goodman, Villarreal, & Jones, 2011). Thirty percent of medical-related malpractice claims in the United States are attributed to problems with

communication (Collins, 2017). Makary and Daniel (2016) reported that medical error becomes the third leading cause of death in the United States if it was considered a disease and listed on death certificates.

Patient safety is the central focus and the most crucial aspect of nursing. Issues about patient safety are linked to effective or ineffective communication among health care professionals. The Joint Commission's (2017b) national patient safety goals continue to list staff communication as one of its initiatives. The Joint Commission (2014) recorded miscommunication as a significant factor in sentinel events. Patient safety is impacted first when handoffs are inadequate (IOM, 2001).

The senior nursing practicum is a time when nursing students receive experiential learning that prepares them for the transition from a student nurse to a professional nurse. The practicum experience allows the student nurse to connect theoretical and practical aspects of acquired knowledge throughout the nursing program. The practicum provides an opportunity for the student to develop clinical competence and confidence for clinical practice while working under the supervision of a nurse preceptor. The student is assigned to work with a designated nurse preceptor (Casey et al., 2011). During this time, the student nurse carries out all aspect of patient management, including providing the report on assigned patients at the change of shift to the oncoming nurse. Ensuring that students develop proficiency with handoff communication assists students in achieving confidence and decrease anxiety with handoff communication as they transition to professional practice.

Nursing Research

There were no qualitative studies found in the literature that focused on the experiences of student nurses with handoff communication during the clinical practicum. There are limited studies that involved handoff communication among nursing students. These studies included looking at techniques of the use of the Situation, Background, Assessment, Recommendations (SBAR) tool, role-play, simulation, and other handoff tools to teach communication (Kesten, 2011; Lee et al., 2016; Thomas, Bertram, & Johnson, 2009; Yu, & Kang, 2017). An issue of concern discussed in a qualitative study by Skaalvik et al. (2010) was that some student nurse participants voiced no perceived benefit of an oral shift report because of a lack of discussions during the shift change report. Other studies evaluating the handoff process among practicing nurses addressed issues pertaining to patient safety (Drach-Zahavy & Hadid, 2015); the use of Introduction, Situation, Background Assessment Recommendation, Questions (ISBARQ)/Situation, Background, Assessment, Recommendation (SBAR) among the health care team members, including nurses (Funk et al., 2016); and the implementation of the handoff process (Natafgi et al., 2017).

Conducting this study, which focused on the student nurse experience, laid the groundwork for additional and larger studies looking at the effectiveness of different handoff communication processes, comparative studies of various teaching methods for handoff communication and developing standard procedures for teaching handoff communication to students. Rigorous studies based on the findings of this study evaluating handoff communication among student nurses may assist in-program and future nursing students by improving the way in which students can efficiently learn handoff

communication and transfer these skills as they transition to professional nursing practice. This study also included an opportunity to question and evaluate the in-use practices in student nurse education and the construction of new teaching and learning processes that will improve student learning and promote patient safety in the clinical setting.

Various methods of handoff communication are used in multiple facilities and on different units within the same hospital system. Evaluating the student experience and perception provided information that is valuable to nursing educators, preceptors, nursing faculty, and administrators and can be used to tailor specific learning modalities to benefit nursing students in training and the clinical setting. The results of this study provide descriptive and interpretive information on the student nurses' experience with the process of learning about handoff communication and the practical component of handoff communication during the shift change in the clinical setting. Illuminating the issues that students experience with the handoff process during shift report provided information about student nurses and handoff communication during clinical practicum that is lacking in the literature. Information garnered from conducting this study provided data on the student nurses' ability to conduct a shift handoff report effectively and their preparedness to perform this skill, their understanding of the handoff process, and their proficiency in conducting a change-of-shift report.

Rigorous research and practical resources for faculty and nursing students on handoff communication are limited. Developing and conducting research initiatives on handoff communication for students and new graduate nurses would provide additional scholarly information. As a result, this information can improve nursing education, clinical practice, clinical training, patient safety initiatives, and over the long run, have an impact

on the cost-effectiveness of patient care.

Public Policy

The recommendations of the IOM and the Joint Commission to educate nurses on handoff communication should be followed by the health care facilities and academic nursing programs (Joint Commission, 2014; Kohn et al., 2000). Inefficient communication produces a significant financial burden on the health care system (Agarwal, Sands, & Schneider, 2010). The goal of providing education with handoff communication is to protect the patient, the health care provider, and the health care system. Patients entrust health care professionals with their care, and, in return, they expect timely and efficient care without harm. Miscommunication and communication errors lead to malpractice suits and increase the cost to the patient and hospital systems (CRICO, 2015; Richter et al., 2016). Academic institutions are responsible for ensuring that their curriculum meets the standards that are required to prepare student nurses to transition to professional practice. In this dissertation study, the findings from the student experience are presented and will assist in making educational policy changes to address handoff communication education among student nurses as it relates to patient safety.

Philosophical Underpinnings

Constructivism

The philosophical underpinning of this research dissertation study is based on the principles of constructivism, which is also known as a naturalistic inquiry (Appleton & King, 1997). The selection of the constructivist paradigm requires answering questions about the nature of reality and understanding that there are multiple realities constructed by each person. Constructivism supports a hermeneutic and dialectic approach (Appleton &

King, 1997). The constructivist paradigm has adopted the hermeneutic (interpretive) and dialectic (investigative) approach in qualitative research (Appleton & King, 1997). Piaget and Vygotsky focused on the individual learner's knowledge construction through individual cognition processes. However, Piaget stressed the biological and psychological component of the individual learner's capability while Vygotsky stressed the importance of social factors (Phillips, 1995). Knowledge construction is an active process requiring both mental and physical activity and engages both cognitive processes and social processes. Knowledge construction in a social environment follows procedural rules and criteria of the socio-cultural group. Cognitive processes are needed for an individual to acquire knowledge, making this a process of human knowledge that is constructed (Phillips, 1995).

Constructivism in education and research is a way to provide a philosophical explanation for learning. Constructivism includes a description of knowing and how individuals make sense of new knowledge. In constructivism, attaining knowledge is an individual experience and is socially constructed as maintained by Vygotsky's social constructivism. An individual's mental constructions are imperceptible and allow individuals to increase knowledge through their understanding and provide a description of their experiences (Chikotas, 2008; Ertmer & Newby, 2013; Guba & Lincoln, 1994; Hyslop-Margison & Strobel, 2008).

People make sense of the world in different ways; individual sensemaking is valid and should be respected (Crotty, 1998). As such, the teaching and learning experiences provided to nursing students should challenge their thinking with the purpose of constructing and enhancing knowledge. For cognitive processes to be enhanced, learning opportunities must be in the right physical and social context (Schunk, 2012). This is the

case with the senior nurse practicum experience, which connects students with a specific clinical unit (location) in which they can learn about and practice handoff communication (social activity). Knowledge construction through constructivist learning requires the student to develop individual interpretations of the subject matter. This occurs when the student has a solid grasp of the information, is able to apply the applicable concepts, can construct new meaning, and develops critical thinking skills. Creation, interpretation, and reorganizing knowledge are the basis of constructivist learning (Gordon, 2009a; Windschitl, 1999).

It is important that both the student and the teacher become actively engaged in constructive teaching and experiential learning opportunities. Maintaining a balance between teacher- and student-directed learning approaches is important. The foundational knowledge of the student impacts problem-solving and making sense of the subject matter (Gordon, 2009b; Windschitl, 1999). The educator role in the constructivist learning environment supports participative learning experiences involving activities, such as problem-based learning, peer dialoguing, encouraging making sense, and provision of opportunities for student demonstration of knowledge learned (Windschitl, 1999). Knowledge creation and facilitation using constructivist techniques is a process that is dynamic and involves inquiry (St. Pierre Hirtle, 1996).

Social Constructivism

Social constructivism and an interpretive framework can be used in qualitative research. Individuals find meaning in their personal and work environment, and their experiences can be explained subjectively. Using social constructivism in research requires careful attention to understanding and interpreting the participant’s point of view. This

provides the basis for understanding historical context and cultural context in which individuals work or live (Vygotsky, 1994). Vygotsky, a leading proponent of social constructivism, believed that cognitive function occurs through social interaction. Vygotsky believed that social, culturally historical aspects and individual influences are essential to the development of humans. Vygotsky noted that human beings are a part of a social group in which norms evolve and thus determine individual behavior (Vygotsky, 1994).

Individual interactions with the environment through training, such as clinical practicum, increase development, and increase cognitive processes. Vygotsky (1986) in the work on *Thought and Language* stated that there is no connectedness with thought and language without an evolutionary development of thinking and speech. This can be equated to the processes of nursing students learning the process of handoff communication in that the students' knowledge of handoff occurs as learning experiences that build on original knowledge and supports change through advanced learning and experiential learning. There is no connectedness with theoretical and practical aspects of effective handoff communication if there are no opportunities to learn the process, increase knowledge, and make changes that improve the communication process to function safely as a student in the clinical setting (Schunk, 2012). The social environment for student nurses is the clinical setting where they interact with other persons and the environment: These social interactions aid in knowledge acquisition and learning new skills (Schunk, 2012).

Constructivism and Qualitative Research

The connection between constructivism and the qualitative research method is based on relativism. In qualitative research, the creation of knowledge occurs through

transactional and subjectivist assumptions between the researcher and participant interactions (Guba & Lincoln, 1994). Social constructivism is based on language and cultural influences. In qualitative research, the researcher is provided with the means to examine and theorize contextual information through language and in the socio-cultural setting (Yardley, 2017). Nursing is a profession that has its own culture and language. Handoff communication is transactional and requires subjectivist evaluation on the part of the nurse. For the student nurse, learning the process of handoff communication is experiential learning in which synthesis of knowledge occurs. Handoff reporting requires active engagement and participation from both the incoming and outgoing nurse. This allows the student to make their own interpretations based on their experience and interactions (Ertmer & Newby, 2013).

The student nurse experience with handoff communication during shift change allows the student to construct personal knowledge about the process (Schunk, 2012). Constructivism can be supportive in learner-centered learning (Schweitzer & Stephenson, 2008). Constructivism can also be supportive in situated cognition, noting the necessity of context within an environment that explains individual actions (Schunk, 2012). The importance of experiential learning with handoff communication in building knowledge cannot be understated as the ability to engage in hands-on experience increases knowledge (Etheridge, 2007).

Research Tradition

Phenomenology is a compound of two Greek words *phainomenon*–appearance–and logos–argument or reason–and, according to Sembera (2008), is defined as “giving an account of appearances” (p. 1). Phenomenology emerged in the early 20th century through

the works of philosophers and scholars, such as Husserl, Heidegger, and Merleau-Ponty (Nelms, 2015; Wertz, 2005). Phenomenology is a branch of philosophy, which is the study of a person's conscious experiences. Being conscious is a matter of having experiences that are lived or performed (Gallagher, 2012). Crotty (1998) suggested phenomenology means in putting aside one's usual understanding of a phenomenon and revisiting one's then present experiences, new meanings emerge. The tradition of phenomenology has provisions for making sense of individual experiences through real-life experiences. These real-life experiences develop through different encounters during events, the passage of time, the use of objects and tools, engaging with self, and interactions with others (Giorgi, 1997).

According to Giorgi (1997), four components make up the phenomenological perspective. First, consciousness provides meaning of objects. Second, intuition of objects can be noted through time and space, and be measured by causality. Third, phenomenon means the presence of any *givenness*–presence as given or experienced–by an individual. The phenomenal meaning and the object meaning should be connected to ensure clarity of information. The last component is intentionality, which is being in a state of desire, noting that something is desired. This means consciousness is focusing on an object that transcends it (Giorgi, 1997). Understanding phenomena require the dispersing of preconceptions (Heron, 1992). Heron (1992) reported that the researcher must be cognizant of what is thereby "opening his eyes, keeping them open, looking and listening, not getting blinded" (p. 164).

The study of phenomenology started with Husserl, a German mathematician and social thinker, whose focus was describing lived experiences as the foundation for a

philosophical explanation of phenomenology, which is a contrast to Heidegger's who focused on both descriptive and interpretative phenomenology (Cibangu & Hepworth, 2016; Crotty, 1998). Phenomenology involves qualitative observations, assessing the varied conceptions, and experiences of people allowing the researcher to understand the phenomenon under investigation better. Understanding the experience of the student nurse with handoff communication involves examining through interviews the student's conscious experience as reported from the students' viewpoint (Smith, 2016).

Theoretical Frameworks

Situated Cognition Theory and Experiential Learning Theory

The situated cognition theory and experiential learning theory support the conceptual framework of this study in that nursing students as part of their clinical training are required to participate in clinical learning experiences. To practice handoff communication, the student nurse needs to be in a clinical training worksite (situation) and be able to actively participate in the skill of conducting a handoff (experience) as both giver and receiver of clinical patient information. Situated cognition relates to creating a learning environment in which learners gain knowledge through working in real life or simulated environments (Paige & Daley, 2009). Knowledge construction is supported by having the ability to learn specific skills within the physical and social (cultural) context. Situated cognition is focused on both how and where learning occurs (Szymanski & Morrell, 2009) allowing the learner to understand and participate successfully in the norms of the practice environment (Petrina, Feng, & Juyun, 2008).

Seaman, Brown, and Quay (2017) noted that the concept and phenomenon of experiential learning were first developed in 1946 as a form of social practice based on

Lewin's work with action research and was later deemed a theory. During experiential learning, practical opportunities are provided to improve critical thinking skills (Hamilton & Klebba, 2011). Experiential learning necessitates the integration of active and participatory learning opportunities. This changes the learning engagement of students from passive learners to active learners. Experiential learning is being used more in higher education (Hawtrey, 2007).

Lave's Situated Cognition Theory

In the situated cognition theory, also referred to as situated learning theory, it is purported that novice learners must be participative in communities of practice (among professional nurses), which enables them to develop mastery of knowledge and skills in the socio-cultural practices of the community (clinical setting; Lave & Wenger, 1991). By being participative in handoff communication, the student can become involved in new activities, tasks, and functions; and develop mastery of new knowledge (Lave & Wenger, 1991). Learning occurs in a physical and social context (Schunk, 2012). In situated learning, the learner is removed from the classroom and placed in the social environment allowing the student to become a member of the community of practice (Kolb, 2015). The student nurse in clinical practicum is in a situated learning environment. Active engagement in the advanced student role assists in strengthening the student's communication skills, patient management skills, role socialization, and transition from novice to expert (Kolb, 2015).

The separation of didactic learning and practical experience has been described in the nursing literature with students noting this disconnect. Connecting the theoretical knowledge with practical experience through work-based learning is an opportunity to

provide situated learning opportunities (Flood & Robinia, 2014; Khaled, Gulikers, Biemans, & Mulder, 2015). Situated cognition embodies the acquisition of knowledge necessitating a direct connection to contextual learning (Salkind, 2008) making the clinical setting the best place for learning handoff communication for students. It is necessary to bridge the gap between what nursing students learn in the classroom and knowledge transference to the clinical setting, which is supported by the situated cognition theory.

Kolb's Experiential Learning Theory

The experiential learning theory can be attributed to several scholars, including Lewin, Piaget, and Dewey. The central focus of the experiential learning theory is providing experience to students. Through experience, a student is then able to learn concepts and modify these concepts as knowledge increases. Learning, therefore, is a continuous process that is grounded in experience (Kolb, 2015). Kolb (2015) reported, "Learning is the process whereby knowledge is created through the transformation of experience" (p. 49).

In providing opportunities for student nurses to practice handoff communication in the clinical setting (senior practicum), the student nurse is grounded in this experience, and the learning of this skill is enhanced. This experience provides opportunities for the observation of how handoff is conducted and for active participation by the student. Active participation by the student allows for the student to participate in the clinical management of the patient and provide an opportunity for the student to conduct a self-assessment through reflection by assessing how the handoff communication was conducted and whether it went well or could be improved.

The selected experiential learning theory for this dissertation study is Kolb's experiential learning theory. Kolb's experiential learning theory is a framework that is fitting for use with the study of handoff communication among student nurses. Six principles of experiential learning theory as discussed by Kolb and Kolb (2009) follow:

1. Learning should be considered a process, not an outcome: Student engagement is essential, and so is facilitator feedback.
2. Learning is relearning: A person's belief is part of the learning process and helps to shape new knowledge and ideas.
3. Learning requires conflict resolution through adaptation: The learning process involves resolving conflicts and disagreements, as well as understanding individual differences.
4. Learning is a holistic process of adaptation: Developing the ability to problem solve, make decisions, and show creativity are part of adapting and learning.
5. Learning occurs because of interaction between person and environment: The environment helps to shape learning.
6. Learning is a process that generates knowledge: Experience allows the learner to form and reshape knowledge through social means.

Kolb's experiential learning model (see Figure 1) is a circular process and encompasses four theoretical constructs (Kolb & Kolb, 2017). The four constructs follow: (a) concrete experiences, (b) reflective observation of the experience, (c) abstract conceptualizations, and (d) active experimentation (Kolb, 2015; Kolb & Kolb, 2009).

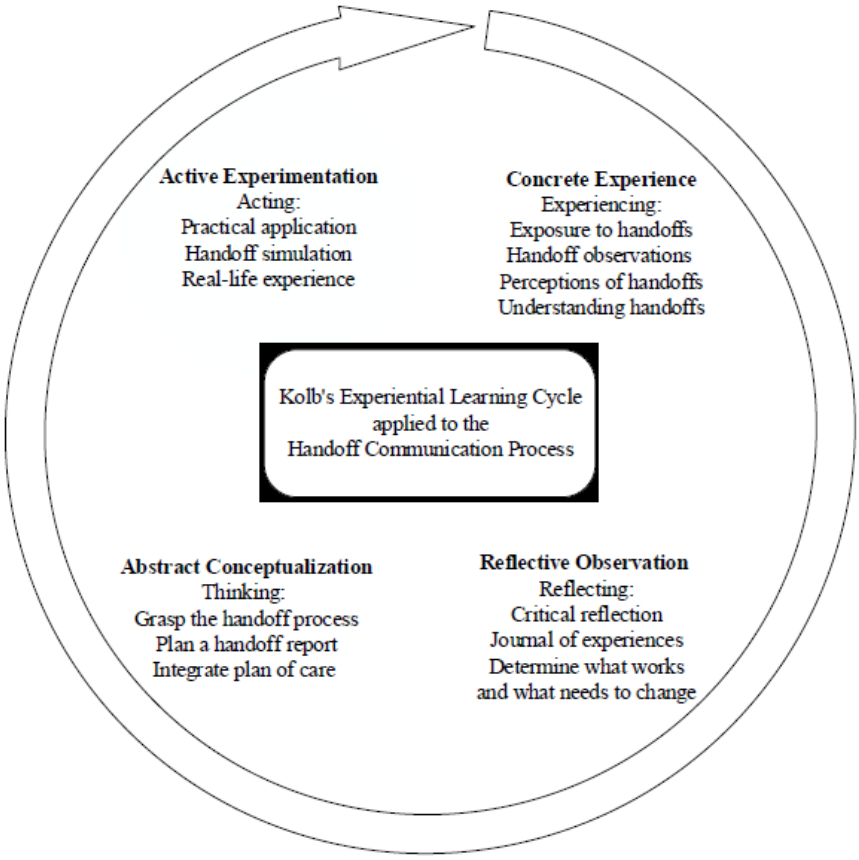

Figure 1. Experiential learning cycle applied to the learning process of handoff communication. Adaptation of Kolb's experiential learning cycle to handoff communication by A. Y. Kolb &and D. A. Kolb (2017). *The experiential educator: Principles and practices of experiential learning.* Kaunakakai, HI: EBLS Press. Adapted with written permission (see Appendix B).

In this study, the use of clinical practicum and practicum student refer to nursing students in the hospital setting. Common terms used within nursing and health care for handoff communication include handoff, handover, shift change report, and sign out, which have different meaning depending on the nursing or medical staff and the area of clinical practice. Therefore, the following terms are defined for this study.

Handoff, handover, shift change report, and sign out are terms used to describe the communication that occurs with the transfer of care from one provider to another (Riesenberg, 2012). The primary term used in this dissertation research study is *handoff*. According to the Joint Commission (2014), handoff is the

> transfer and acceptance of responsibility for patient care that is achieved through effective communication. It is a real-time process of passing patient-specific information from one caregiver to another or from one team of caregivers to another to ensure the continuity and safety of that patient's care. (p. 2)

Handoff, according to Patterson and Wears (2010), is "the process of transferring primary authority and responsibility for providing clinical care to a patient from one departing caregiver to one oncoming caregiver" (p. 53). For this study, a handoff is defined as active participation by nursing students in face-to-face handoff communication (shift report) in which clinical information is given or received to maintain ongoing clinical patient management at the change of shift.

Clinical practicum*,* in the context of this study, is defined as senior nursing students enrolled in the final practicum course before transitioning to professional practice. Students are engaged in the advanced clinical management of patients under the supervision of a registered nurse preceptor. The clinical nursing practicum provides experiential learning in the clinical setting for student nurses during their senior year. Students gain an increase in their independence in the clinical setting while in clinical

practicum (Baptiste & Shaefer, 2015).

During this time, students work with an assigned nurse in a preceptor-mentee relationship. Students use acquired knowledge and develop their clinical skills in preparation for transitioning from student nurse to professional nurse. The clinical practicum provides experiential learning for the senior nursing student to function as a nurse under the supervision of a nurse preceptor. This allows the student to solve problems, develop independent thinking, and develop decision making in this field experience (American Association of Colleges of Nursing, n.d.).

Practicum student is a student who is enrolled in a specific nursing practicum course. In addition to the course work, the practicum student's experience includes the clinical experience in the hospital setting.

Chapter Summary

Effective communication is an integral part of patient care management among health professionals. When communication is not carried out correctly, detrimental effects are likely to occur. This can be avoided by providing proper training to student nurses and evaluating their learning and experience. Some graduate nurses receive no formal training with handoff communication in their nursing program or the clinical setting for a variety of reasons, including the staff nurses are too busy or no opportunities to practice (Collins, 2014). This lack of proper communication among nurses can likely be attributed to inadequate preparation with communication skills, and lack of opportunities to learn and practice handoff communication while in training. An essential goal for all health care professions is to maintain patient safety–a key component, which is directly linked to good communication. The student nurse must learn to navigate the work environment in

which they function; this includes understanding and mastering what clinical information constitutes an effective handoff from one clinical provider to another clinical provider.

Understanding the student nurse experience is an important part of making future changes to communication training in nursing education. The focus of this research dissertation study is to understand and interpret the findings of handoff communication among nursing students in clinical practicum.

The phenomenological research process is ideal for this type of study. The goal of conducting a phenomenological study is to understand a phenomenon as experienced by the research participants from their point of view. The philosophical underpinning of this research study is based on social constructivism. The place, time, and space have an impact on student learning experiences. As such, the student's reality is embedded within the content and context of the clinical learning environment (Hanson et al., 2011; Wertz, 2005) and serves as the basis for understanding how students understand and engage in the clinical setting with handoff communication.

Chapter Two

Literature Review

The premise of this literature review was to explore and discuss information that is readily available in the literature concerning handoff communication within nursing and the health care system. Due to its link to patient safety, handoff communication has been front and center in the years just prior to this study. Although handoff communication is important, nurses and nursing students have difficulty with the handoff process, and there is no standard process to teach handoff to nursing students. Available handoff communication studies have had a focus on practicing nurses, physicians, the processes of handoff communication, the use of specific handoff tools, simulations, and barriers to handoff communication (De Meester, Verspuy, Monsieurs, & Van Bogaert, 2013; Drach-Zahavy & Hadid, 2015; Flanigan, Heilman, Johnson, & Yarris, 2015; Foster-Hunt, Parush, Ellis, Thomas, & Rashotte, 2015; Kowitlawakul et al., 2015). There are limited studies that have included undergraduate student nurses training with handoff communication in the clinical setting (Kesten, 2011; Lee et al., 2016; Skaalvik et al., 2010; Yu & Kang, 2017). To date, studies are nonexistent in the literature that include an exploration of the student nurses' experience with handoff communication during the clinical nursing practicum.

The databases and resources used to conduct this literature review include Academic Search Premier, Cumulative Index of Nursing and Allied Health (CINAHL), EBSCOhost, Google Scholar, ProQuest, PubMed, ScienceDirect, web sites, and books.

The search date ranged from 1998 to 2018. The reference section of articles was reviewed for additional resources. The search terms used include communication, handoff, handoffs, hand-off, handover, nurses, nursing education, patient safety, shift report, sign-out, and student nurse. For discussion of this literature review, the term *handoff* is used to encompass the use of handover, shift report, and sign-out procedure. This chapter presents an overview of the following: communication, patient safety and communication, handoff communication training, barriers to good handoff communication, handoff communication tools, and errors and handoff communication.

Communication

Communication allows an individual to gain information, accomplish goals and determine success or failures of these goals (Kanki, Helmreich, & Anca, 2010). Communication has five functions when carried out effectively. The first function is to provide information when communication is inadequate, which results in the loss of information. The second function is to establish team relationships–poor communication among team members can be attributed to ambiguity, which is due to a lack of leadership or lack of understanding of roles and responsibilities. The third function is to establish predictable behaviors that follow standard operating procedures and best practices: Poor communication does not conform to best practices and standard procedures. The fourth function is situational awareness to monitor and attend to a task: It is expected that team members would be vigilant, monitoring, and being aware of situational changes. The fifth function is a management tool–resources, workload, and time allotment–must be adequate: When available resources are inadequate, a task may be misdirected or poorly managed (Kanki et al., 2010). Communication is also contextual. There is the physical context–

location where communication takes place, the social context–communicator, operational context–operational conditions, and linguistic context–language barriers, cultural understanding (Eisenberg, 2008; Kanki et al., 2010).

The process of communication requires a determination of what information should be communicated, how information should be communicated–communication method, why the information needs to be communicated, and to whom the information should be communicated (Flin, O'Connor, & Crichton, 2008). Developing the ability to communicate effectively is a skill, which is learned and can be improved. Active listening and nonverbal communication are also important parts of the communication process. Developing standard protocols for communication, such as with shift handoffs, enhance good communication, and decrease any communication problems (Flin et al., 2008; Halm, 2013).

Communication in Aviation

Seventy percent of aircraft accidents worldwide from 1959 to 1989 have been directly attributed to the actions of the flight crew (Kanki et al., 2010). Reportedly, many plane crashes occur due to pilots hurrying because of being behind schedule. Other issues relate to long flight hours, tiredness, and exhaustion resulting in decreased mental acuity affecting memory, concentration, and understanding (Gladwell, 2008; O'Connor, Papanikolaou, & Keogh, 2010). According to Gladwell (2008), the typical accident includes several successive errors by the pilots. These pilot errors are directly linked to inefficient teamwork and problems with communication. The 1979 National Aeronautics and Space Administration (NASA) workshop of aviation accidents due to a pilot error found that accidents are related to human errors of social and cognitive skills and not the

technical skills of pilots (Thomas, 2018). Cockpit resource management training has a focus on training pilots on communication, leadership, and decision making to avoid errors (Thomas, 2018). Similarly, errors in health care can be attributed to human errors.

Communication in Health Care

Communication is a process that involves written, verbal, or nonverbal interactions between two people or within a group (Thomas, 2018). In high-risk workplaces, such as health care, exchange of information and a closed-loop communication system are essential. Communication should be clear and precise. The emphasis, intonation, and the use of nonverbal cues are used to express a sense of urgency. The close-looped system ensures that the receiver understood the message relayed (Kanki et al., 2010; Thomas. 2018).

Communication among different health care teams is socially constructed: Communication efficiency and effectiveness depend on the institutional and professional cultures. The cultural values of communication among team members require a solid commitment to the organizational mission, mutual respect, compassion, and continual improvement (Eisenberg, 2008; Kanki et al., 2010). There are hierarchical levels that prevent health professionals from speaking up, and time constraints affect communication. Communication among health care professionals should support collaboration and cognition (Eisenberg, 2008; Leonard, Graham, & Bonacum, 2004). Woodward (2017) included bullying, gender-related issues, and grandstanding as additional hindrances to good communication. Errors made by humans in the health care setting fall into several categories: errors of omission, commission, inadvertent. Errors occur in the workplace because of a lack of optimization of safety processes (Craven, Koppel, & Weiner, 2016).

Human factors resulting in medical errors can be attributed to similar issues of overwork, fatigue, and exhaustion reported with pilot errors (Helmreich, 2000; O'Connor et al., 2010).

Patient Safety and Communication

The IOM presented a framework for improving health care quality, which included six aims. These six aims of quality health care in a clinical setting follow: (a) provision of safe, (b) effective, (c) patient-centered, (d) timely, (e) efficient, and (f) equitable care to patients (IOM, 2001). Addressing handoff communication issues in the health care setting allows academic and health care systems to focus on and make changes that support the IOM's six aims in managing clinical care for patients. Patient safety and handoff communication are intertwined. Ensuring patients are adequately cared for in the health care system is supported by the incorporation of effective handoff communication as outlined by the Joint Commission's National Patient Safety Goals, and the IOM initiatives of providing quality care throughout the health care system (Joint Commission, 2014; Kohn et al., 2000). In 2008, the Joint Commission established National Patient Safety Goals after the *To Err is Human* report by Kohn et al. (2000) addressing the seriousness of medical errors and its detrimental effect on patients and the need for a system and human improvement to protect patients.

Recommendations by the Joint Commission included and supported several initiatives to improve handoff: first, standardize handoff communication; second, develop ways to make handoff more effective, such as providing time for questions to be asked and responded to during clinical information exchange; and, third, during transfer of information from one provider to another (Joint Commission, 2008). The recommendation

for standardizing handoffs is based on specific unit and patient population needs. Standardization of this process provides the foundation for improving face-to-face handoffs, as well as transitioning to using electronic resources to assist and enhance the handoff process (Staggers & Blaz, 2013).

The primary reason for conducting handoff communication is the transference and acceptance of clinical information to ensure continuity of care among health care professionals during patient transitions of care or during shift change. Inefficiency and inadequacy with handoff communication increase a risk to patients and compromises the safety of the patient (Collins, 2014; Joint Commission, 2014). The Joint Commission's (2014) review of data from 1995 to 2006 included a revelation that sentinel events are due to poor communication among health professionals in the health care system. Many of these reported incidents are avoidable with good communication thus avoiding harm to patients (Joint Commission, 2014).

Issues surrounding medication errors, patient safety, and efficient patient care have been connected to the effectiveness of handoff communication. The need for handoff encompasses every point of contact that patients have with health care professionals whether the contact occurs in an inpatient or outpatient setting. Regulatory recommendations for ensuring patient safety are drivers of change that are essential to managing patients within the health care system.

Patient Safety History

Patient safety is not a new concept and is supported by over 150 years of deliberation. However, the *To Err is Human* report revived this issue and propelled it to the forefront of medical discussions regarding how to better protect patients from harm within

the health care system (Wears, Sutcliffe, & Van Rite, 2016). According to Wears et al. (2016), three historical periods defined the development of patient safety initiatives starting with the ancient Greeks to present day. The first era, referred to as the sporadic era, dates from the ancient Greeks to the 1950s. The term *patient safety* infrequently appeared in English language books, though it is not documented in the literature before 1950 (Wears et al., 2016).

The adage of first do no harm is attributed to Hippocrates, the father of medicine. Nightingale in 1860 stated that the sick should not be harmed. Nightingale is considered one of the earliest proponents of patient safety (Sharpe & Faden, 1998; Woodward, 2017). Semmelweis, a Hungarian physician, wrote about risks associated with medical treatment in 1847. Codman, a surgeon, developed a classification system for surgical error reporting in 1915 (Wears et al., 2016). These pioneers sought to make an impact on the lives of the patients they served by seeking ways to make the patients' lives better and prevent medical harm.

The second era referred to as the cult era includes works available from a variety of sources who advocated for health care safety. Some notable occurrences during the cult era include the formation of the Anesthesia Patient Safety Foundation in 1985, the Annenberg Patient Safety Conference held in 1996, and the National Patient Safety Foundation was formed in 1997 (Wears et al., 2016).

The third era, referred to as the breakout era occurred at a point when the medical community was faced with the facts pertaining to medical errors and its negative impact on patients were reported in the *To Err is Human* report, The *British Medical Journal* report on *"*Reducing Error, Improving Safety*,"* and the National Health Safety Report, all of

which were published in 2000 (Wears et al., 2016). Errors in medical care have been linked directly to poor communication among health professionals (Kohn et al., 2000). The patient condition, changes in clinical status, medical interventions, and uncertainty make handoffs essential as well as difficult; however, the process is critical to ensuring patient safety and the provision of effective and efficient care to patients (Nemeth et al., 2008).

To ensure the safety of patients, health care providers are required to embrace a mindset of patient-centeredness and to acknowledge that every action has a negative or positive impact on the patients. Patients need to feel that their safety is the Number 1 priority of health care providers (Woodward, 2017). According to Woodward (2017), some of the reasons attributable to patient harm within the health care system follow: first, human factors, including training, experience, fatigue, and burnout; second, work hours, including shift patterns and length of working hours; third, length of hospital stay, including multiple transfers; and, fourth, poor communication, including inefficient handoff and transitions.

Handoff Communication

Handoff is a term used for the transition of care from one clinical provider to another. The handoff process occurs among various health care members formally or informally, including at a patient's bedside, in conference rooms, during rounds, at the nurse's station, and in hospital corridors (Benson et al., 2007; Eggins et al., 2016). Handoffs are needed as they allow clinicians to transfer information between shifts by coordinating clinical work, and transition responsibility and authority of patients to another provider (Nemeth et al., 2008). Handoff is an essential part of patient care and treatment, but it is a vulnerable time for patients (Halm, 2013; Serksnys, Nanchal, & Fletcher, 2017;

Watson et al., 2015).

Two-Way Communication

Handoff communication requires two-way communication. Using two-way communication has been shown to be more efficient, accurate, and reliable: It allows for the checking and correction of information, both the sender and receiver are actively engaged in the process and share responsibility, and both the sender and receiver work cohesively to achieve a mutual understanding (Flin et al., 2008). Unlike one-way communication, two-way communication allows for feedback that provides the receiver and sender with an opportunity to clarify information to assure understanding. The feedback process can be informational (nonevaluative response), corrective (the receiver questions or corrects the sender's message), and reinforcing (receiver acknowledges clear understanding of the message; Flin et al., 2008). Handoff communication requires two-way communication in which information is relayed, and the oncoming nurse has an opportunity to clarify information and elicit additional information (Barry, 2014; Drach-Zahavy & Hadid, 2015; Randell et al., 2011).

Transitions in Care Requiring Handoff Communication

Patient-related transitions. Patient-related transitions are the transfer of a patient from one unit to another within the same facility or from one facility to another. Examples of these transitions are emergency room to a unit transfers, operating room to the intensive care unit (ICU) transfers, or a discharge from a unit to a rehabilitation center or nursing home (Catalona, 2009; Wachter, 2008).

Provider-related transitions. In provider-related transitions, the patient remains in the same unit, but the clinical provider changes, necessitating a handoff, such as with

nurse-to-nurse shift change or resident-to-resident sign out (Catalona, 2009; Wachter, 2008).

Effectiveness of Handoff Communication by Nurses

In a qualitative study, Kerr (2002) revealed that the handoff process is a social activity in which the nurse must be effective while being flexible and attending to competing demands. Handoff serves as an informational and educational process (Kerr, 2002). In a study by O'Connell, Macdonald, and Kelly (2008) evaluating nurse's perceptions of the handoff process, differing opinions are reported of the handoff process. Some nurses reported being satisfied with the in-use handoff process while others reported the handoff as being too lengthy. Information was provided on the parts of the handoff process that needs improvement, such as what subjective information should be included, repetitive information found elsewhere in the patient's record, and receiving the handoff from a nurse who was not involved in the patients' care (O'Connell et al., 2008).

Handoff Communication Training

Handoff communication of patient information occurs through different means, including reading the chart, face-to-face verbal report between nurses, physicians, and other health care professionals; and through computerized or electronic handoffs. Essential components of handoff communication necessitate the provision of adequate, timely, and correct information to the incoming nurse. It was significant that many nurses and student nurses do not have any formal training in handoff communication (Lee et al., 2016; Leonard et al., 2004). This finding is the same among medical students and resident physicians (Gordon & Findley, 2011). In an online survey conducted by Barrett, Turer, Stoll, Hughes, and Sandhu (2017) of surgical residents, it is notable that 78% of the

respondents noted that they received formal handoff training. However, these residents reported that 41% of the handoff they received was inadequate. They also reported their efficacy of handoff reporting as being effective. There is a mismatch of perceived adequacy of the handoff given to another resident versus receiving the handoff. It is common for individuals to believe they are good communicators, yet be viewed by others as being ineffective communicators (Spitzberg, 2013).

Starmer et al. (2013) reported the implementation of a handoff program in nine hospitals for medical residents resulted in reduced medical errors, prevention of adverse events, and improved communication. To have an impact on patient safety, continual education of staff nurses, improvement of organizational processes, and training student nurses to function safely in the clinical setting is imperative. Inexperience with handoff communication, lack of handoff training, lack of role models, lack of confidence, and lack of understanding of the handoff process results in student difficulty communicating with senior nurses and to other health professionals. This is evident in the notable omission of important information, the lack of organizational skills, and the lack of self-confidence with the handoff process among nurses (Ascano-Martin, 2008; Manias, Geddes, Watson, Jones, & Della, 2016).

Effecting change and providing students with the necessary tools for conducting handoff requires student nurses to be educated and trained in the academic and clinical setting. Students should also be assessed for proficiency with handoff communication. Protecting the patient is the Number 1 priority of health care professionals, and students should understand their responsibility in patient management. This protects the patients whom the students are responsible for during their clinical training.

Brown et al. (2012) asserted that the lack of training and preparation of students with the handoff process results in student anxiety and increased risk to patients. Students also require more oversight due to lack of training and experience. Brown et al. developed a virtual world simulation training to assist students in the ICU to learn handoff. This is a safe environment for students to practice, providing experiential learning through repetition resulting in better retention of information.

Nursing students in a research course participated in a qualitative research project in which medical-surgical and emergency room nurses were interviewed regarding handoff communication between both units. Based on the responses of nurses from both units, the SBAR format was recommended to standardize the reporting process from the emergency room to the medical-surgical unit. The students gained knowledge about what is important for effective handoff: They were engaged in communication with the health care team and promoted patient safety (Schindler & Lapiz-Bluhm, 2014). Collins (2014) reported that there is no adequate information available regarding the process by which student nurses obtain experience and practice with handoff shift reporting. Collins noted that nurses have difficulty in determining the essential information to pass on during the change-of-shift report.

A study by Abdrbo (2017) evaluating nursing student and new graduate nurse interns' attitudes to learning communication skills, the importance of medical communication and caring efficacy included a conclusion that there was no difference in the attitude of the students and the new graduate nurses to learning communication skills. Also, there was no difference in their perceptions of the importance of nursing communication. In terms of caring efficacy, the nursing interns scored higher than the

students.

Observations, Simulation, and Handoff Communication

Simulation is supported as an effective means of teaching students' handoff communication through experiential learning (Yu & Kang, 2017). In an observational study reviewing 40 nurse-to-nurse handoffs report, it was found that the information provided during the handoff process was not standardized in detail or order. It was also evident that less experienced nurses lacked organization with handoff reporting in comparison to more experienced nurses (Foster-Hunt et al., 2015). In a study evaluating 115 senior nursing students using the SBAR technique, Kesten (2011) found that students using a standardized tool increased their communication knowledge. It was also noted that the use of role-playing with SBAR training and didactic lessons improved student performance (Kesten, 2011).

A quasi-experimental pilot study by Wang, Liang, Blazeck, and Greene (2015) using role-play and video simulation improved 18 masters' nursing students' knowledge of SBAR and the SBAR technique. Similarly, Lee et al. (2016) found that after engaging in simulation case studies, students had improved self-efficacy and increased comfort with conducting handoff to a nurse during the report. Malone et al. (2016), in an integrative review of student participation in handoff, surmised that students who gained experience with handoff before working in the clinical setting with real patients were better prepared to function in the clinical setting. Using simulation and structured handoff procedures improved student confidence with handoff participation (Malone et al., 2016).

A contrasting study of handoff involving experienced nurses and nursing students assessed information transfer at nursing handoff using written information and an affective

statement of concern through video-recorded handoffs. The study result included no increase in information transfer with handoffs. However, it was noted that when an affective statement of concern was interjected, information transfer increased among experienced nurses (Lee, Cumin, Devcich, & Boyd, 2015). A simulated handoff classroom activity using Avatars helped students increased confidence and lessened anxiety with handoff procedures. Students were able to select important information from the report and determine the relevancy of the information provided. Another reported the benefits of the simulation activity were teamwork and improved critical thinking (Rose, 2013). A preintervention and postintervention study of resident physicians using a simulation-based education for intraoperative handoff communication improved communication failure and errors from 29.7% to 16.8% with an eventual decrease to 13.2% at 1-year posttraining (Pukenas et al., 2014).

Funk et al. (2016) conducted a preimplementation and postimplementation design study to evaluate anesthesia clinicians, surgical clinicians, and registered nurses that compared handoff observations to a SBAR checklist. This study reported improvement in handoff communication among clinicians and improved provider satisfaction without any change in the length of time required to complete the handoff.

Barriers to Good Handoff Communication

Two of the most common communication issues resulting in negative outcomes includes lack of communication and poor communication. Communication quality is lessened due to problems with transmission–the sender provides ambiguous messages or there is a language problem; medium of transmission–background noise; problems with receiving–wrong interpretation or disregarded message; interference–arguments; and

physical problems–hearing (Crew Resource Management, 2017). Flin et al. (2008) reported barriers to good communication can be surmised as internal–language, culture, motivation, expectations or external–noise level, interference, distractions, location, and lack of visual cues. Transitional care errors or handoff errors are the most common errors in health care settings. Decreasing these errors requires having an organizational process in place that allows for handoff to be conducted at a specific place and time free of distractions, as well as the use of specific handoff tools to aid in handoff efficiency among clinical providers (Wachter, 2008).

Reilly, Marcotte, Berns, and Shea, (2013), in a qualitative study, included health professionals (16 physicians, 13 nurses, and seven social workers) caring for hemodialysis patients citing issues of fair to poor communication, inefficient or nonexistent communication, and no standardization of the handoff process, which can negatively affect patients. Another significant issue with poor communication relates to workload imbalance and allotted time to complete the work. The expectation of good communication in this study among physicians, nurses, and social workers surround timeliness, and coordination; and having a contact person.

Barriers Affecting Practicing Nurses

Effective handoff requires two-way communication, which involves giving information, receiving information, and verifying information through a closed loop system (Flin et al., 2008; Streeter, Harrington, & Lane, 2015). Many challenges noted in the literature affect the way nurses conduct handoffs. Some issues that nurses encounter with handoff were not being able to access a patient's Kardex, numerous interruptions, unrelated conversations, use of agency nurses who needed additional assistance, nurses' perception

that they had to justify their work, and lack of clarity with the report (Benson et al., 2007). According to Halm (2013), other issues of barriers to effective handoffs include organizational and unit culture, inadequate staffing, and lack of training with the handoff process.

Kowitlawakul et al. (2015) conducted a cross-sectional descriptive study of 50 nurse-to-nurse handoffs and 40 physician-to-physician handoffs found the most common barriers to effective handoff in the ICU was phone call interruptions, other people, portable equipment use, and background noise. The location where handoff occurs affects interprofessional relationships both positively or negatively. As such, the location and awareness of duties affect collaboration and consensus-building among professionals (Flanigan et al., 2015). An evidence-based practice project implementing a standardized end-of-shift report in conjunction with walking rounds reported that nurses did not always participate in walking rounds due to interruptions, such as patient call lights, phone calls, time constraints, and clinical priorities. Patient privacy issues and Health Insurance Portability and Accountability Act of 1996 concerns were also noted (Taylor, 2015). The results of a survey conducted by Kerr, Lu, McKinlay, and Fuller (2011) included a report of nurses' handoff as being time-consuming, inconsistent reporting, and lack patient involvement. These problematic areas with shift handoffs have the potential to affect nursing care and documentation. Grimshaw, Hatch, Willard, and Abraham (2016) reported that nurses, despite finding bedside handoff reports as time-consuming and anxiety-producing, perceived value in the process bedside shift handoffs.

Serksnys et al. (2017), in another qualitative study, looked at handoffs between physicians and nurses in a critical care setting that underscores the benefits of

interprofessional communication and noted barriers related to data integration due to nursing and medical professionals operating in silos. Nurses' inability to effectively conduct handoff has been attributed to nonexistent role modeling by senior staff, lack of training, and lack of understanding with the components necessary for an effective handoff to another provider (Manias et al., 2016).

Blouin (2011) asserted that miscommunications during handoff can be attributed to organizational culture and lack of teamwork; varying handoff methods that are ineffective, such as verbal, tape-recorded, bedside, and written reports; lack of synchronization of patient transfers and handoffs; limited time, inadequate staff, and no patient involvement; lack of standardization; and interruptions during handoff report (Blouin, 2011). Welsh et al. (2010) discussed notable problems with nurses' handoff; the information reported was at times excessive, or insufficient; quality of information changed; insufficient time for questions; interruptions during handoff; and audiotape recorder malfunction. Nurses need to be able to participate in face-to-face reporting and use a structured method, such as a checklist when conducting handoffs (Welsh et al., 2010). Kear, Bhattacharya, and Walsh (2016) conducted a mixed-methods, cross-sectional study of handoff communication among nephrology nurses and reported barriers of time, missing information, unstructured handoff process, multiple handoff methods, no handoff, and handoff perceived as unimportant.

Barriers Affecting Student Nurses

Handoff communication among student nurses is not well studied. Challenges and barriers, which affect student nurses learning good handoff communication, include minimal or no opportunities to practice handoff during clinical training and lack of staff

support or mentors (Lim & Pajarillo, 2016). The use of simulation training can assist in preparing student nurses on the process of handoff before entering the clinical setting to work with real patients (Malone et al., 2016). It is difficult for student nurses and novice nurses to learn proper handoff communication due to the lack of standardization and guidelines for handoffs (Lim & Pajarillo, 2016). Brady (2011) noted that new graduate nurses are intimidated and faced communication challenges with other health care professionals most notably with handoff reporting at the change of shift and with reporting information related to change in a patient's status.

Nurse educators and faculty members have a responsibility to ensure that student nurses can practice safely in the clinical setting (Bourbonnais & Kerr, 2007), which includes adequate preparation of handoff communication. Many nursing programs do not include handoff training as a formal part of the curriculum. Most student nurses' initial exposure to handoff communication occurs informally in the clinical setting. Preparing nursing students to communicate effectively includes engaging with other health care team members. Students lack exposure to important processes of various team communication, including handoffs, interprofessional rounds, nurse-physician communications, and unit-to-unit and facility-to-facility transfers (Sherwood & Drenkard, 2007). Supporting students' understanding of handoff communication tools requires coaches and mentors to aid in helping students organize critical information for care coordination and patient safety while in training (Sherwood & Drenkard, 2007).

The role of administrators, faculty members, and educators is to integrate courses and training in the curriculum enabling students to continually build on prior knowledge and increase student exposure and experience with handoffs. In preparing student nurses to

perform handoff competently, several factors must be addressed: A student must understand what constitutes effective communication, understand the ethical and legal principles of handoff communication, and understand the connection to patient safety (Lee et al., 2016; Malone et al., 2016).

Linking communication to patient safety will help to meet national safety goals for safe patient care by decreasing medical errors and avoiding sentinel events. Handoffs that are not conducted effectively by health professionals will have a negative impact on patient safety. The promotion of patient safety must incorporate adequate processes to ensure that information about patients is not lost, overlooked, or inaccessible to providers (IOM, 2001). Professional accountability is a necessary component to safely care for patients (Maxson, Derby, Wrobleski, & Foss, 2012). A formal process for proper implementation of handoff as outlined by the staff members at the Joint Commission follows: (a) engaging in interactive communication, (b) providing up-to-date patient information, (c) information verification process, (d) extending an opportunity for the receiver to review historical patient information, and (e) minimizing interruptions (Arora & Johnson, 2006).

Handoff Communication Tools

Types of Handoff Communication Methods in Health Care

Various mnemonics are used in health care to assist physicians, nurses, and other health care providers with handoff communication. Two of the more frequently used mnemonics are SBAR and I-PASS (illness severity, patient summary, action list, situation awareness and contingency planning, and synthesis by receiver). Other mnemonics variations in use to assist health care professionals with information exchange include I-SBAR, HANDOFFS, and SIGNOUT (Riesenberg, Leitzsch, & Little, 2009). SBAR was

developed by Leonard, Bonacum, and Graham of Kaiser Permanente (Leonard et al., 2004).

SBAR. SBAR has four components and is a way for nurses and physicians to communicate information regarding patients due to differing communication styles. The four components of the SBAR communication process follow: first, situation–focuses on what is going on with the patient; second, background–focuses on clinical and contextual information about the patient; third, assessment–is the health care provider's analysis of the problem affecting the patient; and, fourth, recommendation–the health care provider determines what the patient need to fix a given problem. Nurses tend to be broad and general when communicating issues and physicians more to the point in addressing issues (Leonard et al., 2004). In a preintervention and postintervention study, De Meester et al. (2013) evaluated the effectiveness of SBAR communication among nurses and noted improved collaboration among nurses, unexpected deaths decreased, and an increase in unplanned intensive care admissions. Role-playing, as a method for teaching SBAR communication, was better than lecture alone (Chaharsoughi, Ahrari, & Alikhah, 2014).

I-PASS. I-PASS was developed for use by a resident physician's handoff. The I-PASS mnemonic follows: First, I represents the illness severity–patient stability; second, P represents patient summary–admission information, hospital course, assessment, and plan; third, A represents action list–what needs to be done; fourth, S represents situational awareness–what is going on; and, fifth, S represents synthesis by the receiver–receiver asks questions, repeats information, and summarizes the information (Starmer et al., 2012). I-PASS can be used for both verbal and written handoffs and has been adopted by other disciplines (Starmer et al., 2014). Maraccini, Houmanfar, Kemmelmeier, Piasecki, and

Slonim (2018) found that the use of the I-PASS bundle with nursing and medical students improved communication. Regardless of the method of handoff communication used by the staff of an institution, the components of handoff must include in-use patient information, up-to-date information on the patient condition, plan of care, treatment, and any potential changes in a patient's condition (Catalano, 2009). Improved handoff communication with the use of I-PASS is also supported in a study by Starmer et al. (2017). This study noted improved inclusion of critical information in the handoff reports, interruptions during handoffs reduced by 40%, and no increase in the time to conduct the handoff or change in nursing workflow occurred.

Errors and Handoff Communication

Drach-Zahavy and Hadid (2015) conducted a mixed-methods prospective study of five hospital units and observed 200 handoffs followed by chart reviews. The chart review found that medication dosage discrepancies occurred in 23% of handoffs: In 52% of the handoffs, delayed or unexecuted orders occurred, and, in 33% of the charts, handoff documentation was not present.

Communication errors occur in face-to-face encounters, electronic and clinical notes and interpretation of medical records. Communication failures among nursing cases reported by the CRICO (2015) totaled 32% of cases with most of the cases occurring in the inpatient setting. Many of the communication issues surround verbal and written communication gaps with other clinical providers about a patient's condition.

Financial Impact and Legal Implications

In instances of patient harm because of communication errors, it is reported that financial losses total $1.7 billion, including settled and open cases. Thirty percent of

malpractice cases filed between 2009 and 2013 involved a communication-related issue (CRICO, 2015). Malpractice cases that involve nurses reportedly include miscommunication about a patient's condition (38%), poor documentation of findings (21%), and nurses being unsympathetic to a patient's concern (8%; CRICO, 2015).

In a review of 444 surgical malpractice cases by Greenberg et al. (2007), communication breakdown occurred in 43% of provider handoffs. Some notable findings included 49% involved lack of information transfer and 44% involved the accurate transfer of information, but not received. Preventable problems with handoff communication include loss of information during transfer from the sender to the receiver resulting in medication errors, delay of treatments, delayed transfers and discharges, and readmissions that could have been avoided. Failing to communicate effectively in the transfer of patient information is considered an error as this can be detrimental to patients (Kohn et al., 2000). Agarwal et al., (2010) estimated the financial loss to the U.S. health care system as a result of poor communication by health professionals to be in excess of $12 billion annually. The economic waste for a 500-bed hospital is estimated at $4 million annually due to poor communication.

Personal Experience With Handoff Communication

Over the years of nursing practice, the researcher developed proficiency with the process of handoff communication among my peers. This was not so initially as a new graduate nurse. That initial personal exposure to handoff communication occurred informally during clinical training at the beginning and at the end of the clinical day with the staff nurse. The researcher did not receive any formal training in the classroom or the clinical setting with the shift handoff. As a student nurse giving the report, the researcher

verbally explained to the staff nurse what was done for the patient during the shift. A more formal process took place during the final clinical practicum rotation where the researcher shared responsibility for a set of patients with an assigned preceptor. The nurse provided the direction of how the report should be conducted. In the researcher's first staff nurse position, handoff was conducted in the same manner with the nurse preceptor verbally provided the critical information that was necessary to share with the oncoming nurse. That experience with handoff communication was primarily on the job training. As a new nurse, handoff was difficult because of the environment and a new level of professional role expectation. Since that initial exposure to handoff, the researcher has worked in a variety of settings within various hospitals, all of which required handoff reports at the end of the shift, intershift, or with the transfer of a patient from one unit to the other.

There are many methods that have personally been used when conducting shift handoffs: All were based on the specific unit protocol: audiotape, face-to-face, and written reports. The most effective were face-to-face reports accompanied by walking rounds with the outgoing nurse after the report was given on a general surgical unit and bedside shift report in the critical care setting. In the ICU, an unwritten formal process was used to provide handoff shift report using the body systems starting with neurological to integumentary: This was helpful; however, it was not standardized throughout the units.

While working in a general surgical unit, end-of-shift reports were completed using an audiotape recorder. This was the least effective method. Using the tape recorder was problematic due to background acoustic problems, staff interruptions, inaudible sections on the tape, incomplete reports, loss of information, or the next nurse recording over the previous nurse's report. When the problems occurred, the incoming nurse was left to go

through the patients' charts and piece together the puzzle on their nurses' time as overtime was not allowed. Therefore, there was no extra time for the outgoing nurse to remain and answer questions or clarify information.

As a staff nurse, the researcher witnessed many incidents where reports were inadequate having a direct impact on patient care. An example is not receiving information that a new antibiotic was ordered and awaiting processing from the pharmacy, or not relaying that discharge or transfer order has been written for a patient. These incidents resulted in untoward effects and treatment delays. A delayed transfer or discharge holds up the workflow and delays an admission. This affects the system entirely by causing a ripple effect. An example of this is a patient waiting in the emergency room for placement and remains there longer than necessary while a patient in intensive care has an assigned bed on a general unit continues to incur charges for the critical care bed. An inadequate system of handoff communication will lead to potential mishaps, which negatively impact patients.

The handoff process differs from one health care institution to another, but there are fundamental principles of communication that students must learn to become effective communicators (Lim & Pajarillo, 2016). Students should learn and understand the connection between patient safety and effective communication in the academic and clinical setting (Enlow, Shanks, Guhde, & Perkins, 2010). It was noted that novice nurses have difficulty communicating with peers and physicians. When students are provided opportunities to practice handoff, they display increased confidence, less fear, and improved thought processes (Thomas et al., 2009). It is vital that student nurses receive foundational information that leads to a mastery of handoff communication, thereby ensuring safe and competent practice. Many nursing students are inadequately prepared to

conduct handoff communication, which may be due to a lack of exposure, a lack of opportunity, or handoff training not being part of the curriculum (Lee et al., 2016).

Fifty-three percent of health professionals believed that handoff communication training should be a part of undergraduate courses (Manias et al., 2016). It is necessary to consider the opinions, perceptions, and experiences of student nurses in determining what is important in teaching students about handoff communication to ensure patient safety and mastery of skills for transition to professional clinical practice. New graduate nurses transitioning to professional practice are expected to practice safely and efficiently, which includes being proficient with handoff communication.

As part of a student nurse's preparation, students are provided with opportunities to build on foundational knowledge and skills, which enable them to manage patients with different health care needs safely. However, handoff communication training is inadequate for some nursing students. Preparing nursing students to communicate effectively requires a joint effort by academic and clinical educators to provide real-life handoff experiences. Focusing on effective communication is essential as this will have a direct impact on patient safety, the quality of care provided, improve nurse-to-nurse transitions in care, and allow for better interprofessional communication and improved management of patient clinical needs. There is no uniformity in the way student nurses gain experience and practice with handoff shift reporting. It is necessary that student nurses are evaluated to obtain information regarding their knowledge, expertise, and experience with handoff communication (Brown et al., 2012; Collins, 2014; Lee et al., 2016). A summary of the literature reviewed is provided in Table 1.

Table 1

Literature Review Summary

Author, Year	Population	Study design or purpose	Country
Abdrbo (2017).	New graduate nurses and undergraduate nursing students (*n* = 29)	Longitudinal descriptive study assessed student attitude to learning communication skills, importance of nursing communication and caring efficacy.	Egypt
Ascano-Martin (2008).	Student nurses postconference shift report	Small group activity postconference using SBAR.	United States
Bourbonnais & Kerr (2007).	Nurses (*n* = 8)	Qualitative study of nurse preceptor's reflections of preceptoring student nurses in their final clinical training.	Canada
Chaharsoughi, Ahrari, & Alikhah (2014).	Nurses (*n* = 78)	Quasi-experimental posttest design study using SBAR technique with role-play and lecture.	Iran
De Meester, Verspuy, Monsieurs, & Van Bogaert (2013).	Nurses (*n* = 425)	Preintervention and postintervention study assessing nurse physician collaboration and communication.	Belgium
Drach-Zahavy & Hadid (2015).	Nurses (*n* = 200 handoffs)	Mixed-methods, prospective study. Chart review and nurse handover observations. Role-play versus didactic only training with handoffs.	Israel
Flanigan, Heilman, Johnson, & Yarris (2015).	Residents, attendings, physician assistant, and nurses	Qualitative, grounded theory. Four focus groups explored cultural and interprofessional themes that may be barriers to emergency department handoff education and staff perceptions of ED handoffs.	United States

Foster-Hunt, Parush, Ellis, Thomas, & Rashotte (2015).	Pediatric intensive care nurses (*n* = 66)	Qualitative observational study to understand information transfer during change-of-shift handoffs.	Canada
Funk, Taicher, Thompson, Iannello, Morgan, & Hawks (2016).	Anesthesia providers, surgical providers, and registered nurses (*n* = 103)	Preimplementation and postimplementation design to evaluate the use ISBARQ checklist and handover duration among providers in the pediatric Postanesthesia care unit (PACU).	United States
Grimshaw, Hatch, Willard, & Abraham (2016).	Nurses (*n* = 7)	Qualitative study of bedside handoffs.	United States
Kear, Bhattacharya, & Walsh (2016).	Nurses (*n* = 744)	Descriptive, mixed-methods, cross-sectional design to determine how critical information about nephrology patients is exchanged between nurse and other health care providers.	United States
Kerr (2002).	Pediatric nurses (*n* = 12)	Qualitative study exploring handoff practices in two pediatric units.	United Kingdom
Kerr, Lu, McKinlay, & Fuller (2011).	Registered nurses (*n* = 153)	Survey examining the handoff process between shifts.	Australia
Kesten (2011).	BSN and second-degree nursing students (*n* = 115)	Experimental study pretest and posttest design evaluating role play plus didactic versus didactic only using SBAR to improve communication skills.	United States
Lee, Cumin, Devcich, & Boyd (2015).	Nurses and nursing students (*n* = 157).	A randomized, single-blind, controlled experiment. Examined the effects of transmission of clinical information during handoff.	New Zealand
Lee, Mast, Humbert, Bagnardi, & Richards (2016).	Nursing students (*n* = 47)	Pretest-posttest interventional study design. Self-efficacy study and handoff score (CEX Tool). Teaching intervention to teach	United States

		handoff communication to students.	
Manias, Geddes, Watson, Jones, & Della, (2016).	Doctors, nurses, and allied health professionals (*n* = 707)	Prospective, cross-sectional design. Survey of health professional's perspective of clinical handoffs.	Australia
O'Connell, Macdonald, & Kelly (2008).	Nurses (*n* = 176)	Qualitative study, survey examined nurse's perceptions with handoff.	Australia
Reilly, Marcotte, Berns, & Shea (2013).	Physicians, nurses, social workers (*n* = 36)	Qualitative study evaluating the quality of information reported to outpatient dialysis centers on discharge.	United States
Serksnys, Nanchal, & Fletcher (2017).	Physicians, advanced practice providers, nurses (*n* = 16)	Qualitative study to determine facilitators and barriers to communication among health professionals in a medical intensive care unit (MICU).	United States
Skaalvik, Normann, & Henriksen (2010).	Nursing students (*n* = 11)	Qualitative study describing oral shift report and student learning	Norway
Starmer et al. (2017).	Nurses (*n* = 90)	Prospective preintervention-postintervention study of medical intensive care and surgical intensive care pediatric nurses using I-PASS nursing handoff bundle.	United States
Streeter, Harrington, & Lane (2015).	Nurses (*n* = 286)	Quantitative cross-sectional 2x2 factorial design. Evaluated competency of handoff at change of shift.	United States
Wang, Liang, Blazeck, & Greene. (2015).	Chinese (Master's) nursing students (*n* = 18)	Quasi-experimental pilot study preworkshop and postworkshop to teach Chinese nursing students SBAR communication tool and examine their attitudes toward using the SBAR tool.	United States
Welsh, Flanagan, & Ebright (2010).	Registered nurses and licensed practical nurses	Qualitative pilot study of nurses regarding the handoff process and the tool used for this process.	United States

	(*n* = 20)		
Yu & Kang, (2017).	Undergraduate nursing students. (*n* = 62)	Quasi experimental pretest-posttest design Nurse-to-doctor handover role-play simulation scenario using SBAR.	Korea

Note. CEX= clinical evaluation exercise; I-PASS = illness severity, patient summary, action list, situation awareness and contingency planning, and synthesis by receiver; ISBARQ = introduction, SBAR, questions, SBAR = situation, background, assessment, recommendations.

Chapter Summary

Handoff communication should be included in the curriculum from beginning to advanced clinical courses. Specific objectives that address handoff communication should be included in these courses, and students should obtain experience with the handoff communication process in the clinical setting. A mentoring process should be in place for student nurses in clinical rotations (Lee et al., 2016). Although there is an urgent call to improve handoff communication and to standardize the process, there is limited information regarding the adoption of this recommendation by the nursing programs.

Change of shift is a very chaotic time and requires the nurse to be organized and prepared for this transition of care to provide essential information to the oncoming nurse to maintain continuity of care for the patient. In the literature, the importance of handoff communication and handoff communication training for nurses and students is supported. It is essential that student nurses are properly trained in the process of handoff. Information regarding the effectiveness of teaching handoff communication to student nurses and the various methods of conducting handoff communication in practice is limited.

Understanding the experiences of student nurses and their perceptions of the handoff process while in training aids in providing information that can support curriculum changes and initiatives for improving handoff among nurses and meeting the requirements of the Joint Commission's National Patient Safety Goals. Effective handoff communication is essential and needs to be improved to protect patients. Students should be provided opportunities for learning, and faculty members should employ teaching strategies that are effective to assist students and provide experiential learning and mentors in the academic and clinical setting.

Chapter Three

Methods

In this chapter, the methods are presented and explained that were used to conduct this research about the lived experiences of senior nursing students with handoff communication and how the students make meaning of this experience. A qualitative phenomenological inquiry was used to gain an in-depth understanding of the lived experiences of senior nursing students with handoff communication in clinical practicum. The selection of a qualitative inquiry method, phenomenological research design, hermeneutics, the study sample and setting, ethical considerations, research question, data collection method, data analysis, and research rigor are discussed. The purpose of this qualitative study using the hermeneutic phenomenological approach was to understand the student nurse experiences with handoff communication through the lens of the students. The guiding question for this research study follows: How do senior nursing students make meaning of their lived experiences with handoff communication during the change-of-shift report in the clinical practicum?

A central premise for undertaking this study is to ensure safe practice and the provision of safe care by novice nurses to patients in the clinical setting. Information about student nurses' experience with handoff communication during the clinical practicum was not available in the literature. This study is necessary as many new graduate nurses and nursing students have difficulty with handoff communication in clinical practice. In the literature, poor communication negatively affecting the care provided to patients is well-

documented. In addition, poor handoff processes that occur among nurses and other health professionals are also discussed (Catalona, 2009; Collins, 2014; Craven et al., 2016; Hasan et al., 2017; Hoskote et al., 2017; Joint Commission, 2014; Liston et al., 2014; Makary & Daniel, 2016; Reilly et al., 2013; Starmer et al., 2013).

Other issues about the lack of communication training for nurses, nonstandardized reporting of patient information, and the lack of medical and nursing curricula addressing verbal communication are also noted in the literature. Effective communication is essential and a necessary skill for health care providers to master. Effective communication is required in the clinical environment to maintain the flow of information, task coordination, continuity of care, and promotion of patient safety (Abdrbo, 2017; Brindley & Reynolds, 2011; Hasan et al., 2017; Lee et al., 2016; Wohlauer et al., 2012).

It is essential that health professionals receive targeted education that is specific to improving handoff efficiency (Barrett et al., 2017). Conducting this study provided information that can directly impact the way students learn about handoff communication and address issues that hinder adequate preparation with handoff communication. This, in turn, will lead to better academic and clinical training (Wong, Yee, & Turner, 2008) of student nurses with handoff communication. Handoff communication is a critical skill that student nurses who are preparing to transition to professional practice should have a good command of while in training.

Research Design

Qualitative Research

Conducting a qualitative research study places the observer in the world of the participant allowing the researcher to interpret, bring meaning, and make sense of the

participant's world in its natural environment (Denzin & Lincoln, 2017; Yardley, 2017). In qualitative research, the researcher provides a narrative description of problems and routines of people's lives through materials, such as case studies, individual experiences, stories, introspection, interview, artifacts, and cultural texts (Denzin & Lincoln, 2017). Yilmaz (2013) defined qualitative research as follows:

> It as an emergent, inductive, interpretive and naturalistic approach to the study of people, cases, phenomena, social situations, and processes in their natural settings to reveal in descriptive terms the meanings that people attach to their experiences of the world. (p. 312)

Qualitative research has multiple approaches that can be used when conducting research. Depending on the type of study being conducted, the qualitative researcher's focus may involve the development of new theories, such as in the grounded theory. The central aim of conducting any qualitative research involves understanding people in their world by determining how they experience, understand, and interact with this world (Ashworth, 1997; Sutton & Austin, 2015). In qualitative research, the researcher can focus on the meaning of a phenomenon, understand context and processes, and involve researcher subjectivity (Maxwell & Reybold, 2015). Realizing that each student nurse would experience the handoff process differently, it is incumbent that the researcher was engaged with the students and understands the world in which they learn, practice, and develop skill proficiency with handoff communication. Understanding the student's world involved skillful questioning, active listening, and accurate documentation of the information provided by each research participants.

Qualitative Designs

Multiple types of qualitative research designs can be used for qualitative inquiry. They are narrative research, grounded theory, ethnography, case study research, and

phenomenology (descriptive and interpretive). Unlike quantitative research which is based on an empirical-analytical paradigm, and supported by positivism, qualitative research is based on an interpretive paradigm (Hathaway, 1995). In quantitative research, statistical measurements are used to evaluate a phenomenon, based on *a priori* information. In quantitative research, an objectivist epistemology is used in which the researcher is independent of the study. This is not so in qualitative research: The researcher and the participants are connected (Leung, 2015; Yilmaz, 2013). The constructivist epistemology is used in qualitative research, which supports the exploration of phenomena in a naturalistic setting. Thus, an understanding of an individual's social reality is achieved through the qualitative researcher's lens, which allows for flexibility, holistic, descriptive, and contextual analysis of the information obtained from the research participant (Cypress, 2017; Yilmaz, 2013).

Narrative Research

Bruner (1991) stated that individuals' life experiences and memories of these life experiences are represented by various narrative forms, such as stories, excuses, myths, and presenting reasons for doing and not doing. Bruner noted that a narrative form has a cultural connection, limited by the person's mastery, and may be influenced by colleagues and mentors. Construction of narratives is the person's reality based on truths not requiring empirical verification (Bruner, 1991).

Narrative inquiry as a research method is studying how humans experience the world through storytelling that is time-based and contextual (Connelly & Clandinin, 1990; Smit, 2017). The use of narrative inquiry in research is considered a phenomenon and an inquiry into the phenomenon being the story, and the inquiry is the narrative. In narrative

research, the researcher collects stories and provides a descriptive narrative of a person's life as told by the individual. These stories are intertwined with the person as a lived experience and are not separated from the storyteller, thus revealing the connection between living and telling (Clandinin, Cave, & Berendonk, 2017; Connelly & Clandinin, 1990; Ison, Cusick, & Bye, 2014; Wang & Geale, 2015). The focus of narrative research is the exploration of the life of an individual through interviews. The researcher collects storied information from individuals through conversations with an individual or with groups of people. The stories are then documented and analyzed (Ison et al., 2014).

Grounded Theory Research

The grounded theory approach was developed by two sociologists, Glaser and Strauss, in the 1960s. They refuted the argument that quantitative research was singularly the only form of scientific inquiry in support of the importance of qualitative methods (Charmaz, 2000). The grounded theory method is derived from symbolic interactionism that is rooted in interpretivism. In grounded theory, it is assumed that individuals go about their social lives irrespective of what others may deduce from their social behavior. Individuals who share similar experiences, perceptions, thoughts, and behaviors share commonalities that are fitting for a research study based on the principles of grounded theory (Corbin & Strauss, 1990, 2008; McCann & Clark, 2003).

In grounded theory research, the theory is not a preordained theoretical perspective but is derived from the data. The researcher uses an outsider or emic approach during the data collection and data analysis phase and an insider or etic approach to data interpretation (McCann & Clark, 2003). The grounded theory approach combines concepts and hypotheses that are derived from the data along with concepts that already exist and may

be useful (Glaser & Strauss, 1967). Glaserian and Straussian grounded theory are two of the choices that researchers have for data analysis when case study research is undertaken. The Glaserian method of grounded theory includes support for the illustration of conceptual and categorical relationships. In contrast to the Glaserian method, the Strauss Ian method includes an examination of the what-if in the data to develop theories (Cooney, 2010; Richards & Morse, 2013).

Ethnographic Research

The term *ethnography* is derived from the Greek words *ethnos*–people and *graphei* –write, and more specifically, to write about people and culture (Marvasti, 2004). Ethnography as a study method is connected to anthropological studies in the early 1900s in rural areas. During this time, anthropologist Malinowski and Radcliffe-Brown worked within societies and provided written accounts of the society's belief systems and social arrangements (Reeves, Kuper, & Hodges, 2008). This same process was later implemented by scholars from the Chicago School of Sociology who studied the social life of people living in urban areas. The studies set the standard for qualitative and ethnographic research to be descriptive instead of a theoretical nature (Marvasti, 2004; Reeves et al., 2008).

The main aim of ethnographic research is to shed light on the individual's views and actions within their habitat through observations and conducting interviews. Features of ethnographic studies include the exploration of a social phenomenon; work with data that are not coded at data collection, which may be small cases or a single case. Additionally, the interpretation of the meaning and function of human behaviors are elucidated by verbal descriptions and explanations (Hammersley & Atkinson, 2007; Reeves et al., 2008). A key part of ethnographic research is the participant observation,

which places the researcher amid the social setting enabling the researcher to gain an understanding of the culture by examining social action in various context (Draper, 2015; Reeves et al., 2008).

Case Study Research

Case study research has roots in several disciplines: sociology, anthropology, psychology, and medicine (Harrison, Birks, Franklin, & Mills, 2017; Simons, 2009) and continues to be an essential research method in these fields. Case study research is commonly used in social work, nursing, business, and education (Yin, 2018). Case study research is conducted as an inquiry to understand a phenomenon and generate knowledge for public consumption of the specific topic. Case studies can be a single case or multiple cases (Simons, 2009) and examine social or systems issues (Richards & Morse, 2013). Yin (2018) used a twofold definition for case study:

> A case study is an empirical method that investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be evident.
>
> A case study copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result; benefits from the prior development of theoretical propositions to guide design, data collection, and analysis, and as another result; relies on multiple sources of evidence, with data needing to converge in a triangulating fashion. (p. 15)

The selection of the case study method is based on several factors: first, explanation of a social phenomenon, which is determined by asking how and why questions; second, behavioral events are outside the control of the researcher; and, third, the study focus is case-based, rather than of a historical nature. Also, the case study method is an appropriate research method that can be used in mixed-methods and quantitative research. It is important that case study research is differentiated from non-research case studies, such as

teaching case studies and case records. The relevance of using the case study research method is dependent on eliciting an in-depth description of a specific social phenomenon (Yin, 2018). The use of the case study design in research has been solidified as a valid form of qualitative research (Harrison et al., 2017).

Research Design Selection

A qualitative phenomenological design was most appropriate for this study of senior nursing students' experiences with handoff communication because, using this design, allowed for in-depth understanding, analysis, and interpretation of individual experience during the clinical practicum training. In using the qualitative phenomenological design, the researcher was able to explore the individual student experience and perceptions by employing broad questions to stimulate discussions and obtain information from students about their exposure in the clinical setting with the handoff communication process. Using this process, allowed the student to share information in their own words about their experience with the handoff communication process during their course work and in the clinical practicum.

Phenomenology

The justification for the use of phenomenology as the qualitative method of inquiry for this study is supported by the need to understand the phenomenon of handoff communication among senior student nurses in clinical practice. This phenomenon is not well understood because there is no information available on this subject within the nursing literature about handoff communication with senior nursing students in clinical practicum. Using phenomenology, the researcher can explore and develop an understanding of the experiences of the participants in their world at a given time. Therefore, phenomenology

provides insightful content, which brings individuals in direct contact with the world of the participant (van Manen, 1984).

When using phenomenology, researchers are open and nonjudgmental regarding the participants' perspective of a phenomenon (Converse, 2012) through their lifeworld as they experienced it and not how it is categorized, conceptualized, or theorized (van Manen, 1984). The phenomenological approach in research includes a requirement that the collection of themes about a phenomenon of consciousness is presented through individual, lived experiences. Phenomenology is studying the experiential world of an individual and promotes open communication between the researcher and the participants. The phenomenological method is used to gather information about the difficult phenomena of human experiences (Giorgi, 1997, 2010). In phenomenological research, part and whole are integrated, the contingent and essential are clarified, value and desire are explained, awareness of the important and inconsequential is presented, and the significance of what is taken for granted (van Manen, 1984). The following section includes a discussion of descriptive phenomenology and hermeneutical phenomenology from the perspectives of Husserl, Heidegger, Merleau-Ponty, Gadamer, and van Manen.

Husserl: Descriptive Phenomenology

Husserl, a German philosopher, is considered the primary founder of phenomenology. Phenomenology came to light around 1900 to 1901 with Husserl's work titled *Logical Investigations* (Winkler & Botha, 2013). Phenomenology is the study of people's experiences as presented by the subject, which Husserl termed the *whole consciousness*. Phenomenology is the description of both subjective and intersubjective life and includes the cultural and spiritual aspect of lived experiences. For Husserl, this

encompasses the explication of cognitive states or judgments and is inclusive of other conscious states; and acts, such as sensory awareness, perception, memory, feelings, thoughts, imagination, and time-consciousness (Moran, 2014). Consciousness is the matrix from which the phenomenological experience emerges either implicitly or explicitly. Consciousness in phenomenology cannot be excluded as it is part of becoming or being aware. This awareness necessitates the embodiment of the lived world of others, which is intuitable and presentable without any addition or deletion. In phenomenology, the phenomenon is what is given or presents itself with a precise understanding of the person's consciousness (Giorgi, 1997).

Husserl's descriptive phenomenology paved the way for many other scholars' works with phenomenology, such as Heidegger, Merleau-Ponty, and Georg-Gadamer (Winkler & Botha, 2013). Husserl's descriptive phenomenology is shaped by the etic approach (the outsider's view) and contrasts with Heidegger's phenomenology, which takes the emic approach (the insider's view). There are four components of Husserl's descriptive phenomenology: first, bracketing–all preconceptions are held back to avoid the researcher's assumptions from directly impacting the processes throughout the research, which is a temporary process; second, intuiting–the researcher is open to meaning of a phenomenon as experienced by the research participant; third, analyzing–information extraction and categorizing; and, fourth, describing–defining and describing the phenomenon (Hamill & Sinclair, 2010).

The steps involved with pure phenomenological design includes reduction or bracketing; a description which expresses the object of a given act as it appears linguistically; and the search for the essence of the phenomenon, which contextual

understanding that is constant and based on intuition (Giorgi, 1997). Husserl viewed consciousness as being part of a larger whole involving emotion and perceptions. For Husserl, in the process of phenomenal intentionality, the use of the mind is required to understand the phenomena in the world. Therefore, intentionality is the main characteristic of one's conscious experience. Thus, through observations, an individual gains an understanding of a phenomenon. Experience is understood through intention and is connected to an individual's will and reason. An individual is then able to conduct an intentional analysis of the experience by describing its content or making sense of the experience (Aldea, 2014; Duckham & Schreiber, 2016; Walsh, 2017).

Husserl saw the natural world as the world in which people live. Husserl purported that, in unfolding the intentional content of a specific experience, an individual is then able to describe other experiences that are matching with what is obvious in an experience (Belousov, 2016; Walsh, 2017).

Motivation. Husserl saw motivation initially as a concept that connects the contents of experience that are lived through in a single experience that can be described through reflection. Husserl later described motivation as the force that channels the flow of experience (Walsh, 2017). Walsh (2017) argued that Husserl's idea of motivation is the foundation of consciousness.

Perception. Husserl's conception of intentionality is that perception is included in the interpretation of nonrepresentational sensations or intuition. Mental actions represented by both intuitive and sensory contents can be representative of different objects and changes based on the contextual setting or circumstance (Hopp, 2008). Husserl described epoche as the purposeful disassociation of the researcher's assumptions on the personal

interpretations of others' experiences and perceptions. This requires the researcher to start anew, leaving behind what is known about a phenomenon. Inserting one's own belief when interpreting phenomena can lead to an inaccurate analysis about the subjective realities of individual subjects (Butler, 2013): Husserl and Heidegger presented two opposing channels of phenomenology; Husserl's focus was on transcendental reflection or being out-of-the-world, while Heidegger focused on the ontological analysis of the nature of being or being-in-the-world (MacCann, 2007).

Hermeneutical Phenomenology

Hermeneutics is a Greek verb, which means to explain, interpret, or translate (Sembera, 2008). Hermeneutics was first used in biblical studies as an interpretation of texts. Hermeneutic inquiry seeks to reveal hidden intentions and meanings. The use of hermeneutic inquiry has moved from solely the interpretation of the biblical text to its use in understanding human practices, events, and situations. Schleiermacher has been credited with modernizing hermeneutics to become more general to shed light on all human understanding. Hermeneutics involves understanding the written or spoken word. Understanding in hermeneutics requires the interpretation of words, signs, and events. This understanding of issues allows the researcher to be intimately engaged and allows for events to become part of the researcher's mental world, thus allowing the researcher to express acquired information in their terms (Crotty, 1998; Zimmerman, 2015).

In this study, the hermeneutic phenomenological approach was used because it was supportive of both descriptive and interpretive analysis of the information garnered from interviewing the students engaged in the handoff process during the clinical practicum. In conducting qualitative research, the researcher is required to use individualistic self-

engagement or researcher as the instrument, self-awareness, engage in critical thinking, and critical reflection (Carawan, Knight, Wittman, Pokorny, & Velde, 2011; Hansman, 2015; Starks & Trinidad, 2007). The goal of the qualitative researcher is to make sense of the world in which the research subjects function and live. The researcher's focus is on deconstructing and understanding multiple realities through specific context and time frame (Cypress, 2017; Hansman, 2015).

The paradigm of interpretive inquiry includes the phenomenological, hermeneutics, experiential, and dialectic aspects. In quantitative research, the researcher is outside the field of inquiry while in qualitative research, the researcher is intimately involved in the process (Hathaway, 1995). According to Hathaway (1995) and Streubert and Carpenter (2011), the interpretive paradigm includes six assertions: (a) human experience is the basis for knowledge acquisition, (b) participants construct their own reality as there is no true reality, (c) understanding the participants' experience serves as a guide for the researcher, (d) acceptance of participants viewpoint, (e) researcher-participant as an instrument, and (f) data reporting based on participant responses.

Heidegger

Heidegger defined hermeneutics as understanding "being" from a phenomenological perspective; the term used is *Dasein*, meaning the phenomenology of the human being. According to Knowles (2013), being-in-the world is to gain an understanding of the world, therefore "there is no world without Dasein and no Dasein without the world" (p. 328). Heidegger also believed that the interpretive process is necessary to understand the lived experiences of individuals (Crotty, 1998). In hermeneutics, Heidegger's interpretation of phenomena is that which is clear and visible

as is: Things are revealed and then comes to light (Crotty, 1998; Sembera, 2008). Heidegger expounded hermeneutical phenomenology as a circular process (Crotty, 1998). The hermeneutic circle represents the whole and parts that make up the whole. This entails the continual gathering of information that leads to understanding and then interpretation, which leads to revelation and new insights (Bontekoe, 1996).

Using Heidegger's hermeneutic phenomenology, the researcher sought to understand the lived experiences of student nurses learning and engaging in the process of handoff communication during the nursing practicum and to interpret the meaning of these experiences. Heidegger's phenomenology involves analysis of the lived experience through description and interpretation. Hermeneutic phenomenology is visualizing phenomena through conversations (Sembera, 2008).

The phenomenological perspective is the evaluation of a research participant's everyday experience as the individual understands it. Data were collected and analyzed without prejudgment (Crotty, 1998). Evaluating the experiences of student nurses produced information about the student nurse's everyday experience with handoff communication during shift report. Using the hermeneutic circle in which it is said that to understand something, the researcher must start with ideas and use terms that presume a basic understanding of what the researcher is seeking to understand (Crotty, 1998).

Selecting hermeneutical phenomenology as the study methodology allowed for the evaluation and interpretation of each student's experience and perspective with the handoff process. At the time of this study, there were no studies in the literature about handoff communication during the clinical practicum. In this study, each student was given the opportunity to discuss personal experiences and perceptions with handoff in the clinical

setting during a time when the individual functioned as the student nurse with additional responsibilities. The student participating in an activity (i.e., handoff process) is entwined in that individual's lived world, which recognizes a person's ties to the world and being cognizant of the world around them (Wertz, 2005).

The hermeneutic phenomenological research process is ideal for this type of study because the goal in phenomenology is to understand the student nurses' point of view and interpret the findings as experienced by the student based on the philosophical perspective of Heidegger. The philosophical underpinning of this research study is based on social constructivism. In this study, student nurses were provided with the opportunity to share their experiences and perceptions with handoff communication in their course work and the clinical setting.

Merleau-Ponty

In Merleau-Ponty's phenomenology of perception, phenomenology is defined as placing essence back into existence. Merleau-Ponty believed that human beings and the world are incomprehensible with the exception of facticity. The body being placed in the world is fundamental to understanding the existence of humans. The perceived world is the world that is discovered through individual senses (Gallagher, 2012; Merleau-Ponty, 2004). Perception is embedded in an experience involving the thing perceived, the perceptual field, the perceiver; and the perceiver's disposition, interests, and orientation. A person's perception of the world occurs through cognitive activity and disappears as cognitive activity terminates (Coseru, 2015). In the text, *Phenomenology of Perception,* Merleau-Ponty was concerned with the individualistic perception of the world-lifeworld, which operates independently of cultural and historical practices. An individual's body

provides a way for the person to experience things and act (Heinamaa, 2014).

Gadamer

Gadamer, a German philosopher and a scholar of Heidegger, initiated philosophical hermeneutics, which deals with examining human understanding. Gadamer's work is an extension of other philosophers, such as Dilthey, Husserl, and Heidegger (Zimmerman, 2015). Gadamer criticized the conceptual definition of experience because it was based on perceptual knowing with a focus on knowledge based on conceptual data. This objectifies experience that is devoid of historical experience. In contrast, experience provides an individual with the capacity to develop an understanding that is not quantifiable or objectified (Palmer, 1969). For Gadamer, like Heidegger, perception is theoretical, practical, and the basis of human existence to incorporate the entire life experience (Zimmerman, 2015). Knowledge is not acquired and controlled, but it is something in which a person participates, thus, affording understanding based on participation. Understanding occurs because the person is already engaged in the process (Zimmerman, 2015).

Van Manen

According to van Manen (2016), any issues that produce a conscious revelation lends itself to phenomenological research whether the issue is real or imaginary, subjectively reported, or empirically measured. Human beings have a singular access to their consciousness: Being conscious makes individuals feel a part of the world. Consciousness, therefore, is to be aware of some facet of the world. Reflection of lived experience occurs only after the experience has taken place or been lived through– retrospective reflection. In phenomenological research, the researcher attempts to reveal,

describe, and interpret the internal meaning of the lived experience by exposing the depth and richness of the experience (van Manen, 2016).

Van Manen (2016) purported that conducting phenomenological research is the human scientific study of a phenomenon: It is, therefore, human science and not a natural science. In the natural sciences, objects do not have any conscious experience. The science of phenomenology is based on a systematic process, explicitness, self-critical, and intersubjectivity. This systematic process is based on participant questioning, reflection, focusing, and intuiting. It is explicit because it clarifies content and embedded meanings of lived experiences. Phenomenology is self-critical in that goals and methods are reexamined to assess strengths and weaknesses of the process and achievements. With intersubjectivity, the researcher is required to have another person validate the meaning of a phenomenon as presented. Searching and understanding the richness of living is the intention of hermeneutic phenomenological research.

Hermeneutic phenomenological research is concerned with the world as it finds it with all its different features and characteristics. The phenomenological researcher is part of the world that the individual is studying. This engagement allows the researcher to understand better commonality, things that are taken for granted, and ordinary concerns. This allows the researcher to describe the actions of humans, behaviors, intentions, and experiences as experienced within their lifeworld (van Manen, 2016).

According to van Manen (2016), hermeneutic phenomenological research involves six dynamic research activities:

1. turning to a phenomenon which seriously interests us and commits us to the world,

2. investigating experience as we live it rather than as we conceptualize it,
3. reflecting on the essential themes which characterize the phenomenon,
4. describing the phenomenon through the art of writing and rewriting,
5. maintaining a strong and oriented pedagogical relation to the phenomenon, [and]
6. balancing the research context by considering parts and whole. (p. 30)

Setting

The research setting was the university where the student attended academic classes in southern Florida. All interviews were conducted in a conference room where privacy was ensured. A convenient time and location were agreed on between the researcher and the participants. Two interviews were conducted in a private room in the library on campus, and seven interviews were conducted in a private room where the students attended classes on campus. Student nurses participating in their senior clinical practicum were interviewed using an interview guide (see Appendix E).

Sampling Plan

Sampling Strategy

The sampling for this qualitative research study about student nurses' experience with handoff communication during clinical practicum was conducted using purposive sampling. This was the best option for this study because the targeted study participants were prelicensure nursing students who were enrolled in their final clinical nursing practicum course. The research participants were all enrolled in the 4-year bachelor's degree (prelicensure) nursing program. The qualitative nature of this study necessitated purposive sampling.

In this dissertation research study, the researcher engaged with a small subset of participants who had experience with and were key to the phenomenon under study allowing for an in-depth evaluation of participant experiences. This contrasts with quantitative research, in which a larger sample size is required (Miles & Huberman, 1994; Patton, 1990; Rapley, 2014).

Sampling in qualitative research is a necessary part of participant selection and requires knowledge about the phenomenon to be studied. This prior knowledge is essential in determining how the sample typifies the phenomenon and the diversity or variances in the phenomenon. It is necessary to select potential participants from whom the researcher can learn more information about the central focus of the study (Patton, 1990). In this study, student nurses were able to provide useful information and give voice to issues surrounding handoff communication training and experience. Sampling in qualitative research is often purposive, unlike the use of random sampling methods used in quantitative research. Purposive sampling is used when cases are typical, extreme, or negative. However, in qualitative research, there is not enough prior knowledge to apprise sampling related issues (Miles & Huberman, 1994; Patton, 1990; Rapley, 2014).

Eligibility Criteria

Inclusion criteria. Students who were eligible to participate in this dissertation study were senior nurses enrolled in their final clinical nursing practicum course. Selection of senior nursing students as the study group served the purpose of gaining a comprehensive evaluation of students' experience with the handoff communication process. These students were at the end of their nurse's training and were preparing to transition to professional practice after successful completion of the National Council

Licensure Examination (NCLEX) exam to obtain their nursing license.

Exclusion criteria. Any students who have worked in nursing prior, such as in the capacity of a licensed practical nurse or nursing assistants, were excluded from the study due to prior exposure to handoff communication. Students who had not yet participated in the clinical practicum were also excluded from this dissertation study.

Determination of Sample Size

The sample size was determined once data saturation was attained from the interviews of nine participants. In qualitative research, an exact sample size cannot be determined a priori. The sample size in qualitative research is small due to the need to obtain detailed information from each research participant (Patton, 1990; Quick & Hall, 2015). There is no set standard for determining sample size in qualitative research. The ideal determination of sample size continues to be debated. It is generally accepted that appropriate sample size is based on redundancy or data saturation (Hanson et al., 2011; Patton, 1990; Thompson & Panacek, 1998; Trotter, 2012). Data saturation occurs when sufficient information has been obtained from the research participants to allow for study replication, no new information can be ascertained, and no additional coding can be attained. Lack of data saturation affects the validity of the study (Cleary, Horsfall, & Hayter, 2014; Fusch & Ness, 2015). Although there is no way to account for a specific sample size ahead of time definitively, the researcher anticipated 15 to 20 students to gather rich information about handoff communication among senior nursing students in clinical practicum. However, data saturation occurred with nine participants. According to Patton (1990), it is best to estimate a minimum sample size based on coverage of the phenomenon and stakeholder interest. This allows for some flexibility to be able to make

changes to the sample, such as adding participants, as information emerges and unfolds.

Protection of Human Subjects

Approval for this study was obtained from the Institutional Review Board (IRB) where the nursing students attended classes. Participants were recruited via an e-mail recruitment letter for the study once IRB approval was obtained. Before engaging in the research process with the nursing students, an informed consent (see Appendix C) was obtained as part of the process of protecting the research participants. The researcher obtained written consent for study participation after the participants were provided information regarding the purpose of the study, length of study, the process of data collection, as well an option to withdraw at any time from the study without any negative consequences.

Students were informed that study participation is voluntary and would not affect their grades. There was no financial responsibility to the research participant for participating in the study. A gift card was provided to each participant as a token of appreciation at the end of the interview. Once the study was completed, all demographic and study-related information was securely stored and will remain in the possession of the researcher until the specified study time frame for data storage of 36 months has elapsed, at which time this information will be destroyed.

Ethical Considerations

The code of ethics in research surrounds informed consent, avoiding deceptive practices, maintaining privacy, confidentiality, and accuracy of information. The researcher informed each research participants about the nature (openness and transparency) of the research study, and that participation is voluntary. The researcher secured participants

without any coercive practices (Denzin & Lincoln, 2000; Tracy, 2010). Deceptive practice in research is morally unacceptable and should be avoided although, arguably, there are times in psychological and medical research where information is attained through deception by omission (Denzin & Lincoln, 2000). Privacy and confidentiality guidelines were in place to protect the research participants by maintaining their anonymity. Maintain anonymity and privacy involves the protection of an individual's identity and, at times, the location of participants. Presenting research data accurately is critical in research. Fabricating information, omitting information, and providing fraudulent data is unethical (Denzin & Lincoln, 2000; Tracy, 2010).

Risks and Benefits of Participation

It is the researcher's responsibility to ensure that each potential research participant is correctly informed about any anticipated risk or benefits for participating in this research study (Nusbaum, Douglas, Damus, Paasche-Orlow, & Estrella-Luna, 2017). Students were informed that withdrawal from the study would not result in any negative consequences for withdrawing from the study. Participating or not participating in the study had no impact on the student's academic grades. The benefit to the student for participating in this study was being able to help the researcher by providing valuable information about handoff communication that will impact nursing education and nursing research. An anticipated inconvenience was the personal time allotment of 45 minutes to 1 hour that was required for the interview. As a thank you, a gift card of $25 was provided to each participant for their time and effort in participating in this research study at the conclusion of the interview session.

Data Storage

All audio recordings, field notes, transcriptions, and informed consents are maintained in a secured file cabinet in the researcher's home as per the IRB protocol. Transcriptions of the audio files were uploaded to a computer program NVivo 12 software and were password protected. Each student was provided a pseudonym ensuring that no participant identifiers could be connected to any of the collected data. The researcher listened to all the recordings and compared each audio recording with the transcription to verify its accuracy.

Recruitment Plan

Once departmental and approval from the IRB was obtained, each potential research participant was contacted via e-mail (see Appendix D) and provided with information regarding the purpose of the study. The researcher provided the students with a contact telephone number and an e-mail address in the event additional questions arose. A follow-up phone call or in-person discussion commenced assuring that all questions regarding the research study were answered. Once the student agreed to participate in the study, an informed consent was given to the student for review. Adequate time was allowed for the student to ask questions before formally agreeing to participate and to sign the consent form.

Data Collection

Data collection in qualitative research involves several strategies, such as interviews, focus groups, observations, and note-taking (Levitt et al., 2018). For this study, data collection included participant interviews and field notes. All interviews were tape-recorded, using two digital audio recorders; one primary and the second as a backup if one

malfunctioned. The recording instruments were securely maintained. The interview questions (see Appendix E) were semistructured, open-ended, and broad to gather in-depth information about the handoff communication process during clinical practicum among student nurses. Interviews continued until data saturation, and it was noted that no new themes emerge from the data. After each interview, member checking (Levitt et al., 2018) was completed to ensure that the researcher accurately captured the information that was relayed during the interview. Tape-recorded interviews were listened to multiple times, initially without note-taking or transcription. The recordings were then listened to again as many times as necessary to capture the depth, breadth, and accuracy of the information. All recordings were transcribed verbatim. Each transcription was reviewed several times to elicit the necessary content.

Data Collection Methods

Qualitative Interviews

Qualitative interviews are used to examine lived experiences, language, and communication, and societal and cultural issues. Interviewing in qualitative research is the main avenue through which data collection proceeds and the researcher becomes the primary data collection instrument (Brinkman, 2013; Phillippi & Lauderdale, 2018). Individual interviews used semistructured interview questions using an interview guide (see Appendix E). During the interview, nonverbal behaviors were also noted along with participant responses. Flexibility to ask additional questions based on participant responses was used and accounted for as a strategy to obtain additional supporting information (Brinkmann, 2013; Phillippi & Lauderdale, 2018). Using semistructured questions, the researcher was able to ask follow-up questions based on what the researcher deemed

important in the line of questioning: This allows the researcher to produce knowledge based on the participant responses (Brinkman, 2013). In interviewing, the researcher sought to obtain the descriptions as experienced with handoff communication among student nurses (Brinkman, 2013).

In this study, the primary method of data collection was interviewing, which supports the collection of thick or quantity and rich or quality descriptions (Fusch & Ness, 2015). Interviews provide an opportunity for in-depth questioning in order to prompt the participants to discuss and share information about their perceptions, attitudes, and emotions regarding the phenomenon under study (Bloomberg & Volpe, 2016). The research questions allowed the researcher to dive deeper with the research participants allowing for in-depth data to be collected (Turner, 2010) about the students' experience and knowledge with the handoff communication process. The time frame allotted for each interview session was 45 to 60 minutes.

Field Notes

Field notes are collected as part as of the process of conducting rigorous qualitative research making them useful and suitable when the researcher elicits information to determine the meaning of a phenomenon as experienced by the research participants (Phillippi & Lauderdale, 2018). In this study, field notes were an adjunct and assisted with data collection and construction of thick and rich descriptions regarding student nurses' experiences with handoff communication during practicum training in the clinical setting. Field notes were collected while interviewing the participants individually and added value to the contextual data. Field notes are essential to record what the researcher perceives, understand, experiences, and thinks while collecting the data, as well as self-reflection

(Groenewald, 2004; Phillippi & Lauderdale, 2018).

Using field notes in qualitative research can assist in the recording of information that cannot be captured via audiotape recordings, such as nonverbal cues, behaviors, and environmental contexts. Field notes can be of assistance to the researcher in the data analysis phase (Groenewald, 2004; Sutton & Austin, 2015). Following the recommendations of Phillippi and Lauderdale (2018), the field notes were reviewed and analyzed after each interview concluded allowing for preliminary analysis of the findings. Critical reflection by the researcher was important at this time and allowed the researcher to evaluate performance and document feelings and biases. The field notes included specific information, such as the study title, researcher name, and data collection dates. The setting and location of the interviews were also included. Participant demeanor and behaviors were documented. The interview questions were based on the interview guide and additional probing questions were used to ascertain additional information based on the participants responses. There were no changes to the main interview guide (Groenewald, 2004; Phillippi & Lauderdale, 2018).

Demographic Information

The collection of demographic information using a data survey sheet (see Appendix F) commenced before the interview process ensued. The survey was used to gather background information regarding, gender, location of practicum, and any prior health care experience. The participants were given a pseudonym to protect their identity. The demographic data provided a description of the participants and assisted the researcher in determining similarities and differences in participant perceptions (Bloomberg & Volpe, 2016).

Data Analysis

Data analysis required the determination of specific and common themes and patterns from the data collected from each nursing student. A stepwise approach to data analysis was taken, which included reviewing field notes, transcribed records of interviews, and notes (see Figure 2). An initial reading of the interview notes and listening to the recordings commenced primarily to become familiar with the content and general overview of all collected data. Each recording was listened to multiple times and compared to the interview transcript for accuracy.

In the interpretive process, the researcher is presented with the responsibility of full data immersion and thematic analysis looking for repeated patterns and themes to the point of saturation (Cutcliffe, & McKenna, 2002). Data analysis requires the researcher to be open-minded and minimize preconceptions while continually engaging in reflection, and adjusting to new thinking and perspectives (Åkerlind, 2012). This was followed by an in-depth analysis through manual data coding to determine themes and patterns and subsequent data coding using QSR International's NVivo12 software. After the descriptive information was analyzed, interpretation of the data was conducted, and findings reported. An inductive and deductive approach was used allowing for data analysis.

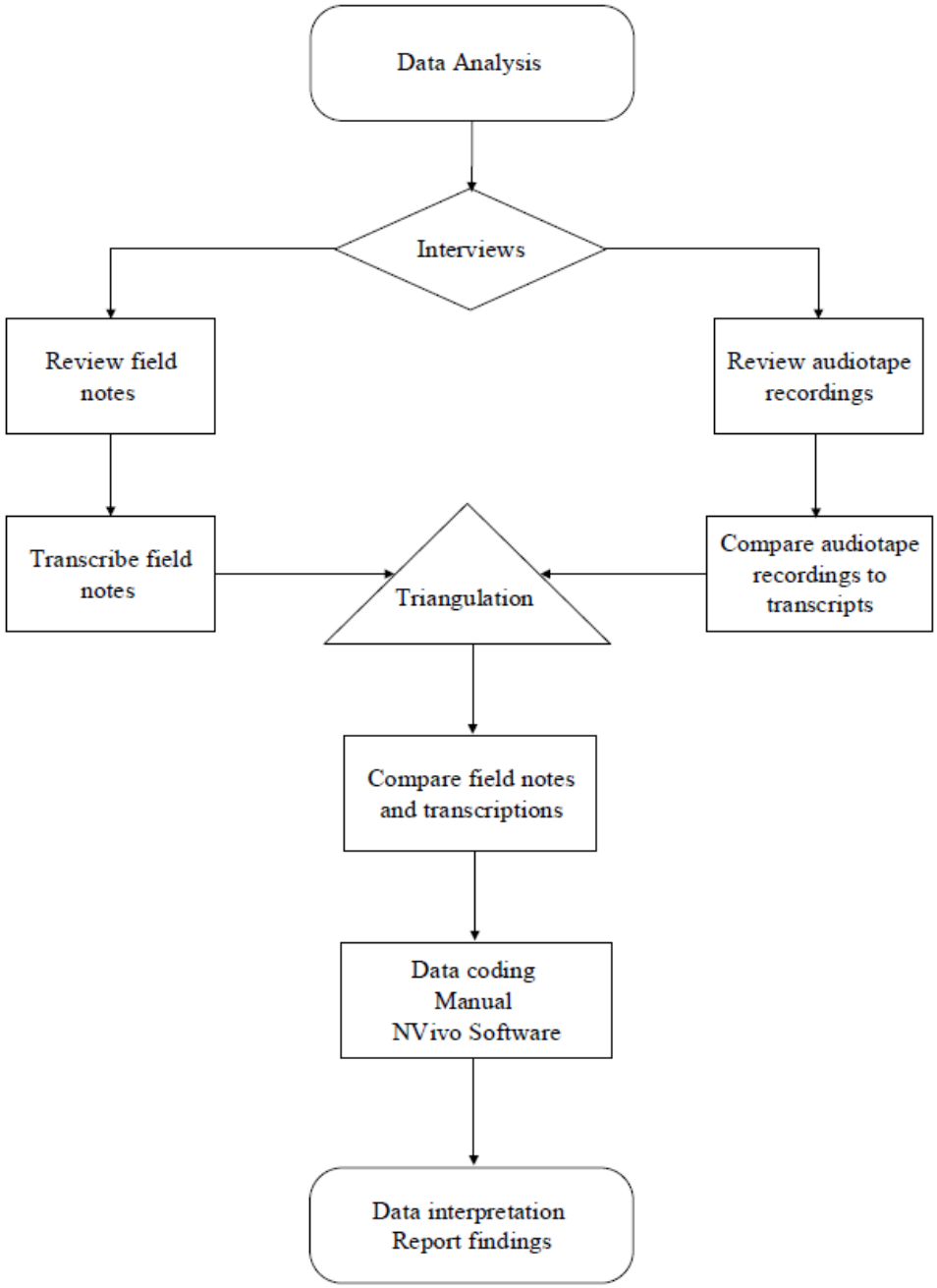

Figure 2. Stepwise approach to data analysis flowchart.

Research Rigor

Rigor in qualitative research includes a presumption about the authenticity of the findings and their relatedness to others in similar situations. Rigorous research can provide the stepping-stone to make policy changes and legislation based on the findings and

address the trustworthiness of the research (Denzin & Lincoln, 2000). In this study, the standards, outlined by Lincoln and Guba (1985) for establishing rigor in qualitative research, were followed. These standards include credibility, which is comparable to internal validity as in quantitative research; confirmability is comparable to objectivity as in quantitative research; dependability comparable to reliability as in quantitative research; and transferability is comparable to external validity as in quantitative research (Hays, Wood, Dahl, & Kirk-Jenkins, 2016).

Credibility

Credibility starts with building trust with the nursing student participants through engagement. Maintaining credibility in this research involved data collection and interpretation that is accurate and presents the perspective and reality of the research participants' experience (Cypress, 2017; Houghton, Casey, Shaw, & Murphy, 2013; Lincoln & Guba, 1985; Tracy, 2010). The researcher was engaged in all aspects of data collection, analysis, interpretation, and dissemination of information. The research findings included thick descriptions wherein contextual knowledge through descriptions and interpretation of the data were revealed (Tracy, 2010). This was achieved through extensive interviews to collect accurate and authentic information (Forero et al., 2018) from each nursing student.

Triangulation

Triangulation is an important concept of qualitative research and is used to assist in data validation. This is achieved by using various methods of data collection on the same phenomenon under study (Hanson et al., 2011; Nakkeeran & Zodpey, 2012). The process of triangulation for this research study included direct face-to-face interviews with research

participants, tape-recorded interviews, notetaking, and field notes (Hays et al., 2016; Houghton et al., 2013).

Dependability

Dependability in qualitative research is the ability to show from the findings consistency of findings and that the results can be repeated with the same group of participants and coders (Forero et al., 2018; Sutton & Austin, 2015). Member checking or member validation occurs when the researcher provides the participants with an opportunity to review the transcript to validate or change any of the reported information. Dependability is closely linked to credibility and allows for validation of findings and themes through an audit trail (Forero et al., 2018; Hays et al., 2016; Houghton et al., 2013; Tracy, 2010). Establishing dependability requires engaging additional researchers with the data analysis process and discussing emerging themes and data interpretation with other researchers. Rigorous data analysis is necessary to assure dependability (Hanson et al., 2011).

Confirmability

Confirmability of the research findings is achieved through maintaining an audit trail and through the process of researcher reflexivity. Reflexivity serves to keep the researcher grounded by continually evaluating personal involvement allowing for transparency (Jootun, McGhee, & Marland, 2009). Maintaining an audit trail provides another researcher with the ability to conduct the same research and achieve similar results. In effect, an audit trail builds a data bank of information supporting oral and documentary history and providing useful information for subsequent questions to be researched by other researchers (Hays et al., 2016; Houghton et al., 2013; Lincoln & Guba, 1982, 1985).

Confirmability is assuring that all study findings are as presented by the research participants and not by the interest or biases of the researcher (Sutton & Austin, 2015). As part of the process of maintaining credibility, the researcher continually participated in the reflexive process before and while conducting the research study through reflexive journaling (Sutton & Austin, 2015).

Transferability

Transferability of data pertains to providing rich, thick descriptions of contextual information, which lays the groundwork for study replication and application of study findings. Transferability of the study findings is revealing how the findings can be applicable in other situations or settings. Purposive sampling and achieving data saturation are ways in which transferability of findings can be assured (Forero et al., 2018; Hays et al., 2016; Houghton et al., 2013; Lincoln & Guba, 1985; Sutton & Austin, 2015). In this study, the transferability of the research findings may be applied to other nursing education programs.

Chapter Summary

In this chapter, the methodological foundations for this study are outlined. The goal of this study is to understand the experiences of student nurses with handoff communication during the clinical practicum. In order to gain knowledge and understanding the student nurses' experiences with handoff communication in the clinical setting, the qualitative method of inquiry using hermeneutical phenomenology approach is appropriate because this process allows for both describing and interpretation of the phenomenon. Understanding the worldview of others requires developing a relationship of trust with participants: This allowed for better engagement and understanding of the

participants' views allowing the researcher to gather detailed and exhaustive information about the students' experience in the clinical setting during the clinical practicum.

Obtaining information from student nurses about their experiences in the clinical setting with handoff communication were obtained through the interview process. This information was elucidated through their descriptions of their lived experiences. Perceptual information is not necessarily factual, but the individuals' perception of their experiences (Bloomberg & Volpe, 2016). Eliciting information from student nurses seeks not to find a right or wrong answer, but the individual story based on the participants' experience (Bloomberg & Volpe, 2016) in the clinical setting with handoff communication. The findings of this research study could be used to provide information for other student nurses that would support the educational and learning needs of the students in preparation for transition to professional practice.

Chapter Four

Presentation of Findings

The purpose of this qualitative hermeneutic phenomenological study was to explore the experiences and perceptions of senior nursing students in a baccalaureate nursing program with handoff communication during clinical practicum and how they make meaning of this experience. Hermeneutic phenomenology was the best method to explore and evaluate the student nurses' experience with handoff communication. This involved conducting face-to-face conversations with prelicensure nursing students who participated in handoff communication during the change of shift in the clinical practicum. Heidegger's hermeneutics, an interpretative method, purports that understanding occurs from being-in-the-world: This is followed by interpretation of that world. Interpretation is a revelation of what is understood from being engaged with and having prior knowledge of the world, allowing the researcher to see things as they are, this is the process of the hermeneutic circle (Ormiston & Schrift, 1990).

This chapter includes a discussion of the findings and presentation of a critical evaluation of the study's findings, including descriptions and interpretations as presented through the lens of the research participants using the hermeneutical phenomenology approach. Direct quotes are used to reflect the exact statement and views of the participants. Minimal changes or addition of words were made to a few direct quotes only to enhance the clarity of the sentence structure and can be identified by brackets in the quoted text. The study findings are supported by the analysis of statements provided by the

participants and captures the meaning of their lived experiences with handoff communication during the change-of-shift report. The statements provided in this study are a true reflection of the participants' statements as presented verbatim and, in some instances, as interpreted by the researcher.

Students participate in clinical practicum as their final clinical training before program completion. The research question that guided this study is as follows: How do senior nursing students make meaning of their lived experiences with the handoff communication during the change-of-shift report in the clinical practicum?

Participants

Students were selected by purposeful sampling based on their exposure to the central phenomenon (Creswell, 2014; Richards & Morse, 2013) of handoff communication. This assured each participant had a referential point of view, enabling conversational discussions about their experiences with handoff communication during the change of shift in clinical practicum. The initial recruitment of student nurses was anticipated to include 15 to 20 students for this study. However, data saturation occurred with nine students who were the final sample size for this study as no new information was elicited from participants and redundancy occurred (Hanson et al., 2011; Patton, 1990; Richards & Morse, 2013; Thompson & Panacek, 1998; Trotter, 2012). According to Creswell (2014), the sample size in phenomenological research generally includes three to 10 participants. However, Patton (1990) noted that there are no specific rules to determining sample size: Sample size is dependent on the purpose of the study, obtaining credible information, what can be achieved within a predetermined time frame, and the availability of resources. When seeking in-depth information, a smaller sample size is

warranted. The meaning of the study and understanding the information is related more to the richness of the information content and the researcher's analytical ability than the sample size (Patton, 1990). Good informants are individuals who have experience with the phenomenon being studied, able to be reflective, and willing to participate in the study (Richards & Morse, 2013).

The students who participated in this study were a homogenous group of senior nursing students in clinical practicum who participated in handoff communication during the change-of-shift report. Nine female participants responded to the recruitment e-mail from their nursing program directors. The participants were all enrolled in their clinical practicum and had completed 117 to 200 hours of their clinical practicum in varied clinical settings at the time the interview was conducted. Collectively, the total clinical hours of all nine participants were 1,667 hours.

The clinical area in which the students were in clinical practicum were critical care, obstetrics, neurology step-down, pediatrics, and telemetry: One student floated to three clinical areas: pediatrics, neonatal intensive care, and a medical-surgical unit. Demographic information of the participants is presented in Table 2.

Table 2

Demographic Information of Participants (N = 9)

Gender	*n*	Practicum hours
Female	9	
Handoff training		
Clinical setting	9	
Lecture	9	
Simulation	9	
Clinical location		
Critical care	4	
Neurology stepdown	1	
Obstetrics	1	
Pediatrics	1	
Telemetry	1	
Neonatal intensive care, medical-surgical unit, Pediatrics	1*	
Pseudonym		
Amelia, Emma, Leah, Ruby, Sophia, Taylor, Victoria		200
Hayley		117
Reina		150

Note. There were no male participants in the study.

* Participant floated between three units.

Data Collection

Data collected for this study were attained utilizing face-to-face interviews with prelicensure senior nursing students who were in clinical practicum or had completed all the required practicum hours. Data were collected over 4 weeks from April to May 2018. An interview guide (see Appendix E) using semistructured questions guided the interview sessions with allowance for flexibility to ask additional probing questions based on participant responses. All participants provided a signed informed consent (see Appendix

C) and all questions were answered before the start of the interview sessions. Each participant was provided with an overview and purpose of the study and was given enough time to read the consent form before signing the consent. Demographic information was collected using a questionnaire before the start of the interview.

The primary mode of data collection was a face-to-face interview, which were audio recorded. A pseudonym was used for each participant to maintain anonymity. Data collection commenced with an audio recording of the interviews using a digital recorder, and involved listening intently, note-taking, and asking follow-up questions of the participants. This allowed the researcher to make a connection to the participants' stories of their experiences in the clinical setting with handoff communication during a change-of-shift report. During the interview, ongoing clarification occurred, and an end of interview review was done after each interview session with the participant to assure that the researcher accurately captured the meaning of the stated responses to the questions.

The researcher assured there was no loss of information by securing information related to the study and study participants. All the audio recordings, transcripts, notes and field notes remained in the possession of the researcher and were secured in a locked cabinet. This information will be protected for the duration of time set forth by the IRB guidelines until which time all data would be destroyed.

Data Analysis

The interviews were uploaded to NVivo transcription at the end of each interview session and were retrieved electronically and stored securely using password protection on the computer. NVivo has a 90% accuracy in transcription per the web site (http://qsrinternational.com/). Each transcript was compared to the audio recordings to

determine the accuracy of the transcription and corrections made to establish a verbatim transcript of the interviews. Each transcription of the interviews was printed and remained in the possession of the researcher and shared only with the dissertation committee.

Once the accuracy of the data was verified, the researcher then sought to obtain data from the reports. Initially, each recording was listened to in its entirety without notetaking. Subsequently, each recording was listened to a minimum of three times to ascertain an accurate understanding of the participants' intonation and emphasis, as they reflected on their experience with handoff communication at the change of shift. The authenticity of their lived experienced was evident in the interview sessions. NVivo was used as a secondary source for data analysis after coding and themes were done manually to assure that no areas were missed or overlooked.

Findings

Hermeneutic phenomenology is a check on reality and provides tools to discover what is going on at different times and in different situations. This discovery of information is dependent on the veracity of one's subjective experience and how it is communicated (Friesen, Henriksson, & Saevi, 2012). Deconstructing the data requires thinking and acknowledging the researcher's preunderstanding is already in place and cannot be separated from the process of thinking. Theme discovery and development occur after repetitive thinking and rethinking about the shared participant experiences. Developing a theme is producing a written representation of what is visual and auditory from the text of the participant interviews allowing for recursive thinking and discussion (Smythe, Ironside, Sims, Swenson, & Spence, 2008). To capture and understand the essence of the lived experience, themes are condensed from the textual parts or from the

entire text allowing for the meaning to be illuminated. Theme development is finding the meaning, formulated through data simplification (Lindseth & Norberg, 2004; van Manen, 2016). Data explication is dependent on the analytical steps taken and the skill of the researcher. Writing the research findings of hermeneutic research is a result of thinking and presenting a factual account of the participant's description of their experiences (Smythe et al., 2008).

The process of data coding allows for data simplification and data abstraction with a focus on specific features and patterns noted within the data (Richards & Morse, 2013). The data analysis phase follows no set guidelines; There are steps outlined to follow. Data analysis is both iterative and cyclical (Yin, 2016). Making sense of the data and theme discovery involved becoming intimately familiar with the data, intuiting, and having insightfulness (Taylor, Bogdan, & DeVault, 2016; van Manen, 2016).

Following recommendations outlined by van Manen (2016), an iterative process was undertaken to examine and analyze the data. The following three steps were adopted from van Manen and used as a guide to uncover and isolate themes as presented in the interview data:

1. The wholistic or sententious approach entails evaluating the text as whole to determine which phrases hold meaning or significance.
2. The selective or highlighting approach involves recursive listening and reading while critically evaluating which statements reveal information about the experience or phenomenon.
3. The detailed or line-by-line approach includes evaluating the data line-by-line looking for clusters about the experience or phenomenon.

Saldaña (2016) defined code as a word or short phrase that assign an attribute that is summative, relevant, and captures the essence of language or visual data. Coding allows the researcher to move methodically to high-level contextual detail from the data (Yin, 2016). Coding is an integral part of the data analysis process and connects the various parts of the data, including arriving at themes, development of ideas, conceptual notations, data interpretation, and propositions (Taylor et al., 2016). Saldaña (2016) described a theme as an outcome of coding, categorizing, or analytical reflection. After the initial coding, a more focused coding of the nine in-depth interviews was conducted resulting in the discovery of four major themes: Nine subthemes were elucidated within the four major themes. A summary of the major themes and subthemes are presented topically in Table 3.

Table 3

Summary of Themes and Subthemes

Themes	Subthemes
Theme One	
Active participation	Being in the moment
	Valuing preceptor support
	Sensemaking
Theme Two	
Understanding handoff communication	Painting a picture
	Perceptions of change-of-shift report
Theme Three	
Insufficient training and practical experience	Wanting more simulation training
	Wanting more clinical hands-on practice
Theme Four	
Confidence with the shift report	Feeling confident
	Feeling inadequate

Theme One: Active Participation

In the clinical practicum, the student is engaged in a wider range of activities than in prior clinical rotations. One such activity is giving shift handoff report to an oncoming nurse. The following section includes a discussion of the study findings as it related to the students' experience while in clinical practicum with giving and receiving the shift report.

Being in the moment

All nine students mentioned some level of trepidation and difficulty with giving the change-of-shift handoff report. In discussing their feelings about participating in the handoff report at change of shift, students reported being nervous, experiencing self-doubt, feeling disorganized, challenged, and unprepared. In Table 4, a list of the students' statements regarding their initial feelings about participating in the change-of-shift report is presented.

Students voiced their initial experience with actively participating with the change-of-shift handoff report as being in the moment and realizing that this is a reality. The students were able to grasp and understand the difference between what was discussed in the classroom and simulation from what works in real life with handoff communication. Students also discussed how, in prior clinical rotations, they were only able to be on the receiving end of shift report and, therefore, shift change report as the person giving the report was new and enlightening. Some students were overwhelmed and concerned with possibly forgetting important information that should be passed on. The following are excerpts from three interview transcripts.

> [Sophia described an initial personal experience with the change-of-shift report]: It was [a] nerve-racking experience: It was nerve-racking because I've never done it before . . . I feel like you have to get used to it . . . practice makes perfect, the more you do it the better you become.

> [Reina reported forgetting the location of the intravenous (IV) line]: The first report I gave I realized I didn't remember where the IV was on the patient . . . when you are a brand new nursing student, and you get on the floor, the first thing an instructor will ask, where's the IV? So, I felt stupid in that moment, but, in the grand scheme of things, I had delivered a lot of information that was very relevant.
>
> [Hayley noted that she did not feel like she knew what she was doing and did not think the report went well, noting the following]: I don't think it went very well. I think I just got scattered and nervous. I was able to give all information that was pertinent but not in a flowing way.

Table 4

Participants Feelings About Conducting Handoff Communication

Descriptive words or statements	Meaning
Doubtful of what I was saying	Self-doubt
Doubtful if I'm missing important information	
Does not feel proficient	
Don’t know if I’m giving too much detail	
I still don't know, like what's good or what's not	
Difficult	Challenging
Don’t want to forget anything	
Hard	
Unsure of relevant information	
Freaking out	Anxiety
Nervous	
Nerve-racking	
Scary	
Stressful	
Super nervous	
I was all over the place	Disorganized
Not organized	
Insecure	Unprepared
Not comfortable giving or getting a report	
Not fully prepared	
Need more practice	

Valuing Preceptor Support

In nursing, the preceptor helps the student to bridge the gap between what is learned in the classroom and the clinical practice. The preceptor is a facilitator and supporter of student and novice nurses learning needs (Miller, Vivona, & Roth, 2016). In this study, the students all reported good preceptor support. They felt encouraged by the preceptor; receiving positive feedback, as well as constructive criticism; received tips on how to conduct the report; and reported that the preceptor made them feel comfortable. One student did report that personal feedback was not positive, but constructive only. Some students reported feeling validated from the positive feedback they received from their preceptor, which led to increased confidence. Some students reported doing practice sessions with their preceptors at the end of the shift prior to engaging in the shift change report. Student comments follow:

> [Victoria noted the following regarding obtaining positive feedback and encouragement from a preceptor]: Positive feedback was always a good feeling. [It] boosted my confidence, it helped me realize you know you're doing it right: You're not messing up. . . . My preceptor, she told me to be confident, to not let them . . . put me down because I was a student and they're not used to a student giving them report. They're used to another registered nurse giving them report. Just to be confident and if any questions were asked, you could answer saying, Oh, let me look at that [or] let me look at the chart. Let me double check before I answer that question. My preceptor definitely did help me a lot with that.

> [Ruby reported that the preceptor made her feel comfortable]: I was like super nervous and I was like–oh my God, I don't want to mess up, but my preceptor we had gone over it [shift report] before [the change of shift]. She just like made me feel more comfortable doing it [shift report].

> [Emma in discussing the preceptor's feedback and constructive criticism noted]: It was also good that the preceptor [told] you . . . you did a good job… and sometimes it was constructive criticism, which is great, because it's part of learning. So sometimes, I did it well and sometimes I didn't, but when I didn't my [preceptor] just told me what I could work on, what I didn't say, what I could have said, or what I could have said in a better way or use better terminology.

> [Leah noted]: When we were alone, and we were practicing, she [preceptor] would tell me like when I did something wrong or said something wrong and then she would also give me positive feedback if I did something right.
>
> [Reina noted]: I wanted to basically share what I had done for the patient that day and it was a really empowering moment I would say, and I got good feedback after, they [preceptor and oncoming nurse stated] that was good. So, it was empowering.

Learning that requires skill mastery also needs the guidance of an expert. For nursing students in clinical practicum, this expert was the clinical preceptor. The students valued and respected the guidance that they received from the preceptors. The students felt that the preceptor was able to help them link prior knowledge and new knowledge in order to understand and conduct handoff communication.

Sensemaking–Change of Shift Report

The students revealed that being in the clinical setting helped them make sense of the importance of the change-of-shift report. All the students acknowledged the benefit of giving a good report to the next nurse and that giving report was one of the most important part of taking care of the patient. One student shared personally never realizing how vital handoff communication was until the clinical practicum. Students also relayed that they had no formal process as to how to give the shift report, so they followed the preceptor's lead, observed, and took notes. Two students remarked that they did not use the I-SBAR technique in giving report they learned in school. Another student remarked having a feeling that students should be taught alternate methods for giving handoff report because different hospitals use different techniques as well as using the electronic health record (EHR) to give the shift report. Several students felt it beneficial to have a formal report sheet to take notes during the day and use as a guideline to give a change-of-shift report.

Another student suggested that unless one could have an opportunity to practice handoff in the hospital, that student was not going to learn. Some participant responses follow:

> [Amelia]: I feel like if you don't go to the hospital, you're not really gonna learn. You can see, and you can touch as many mannequins as you want, but once you get to the hospital it's a totally different story.

> [Taylor]: It made me realize how important it is to give, accurate and prompt information to the other shift or to receive the same accurate or prompt information because it would make a difference in the care that you give to the patient.

Students came to recognize and appreciate that conducting handoff was different from observing and reported their interaction with the other staff nurses during report was beneficial and help to build their confidence with the handoff process. Reina's analysis of participating in handoff communication was stated as follows:

> It makes me feel less of a student because when you're giving a report like that, you're in charge you have the stage and it's like this is my time to tell you exactly what needs to happen or did happen for this patient and so it's empowering.

All students considered the hands-on practice invaluable to understanding the components of the change-of-shift handoff.

Theme Two: Understanding Handoff Communication

Despite the acknowledgment by all students that handoff communication is important only two students directly made a connection with the change-of-shift handoff and patient safety. Continuity of care was evident in their discussions, but patient safety to a lesser extent. The students were asked what handoff communication means, their responses can be summarized by a phrase used by one of the participants–to paint a picture and tell a story.

Painting a Picture

The students all defined handoff using differing terms, but the core concept surrounded the importance of the shift handoff and relaying the necessary information to the next nurse. To paint a picture that will tell a story, a student is required to plan and understand the proper technique. To be effective at handoff communication, the student must first understand the meaning of handoff communication, plan the handoff report based on the care given to the patient, and then effectively communicate the information to the next nurse during a change-of-shift report.

Some of the students' comments follow:

> [Hayley defined handoff as]: You need to paint a picture and a story to the next person coming to care for the client. You must be able to include everything that was assessed and noted during your time with the client or any interventions done so that they can follow up on interventions you've made and check if they worked or if there are changes that need to be made.

> [Reina noted that handoff is: Reporting] anything that is part of their care that has changed drastically . . . it's to make sure that there's continuity of care and that the patient is safe.

> [Taylor]: It's basically having the most important information about the patient that is most important to pass on to the next shift.

> [Sophia noted that it is important to pass on information, so the next nurse knows how the patient has been trending]: I feel it's very important, because you have, for example, pending labs: Pending things need to be done. The day nurse needs to know if the patients' ICP went up and then it went down, that's something you really have to tell the nurse so they can know or they're systolic pressure trends in the 150s and 160s, that's something they should know so they know not to freak out.

> [Emma considered the shift report a summary of what needs to be done]: It means summarizing what you did for the patient, what's most important for the patient, and what needs to get done for the patient that you need to accomplish in those 12 hours because you didn't have time to do . . . so it's kind of like what you need to do for that patient in the time that you're there.

> [Amelia]: To me it means updating the following nurse about the patient. I mean, in case, had they already had them from a previous shift, you would update them with all new information . . . if it's actually a new patient . . . you would just go by every system and you start from the history of the patient, that's what I think it is.
>
> [Victoria]: It means sharing the information about a patient that is going to help the nurse perform the best quality care that can be given them. So, making sure the nurse knows all the information that she needs to know in order to take care of this patient to the best of her ability.
>
> [Leah]: It's important so you can get information about your patient and know how to take care of your patient whatever the goals for your patient. I think it's just important. You need some kind of report on your patient: How can you take care of them without it?
>
> [Ruby]: I guess it's like if there has been any change in the patient and any orders. I think orders are important because sometimes we would get a report and then we'll be like ok, and then we will go in the computer system and we would look and we see that they had orders from the morning that they hadn't done. So, in case they didn't do the orders, then it's important for us to know to do them.

The students summarized handoff communication as providing a summary of what happened during the shift. This summary involves updating the next nurse on any changes in the patient's status, reporting on labs that need to be followed up, maintaining continuity of care, and having the ability to provide good care based on the report received.

Perceptions of Change-of-Shift Report

The students experienced first-hand some of the difficulties and challenges with the change-of-shift report. The reported perceptions of the change-of-shift report by the students are based on their experiences and observations in the clinical setting. Students reported rushed reports. Some nurses were unhappy about the questions asked during report, and some nurses were okay with receiving and giving minimal information. The attitude of some nurses was not caring about the report, while some took report lightly, but most seriously. The students realized that the report is only effective if both the sender and receiver are mindfully present. The expectation is that the report should not be rushed, and

engagement with the report is needed from both the nurse giving the report and the one receiving the change-of-shift report. Several students noted the type of report received impacts the care the patient receives.

Feeling rushed. Feeling rushed was noted as an issue among several of the participants when engaging in the change-of-shift handoff communication. Some participants' comments follow:

> [Emma in discussing the report seeming rushed noted]: Well I guess in the mornings like when we were getting [report] I would say the nurses wanted it done quickly so because there are night shift and they're there the whole night and they're probably tired, so with them it felt a little bit more rushed than when I was giving it to the night nurse.
>
> [Reina stated that there was a feeling of being rushed in the air]: Sometimes there's this feeling of I gotta get out of here, it's in the air so it's like I question if am I going into too much detail? Am I taking too long?
>
> [Ruby]: In certain situations, I think when receiving the report sometimes, it was almost rushed because where I was also doing my practicum hours . . . the nurses have to clock out at a certain time.
>
> [Sophia noted having enough time with some nurses to give the report and with others feeling rushed]: With some nurses, . . . like I said there are those nurses that actually care [about] what you have to say and there's some nurses that don't really care [about] what you have to say, they're just kind of rude, and like ok hurry up, but this is just like depending on which nurses.

In contrast, Hayley reported having enough time to give and get the report and that it was not rushed. Leah also noted that the report was not rushed in the intensive care unit (ICU), but mentioned personally observing prior clinical rotations rushed reports on the medical-surgical floors, which Leah attributed to the number of patients the nurse was assigned.

Superficial reports. Students offered comments with respect to superficial reports, handoff, and handoff communication. Some participants' comments follow:

> [Reina, in discussing perceived challenges with the handoff, noted]: Some nurses ask a lot of questions and I will tell you that the sense I get is that nurses who are giving report get kind of miffed by the amount of extra questions that some nurses might ask for certain details, . . . but I just get this feeling that it's kind of like ok we'll give you the bare minimum.
>
> [Taylor surmised that handoff communication]: needs improvement, because unfortunately what we've seen is that sometimes nurses just give a superficial report because they, of course, have so many patients. . . . I would say sometimes the fact that nurses have so many patients and so little time to give the report.
>
> [Victoria]: I've seen many different nurses give handoff communication and there are some that take it very lightly and there's some that take it very seriously. For the most part, nurses–most nurses do take it seriously because it helps them you know with communication, it’s important.

The students discussed their perceptions of the shift report handoff in general and noted issues of concern, including rushed reports, and report not taken seriously. Overall, the students felt that handoff communication is important, but that it needs improvement.

Theme Three: Insufficient Training and Practical Experience

The students conveyed that they felt there was insufficient training prior to clinical practicum and insufficient practice during the clinical practicum. Exposure to the handoff process was not deficient since all students had been exposed to the process in all prior clinical rotations as well as simulation lab experience. However, students felt their level of engagement was not adequate in both the simulation and the clinical setting.

Wanting More Simulation Training

Despite some students stating that they felt confident with giving the shift report, nearly all students stated that the training they received prior to clinical practicum was not enough to prepare them to participate in the handoff communication. Some students felt that simulation practices were not helpful or not frequent enough, reporting that the simulation lab occurred once per semester, and wanted more simulation time. Some

students also noted that classroom discussion about handoff communication was only cursory. Eight student responses follow:

> [Ruby]: I feel like because we're not in the environment enough [clinical setting], we kind of get stuck because we're not used to it. If we were to engage a little bit more in the simulation lab . . . it would be more comfortable for us.
>
> [Victoria: In the] classroom, we talked about it [handoff communication] but it wasn't emphasized enough. We did, but it [practice handoff communication]–it was just so chaotic sometimes. It wasn't a true depiction of what a handoff report is in my opinion . . . sometimes handoff report wasn't even given in simulation, because it was just so chaotic in there that a lot of us would end up being together in the room taking care of the patient.
>
> [Reina]: Simulation [once per semester]–actually it's the only practice we got, like seemingly real practice of a shift exchange, change-of-shift report.
>
> [Sophia]: I don't feel like simulation helped . . . simulation should be done more towards the end, like more repetitive because that's when we're going to experience more report . . . I believe after six semesters of doing clinicals on the seventh one you should be comfortable with report.
>
> [Amelia]: Simulation it was very stressful. . . . It could be a little scary. I feel like once you go to the clinical setting and see how it helps, you know how simulation helps you.
>
> [Taylor]: I loved it [simulation], but I think the time frame, I don't know if it's because at the beginning you feel like oh my God it's too much. But, at the end, you want to have a little bit more time to be able to actually give a good report because you start realizing . . . you need to give report this way or this other way. So, I think it's very helpful. I would like to have more time for simulation because it is the time where you can actually make mistakes, so you learn a lot from that.
>
> [Leah]: I feel in school they could have incorporated it more in class like maybe some type of interactive online assignment to give report and take report. I wish we did more of that. Maybe in the [simulation] lab. They focus a lot on skills, which is also important, but I wish they were more like strict–on like, [you have] got to learn how to give report.
>
> [Emma]: I can honestly say we didn't do it that much . . . I don't have that much experience with the simulation handoff communication.
>
> [Hayley: Lab practice sessions were not adequate or helpful]. I actually feel like I was able to get better at it [handoff communication] during my seventh semester. The instructor leading it would have us give report, I-SBAR format, as well as a

> head-to-toe assessment from memory without looking at a sheet of paper and that seemed to really help.

Wanting More Clinical Hands-on Practice

Students felt that actively participating in handoff communication helped them to understand the importance of shift change report, as well as differentiate what information is relevant to pass on versus what the oncoming nurse can look up. Most students reported spending more time observing the change-of-shift report than participating during clinical practicum. Only one student reported actively participating in shift handoff each time she worked. Most students reported that they did not start giving the end of shift report until halfway through the clinical practicum. Two students stated that they participated in a change-of-shift handoff but never gave a full report to the oncoming nurse. Most students reported that they need more practice with handoff communication and did not get as much opportunities as they had hoped during the clinical practicum. Another issue reported was that students did not have a predetermined time as to when they would actively participate in a change-of-shift report. One student shared asking the preceptor to give a report at the beginning of the clinical practicum. Student responses follow:

> [Sophia]: Half-way through . . . like 5-6 weeks, I was just purely listening to my preceptor give report so I can get used to it.

> [Reina]: I would say you know, I'm 150 hours into my 200 hours and I'm still not giving a full report all the time.

> [Victoria participated in giving report three times during clinical practicum]: It was just three times. . . . It wasn’t as much as I would like it to have been.

> [Leah: My] preceptor allowed me to practice with her but did not directly give report: Only interjections to add information during the report on what happened with the patient during the shift. . . . [Leah also wished the preceptor had allowed her to be more involved with the shift report but blamed herself for not speaking up.]

The students would have liked to have more practical experience in both the simulation lab and in the clinical setting. They realized that repetitive practice during shift report helps to improve their comfort level and develops proficiency with the handoff communication process. Two student comments follow:

> [Leah summed up personal feelings about learning handoff in simulation]: I wish they could have forced it and made it like part of our grade.

> [Sophia]: You could do it as much as you want like as long as you make an appointment, . . . but if you didn't have somebody else to do it you really can't experience the report and the handoff report back.

Theme Four: Confidence With the Shift Report

Through experiential learning, students participated in handoff communication during the change-of-shift report in clinical practicum. In discussing the level of confidence and the transition to practice, some students stated that they did not feel fully prepared to conduct handoff communication, while most felt more confident, but with some reservations regarding performing the change-of-shift handoff properly in professional practice.

Feeling Inadequate

Initially, all students were unsure of what is important to report during the change of shift: This improved over time for some students, while others voiced insecurity with the handoff report at the end of clinical practicum. Some students despite stating they had built confidence during clinical practicum, did not feel adequate with the change-of-shift report. Three participants' responses follow:

> [Hayley]: I still think I'm not good enough to give report. . . . I think I need more practice. I'm not completely inadequate, but I'm not stellar, somewhere in the middle, maybe less adequate than good. I just need to be able to dissect information and provide it [during report].

> [Victoria]: So, on a scale of 1 to 10, . . . I would say a 5, a 5 just because I've done it a couple of times already, but I also don't feel completely comfortable. Giving a proper handoff communication, there might be some things that I forgot, that I should have said, or maybe I shouldn't have said that wasn't that important to say to the nurse as something else that I missed. . . . I have done it [shift report] before but I am not fully prepared [to conduct shift the change report].
>
> [Leah]: Honestly, I don't feel [prepared] maybe because I'm very insecure. I don't feel fully prepared. I definitely need more practice and hopefully, . . . when you get hired, they train you. . . . I know, not just me; I know a lot of my classmates were super insecure about giving and taking report.

Feeling Confident

Evident in the student's reflections regarding participating in handoff communication during the change of shift is the realization that the students felt that more practice in the simulation lab and in the clinical setting would have improved their skill and comfort level during the change of shift. Six participant responses follow:

> [Amelia]: Definitely more confident than before, but it is still scary.
>
> [Emma]: I feel pretty confident in my ability to give report. I will say this it will probably last maybe like 15 minutes just because I would . . . probably give more than I need to, but that's just because I'm still brand new.
>
> [Taylor]: I feel I'm more prepared. I will love to have a little bit more training, but I feel ok.
>
> [Sophia]: I actually feel pretty comfortable now after giving it [shift report].
>
> [Reina]: I feel really confident, like I want to give report all the time.
>
> [Ruby]: I feel way more comfortable now than if you would have asked me 7 or 8 weeks ago. I would have been like–no, I'm not ready, but now I feel more comfortable doing it.

Chapter Summary

In the fourth chapter, the information was presented regarding the participants, data collection technique, data analysis, and findings of the study. The study findings presented are the perceptions and lived experiences of nine prelicensure nursing students who

participated at varying levels with the change-of-shift report during the clinical practicum. All students were reflective of their experience and willingly shared their experiences and opinions, both positive and negative, regarding learning and practicing handoff communication. A significant part of the discussion surrounded the need for more simulation training ahead of clinical practicum. The students felt that learning handoff could be improved with more repetitive practice to increase their confidence levels. Nearly all participants considered the support they received from the preceptor as invaluable except for one student who noted a disconnectedness between that participant and the preceptor, which the participant attributed to the preceptor workload. The findings included a revelation that all nine nursing students found value in participating in handoff communication and understood that handoff is an important part of a patients' continuity of care. All students gained a better understanding of the handoff communication process through participating in a change-of-shift report.

Chapter Five

Discussion and Summary

This dissertation study using hermeneutic phenomenology was an exploration of the experiences of senior nursing students with handoff communication while in clinical practicum. This chapter includes a discussion of the lived experiences of the student nurses with the change-of-shift report and how they make meaning of this experience. Exploring handoff communication among senior nursing students during the change-of-shift report involved interviewing nine students who were enrolled in their final clinical practicum training. Pseudonyms were used for all student participants to protect the student by maintaining anonymity and confidentiality. A summary of the findings, implications for nursing education, nursing research, nursing practice, and public policy will be presented in this chapter. In addition, the study limitations and recommendations for future research are discussed. A qualitative study methodology was used to answer the research question: How do senior nursing students make meaning of their lived experiences with handoff communication during the change-of-shift report in the clinical practicum?

Summary of the Findings

Important insight into the experiences of student nurses with handoff communication in the clinical setting was offered in this study. Clinical practicum is the final clinical training for nursing students, providing an opportunity for the students to take on more responsibility in the clinical setting under the supervision of a nurse preceptor. Participating in the change-of-shift report is an essential part of the daily function of

nurses. For the student nurse, having an opportunity to practice the handoff communication skill, while in nursing school, the student nurse is assisted to understand the handoff communication process and prepare for role transition.

The findings from this study include an explicit explanation of how senior nursing students experience and make sense of the handoff communication process during the clinical practicum. It was revealed in the study's findings that the students' experience with the handoff process involved several connected components related to the experiential learning theory (Kolb, 2015) and the situated cognition theory (Lave & Wenger, 1991). All students valued their experiential learning and practical experience. This is evident in their descriptions of the value of their experience through active engagement with the change-of-shift report. Practical experience is a necessary component of understanding this critical nursing skill. The need to be in the appropriate setting to learn a specific skill in this case handoff communication during the change-of-shift report was of importance to the students. In addition to valuing the clinical practicum experience, the students desired more simulation training. The location of the clinical practicum and the experience was different for each student. One common thread that links to the situated cognition theory is that each student worked with preceptors in a specific clinical setting and had access to their expertise.

Four major themes were illuminated from reviewing and analyzing the interview transcripts: (a) active participation, (b) insufficient training and practical experience, (c) understanding handoff communication, and (d) confidence with shift report. The participants' experience with the change-of-shift report can be summarized as follows: The senior student nurses valued the active participation and practical experience afforded in

the clinical setting. However, all students desired more prepartum training and increased hands-on experience with the handoff communication process in the clinical setting. Being participative with the change-of-shift report allowed the students to grasp and understand the reality of engaging in the shift report handoff, improve their understanding of the handoff process, and improve their level of confidence from actively engaging in the change-of-shift handoff.

The participants shared that actively participating in the change-of-shift process was a new learning experience, which encompassed understanding a new reality about how information is passed on to the next nurse at the end of a shift. This reality provided a different perspective of the handoff process that was different from the observation phase in the prior clinical rotations. A significant refrain presented by nearly all participants is the need for additional training with the handoff process prior to the clinical practicum. All participants expressed the need for more exposure with the change-of-shift handoff during clinical practicum. The students shared their sense of the importance of the change-of-shift report, which centered around providing good care and continuity of care, which constitutes a good handoff. Lacking from most of the discussions was a direct connection between the importance of handoff communication and patient safety. The students shared they were not accustomed to participating in the end of shift report prior to the clinical practicum due to the past clinical rotations ending before the shift ended. Most students reported building their confidence with the change-of-shift handoff while in clinical practicum but acknowledged that more practice is needed in order to become proficient.

Integration of the Findings With Previous Literature

There were no studies available that included an examination of the handoff communication and the change-of-shift report among senior nursing students in the literature. Limited information was available in the literature regarding handoff communication training and student nurses (Collins, 2014). As such, some of the information presented for comparison in this study are studies related to handoff communication with new graduate nurses and practicing nurses. A comparative analysis of this study's findings follows with information that was available in the literature.

Active Participation With Change of Shift Report

In Heidegger's being-in-the-world (Knowles, 2013), the student is in the lived world, being there, in the clinical setting, and learning by doing. Learning by doing is a necessary part of making sense of the handoff communication process. Experiential learning provides an opportunity for the learner to link classroom learning to real-life experiences. Learning is grounded in experience, and it is a continual process that requires learning and relearning (Kolb, 2015). Nursing students are continually learning: As they transition to practice, learning will remain a continual part of their professional career.

In this study, students desired participation in the handoff communication process, but experienced nervousness, self-doubt, felt disorganized, unprepared, and found the process was very challenging. The inefficiency of the student nurse with handoff communication in this study is likened to the findings in a study by Foster-Hunt et al. (2015) who reported that less experienced nurses lack organization with handoff reports. Lim and Pajarillo (2016) reported on student nurses being disorganized, anxious, and lacked focus during the change-of-shift report due to limited experience in the clinical

setting and is consistent with the reports of the students in this study. Similarly, Brown et al. (2012) also noted anxiety due to lack of handoff training.

Another finding related to active participation is that students were cognizant of the differences between classroom, simulation, and the real world of conducting the change of shift handoff. The reality of participating in the handoff communication process in the clinical setting was overwhelming as students moved from purely observing to actual hands-on practice. An integral part of learning the change-of-shift handoff report was having support and directions from the preceptor. The students were appreciative of the preceptor and the assistance they received from the preceptor providing guidance and support with the handoff process. Some of the assistance the students received came in the form of role-playing, and practice sessions prior to presenting the actual report to the new nurse at the change of shift. Feedback on handoff performance was important to the students and helped to boost their confidence, as well as provided guidance on areas that needed improvement.

Being at the clinical setting during the change-of-shift helped the students understand the handoff process. At first, the students were at the beginning stages of piecing together the necessary components of the change-of-shift report, but, through repetitive practice, most of the students were able to piece together information that initially seemed disparate into a whole. This allowed them to get better at presenting the change-of-shift report in a more organized way. Though not proficient, the students felt that the actual act of conducting the shift report gave them a new perspective on the importance of the change-of-shift report and a better understanding of the process through both observations and practice.

Sensemaking occurs when an individual gains new insights and new perspectives. For the student, actively participating in the change-of-shift report provided new insights and perspectives of the handoff communication process. They developed a new appreciation for the handoff at change-of-shift, recognizing that there are different techniques in use to present the shift report, and discussed what worked for them in planning to give the report. Learning the handoff process occurred informally through observations and preceptor assistance.

Understanding Handoff Communication

A student's understanding of handoffs requires insight on what constitutes effective communication; ethical, legal, and financial implications of poor handoffs; and the link between communication-related issues and patient safety (Agarwal et al., 2010; Enlow et al., 2010; Lee et al., 2016; Malone et al., 2016). As outlined in the situated cognition theory (Lave & Wenger, 1991), the clinical setting is the most ideal place for a student nurse to understand the components of handoff communication, connect effective communication with patient safety, and engage in experiential learning.

In the clinical setting, the student had first-hand experience with handoff observations, the actual practice of handoff, and had an opportunity to assess what is done well and what needs improvement with the handoff-communication process. All students talked about the need for continuity of care and the need to follow-up on pending issues for the patient. What was lacking from the discussions of most of the students was a connection between effective communication and patient safety. This is an important finding that should be addressed because the premise of patient safety is contingent on adequate, timely, and accurate information being passed from one nurse to another to

assure appropriate clinical management of a patient.

Lee et al. (2016) noted that a significant number of student nurses and licensed nurses lack adequate handoff communication training. In this study, the students' perception of how handoff is conducted in the clinical setting included understanding the need for and the importance of the change-of-shift report, making sense of what they perceived both positive and negative with the handoff process, and merging their observations and their experiences with what was taught in nursing school with what occurs in the actual clinical setting. The students grasped the importance of the handoff, but had difficulty reconciling the fact that some nurses seemed disinterested in the change-of-shift report, provided a superficial report, wanted minimal information during the report, or rushed the report.

Some students did not have good role modeling with the change-of-shift report during the clinical practicum. The students felt that some nurses did not take the report seriously while other nurses did: Some students felt the report was rushed, which made them feel uncomfortable when this occurred. This observation is consistent with Manias et al. (2016) who reported that nurses are ineffective with handoff communication because they lack role models in senior staff members. In another study, while most nurses were satisfied with the handoff process, others reported that the handoff was lengthy and repetitive information was provided, which was available elsewhere in the patients' medical records (O'Connell et al., 2008).

Insufficient Training and Practical Experience

It was documented in the literature that nurses have difficulty with handoff due to a lack of training and are unaware of the critical components of an effective handoff (Brown

et al., 2012; Collins, 2014; Lee et al., 2016; Leonard et al., 2004; Manias et al., 2016). Similarly, in this study, students reported a lack of adequate training with handoff communication prior to clinical practicum and felt this was a hindrance to their performance during the clinical practicum. The students also reported the need for more exposure with the handoff during the change-of-shift report while in clinical practicum. They noted that although they had some exposure to handoff communication in the simulation lab, they were not prepared or did not fully understand the components of the change-of-shift handoff until the clinical practicum. The barriers outlined by the students in this study was consistent with the findings of Lim and Pajarillo (2016) who noted that student nurses had minimal or no handoff training during clinical rotations or lacked mentor support. Most of the students stated that they had no formal preparation to conduct the handoff in the clinical setting. All students noted that initially they observed the preceptor and took notes on what the preceptor did during the report and paid close attention to the information that was relayed to the oncoming nurse. Also, most students noted that they did not actively participate in giving the change-of-shift handoff report until about halfway through the clinical practicum. Nearly all students felt that more simulation time and practice sessions would have improved their comfort level and understanding of the handoff prior to clinical practicum. The benefit of simulation is supported by Malone et al., (2016) who noted that the use of handoff communication simulation training helps the students learn the handoff process before working with real patients.

Confidence With the Shift Report

In nursing, skill development and proficiency lead to an increased level of confidence. However, developing proficiency requires exposure and practical experience to

the skill being learned. Self-confidence and perceived confidence include a description of an individual's perceived ability to complete a task at an expected level of performance in various situations (Druckmann & Bjork, 1994; Shrauger & Schohn, 1995). In discussing preparedness with the change-of-shift report, some students reported an increased level of confidence with the handoff communication during clinical practicum while others noted no improvement in their confidence level due to limited practical experience while in clinical practicum. The student's confidence level was directly connected to repetitive practice and preceptor guidance. Thomas et al. (2009) supported this finding noting that students displayed higher levels of confidence, was less fearful when provided ample opportunities to practice handoffs. The students who had more hands-on practice were more confident with what they had learned. In this study, the students who had less hands-on practice were less sure of the process and lacked self-confidence at the end of the clinical practicum. Notably all students reported that they would need more training and hoped to obtain this additional training once they were hired in their first nursing position.

In this study, the students who used a formal report sheet were more organized and felt more confident with the handoff. Students need structure to gain understanding and build confidence. This finding is the same as reported by Kesten (2011) who found that using a standardized tool improved students' communication knowledge and is congruent with the Joint Commission's recommendation to standardize the handoff communication process with a goal of improving face-to-face handoffs (Joint Commission, 2008; Staggers & Blaz, 2013).

Implications of the Findings

All students acknowledged the importance of learning and understanding handoff communication in the clinical setting and is a necessary skill to develop mastery in professional practice. The students held the belief that more exposure to handoff communication and active participation in the clinical setting with the change-of-shift handoff report is necessary to fully understand and develop proficiency in order to become efficient with handoff communication. The findings of this study are the basis for the following recommendations for nursing education, nursing practice, nursing research, and public policy.

Implications for Nursing Education

Effective communication and its effect on patient safety are some of the top priorities listed as a national patient safety goal. Improving communication among health professionals requires risk mitigation by implementing safety measures to decrease untoward effects on patients. It is well-documented in the literature that many sentinel events affecting patients can be attributed to poor communication or miscommunication during handoffs (Collins, 2014; Greenberg et al., 2007; Groves et al., 2016; IOM, 2001; Joint Commission, 2014, 2017b).

Ensuring that students are prepared for professional practice is a critical part of protecting patients from harm. One notable finding in this study is that most students did not verbalize a direct connection between patient safety and handoff communication. This is an important observation as it could be an implication that more need to be done to prepare students with the skill of handoff communication and to assure that, in the initial nurses' training, students are provided information on possible negative impacts.

Students also need to understand that a negative impact on a patient also directly impact the patient family and the broader health care systems and the wider community. A domino effect ensues when information is poorly disseminated from one nurse to another, which affects other health professionals caring for the patient and affects the quality of care provided to the patient. The findings of this study include support for the need for curricular changes for prelicensure nursing students and the need for a more integrated approach to teaching handoff communication to these students.

Implications for Nursing Practice

Developing confidence in any skill is enhanced through repetitive practice, which improves understanding, and increases the comfort level and eventual proficiency. Entry into professional nursing begins with basic nursing education and progresses to more advanced education. Effective handoff communication is a challenge for the nursing profession and requires attention. Clinical educators, academicians, preceptors, and administrators need to focus on improving processes and providing more simulation and clinical opportunities for all nursing students to engage in the practice of handoff communication. The IOM'S (2001) six aims for improving patient care through the provision of safe, effective, patient-centered, timely, efficient, and equitable care cannot be met fully if poor communication is not addressed.

In this study, a major point of discussion by the students surrounded the need for more training with the handoff communication prior to entering the final clinical practicum. Students felt they should be more prepared with handoff communication before starting clinical practicum and offered suggestions as to how teaching strategies could be improved to enhance students learning handoff communication. Three important

suggestions provided by the students follow: first, the need for more simulation time specifically toward the end of the nursing program; second, making additional simulation sessions mandatory instead of a single simulation encounter per semester; and, third, making simulation practice a graded learning activity.

Implications for Nursing Research

This study is foundational in understanding how students learn about handoffs and engage with handoffs in the clinical setting. Additionally, this study fills the existing gap in the literature regarding student nurses and their experiential learning with the handoff process in the clinical setting. Handoff communication is an actionable and mandatory skill that nurses and other health care professionals engage in daily. The primary purpose of the handoff is to ensure continuity of care of the patient and is underlaid by the essential need of patient protection. Determining how to best integrate handoff communication as a central part of nurse's training requires additional research which should include incorporating classroom activities, additional simulation, and current clinical handoff processes in the clinical setting.

Implications for Public Policy

Deaths and adverse events in the United States triggered by health care providers' errors are cause for alarm (Goodman, Villarreal, & Jones, 2011). The economic impact of inefficient communication in the United States is noteworthy. Inefficient communication results in an annual financial loss to hospitals of over $12 billion with about 53% of this economic burden resulting from increased length of stay (Agarwal et al., 2010). Inefficient communication endangers patients and increases unnecessary financial burdens to the health care system. Collins (2017) reported that 30% of medical-related

malpractice claims in the United States can be linked to problems with communication. Knowing that poor communication carries a significant economic burden to the health care system and compromises patient safety, input and coordination by all stakeholders is needed to meet the national safety goals of improving communication and preventing unnecessary harm to patients.

The findings of this study included support for the need for changes to the way student nurses are taught handoff communication, including increased exposure and more practical time in the simulation lab and in the clinical setting. Furthermore, the findings may be used to assist in identifying additional teaching-learning strategies to improve student learning. Improving student learning with communication would meet one of the Joint Commission's (2014) recommendations of starting handoff communication with prelicensure nursing students.

Limitations

This qualitative research study had a focus on a singular issue of handoff communication among senior nursing students in the clinical setting. Participants were recruited by purposive sampling from a bachelor's program from a single university. As such, this study may not be representative of all nursing students' experiences in various nursing programs, but the findings may be transferable to similar nursing programs.

Another limitation of this study is the time frame. The time frame for this study allowed for a single interview encounter and no observations of the student conducting handoff communication in the clinical setting. Also, this research study focused only on the nursing students and did not include the perspective of the nursing preceptors. In addition,

a lack of prior research on handoff communication among student nurses in clinical practicum is a limitation for comparative data analysis.

Recommendations for Future Research

This research study was approached from the viewpoint of the student nurse and presented the views and experience of each student nurse. The purpose of this study was to gain a broader understanding of the student experience with actively participating in the change-of-shift report while in clinical practicum. As a result of conducting this study, five additional focus areas for future studies have been identified:

1. A comparative study of the perceptions of the student nurse, preceptor, and clinical faculty of handoff communication in the clinical setting – additional studies that include the incorporation of the perceptions and perspectives of the preceptors and clinical instructors, which provide additional supportive information about teaching and learning in the clinical setting about the change-of-shift handoff.
2. Exploring the use of different standardized handoff communication tools and techniques. This is important for integrating handoff training in the classroom, the simulation lab, and the clinical setting. This would assess student learning outcomes and handoff readiness.
3. A comparative study of handoff communication among associate degree nursing and bachelor of science nursing student's proficiency with handoff communication practices. This would reveal similarities or differences of educational preparation with handoff communication.

4. Exploring the effectiveness of increased handoff simulation training and the student nurses' proficiency with the change-of-shift report–determining the amount of training that is adequate will enable changes to the in-use allotted time for the student simulation practice sessions.
5. A study exploring preceptor expectations of engaging students and student skill with handoff communication–understanding the preceptor's perceived role and engagement with teaching senior nursing students' handoff communication. This is an important area to focus on as most of the students in this study reported that they did not actively engage in giving the change-of-shift report until halfway through the practicum. They all had varying degrees of participation with the change-of-shift report.

Chapter Summary

This dissertation study was exploratory and interpretative, resulting in four major themes and associated subthemes directly attributed to experiential learning and situated cognition theories. The four themes are outlined in this study: First, active participation-active participation revealed the students being in the moment, valuing preceptor support, and making sense of handoff communication; second, understanding handoff communication–the students presented what they thought the handoff means and discussed both the positive and negative aspects of the handoff communication process in the clinical setting; third, insufficient training and insufficient practical experience–the students specifically pointed out the need for additional simulation and clinical experience with handoff communication; and, fourth, feeling confident with the change-of-shift report–some students voiced improved confidence with the change-of-shift report at the end of the

clinical practicum. However, all desired additional handoff communication training.

As part of the checklist of skills to be completed during the clinical practicum, a minimum standard should be set and include mandatory student engagement with the handoff process. Students should have more than cursory classroom discussions about handoff communication, and more simulation time should be mandated. Changing the future requires changing in-use teaching methods. The starting point must build on what is known about handoff communication teaching methods, by adding to and improving in-use processes, thus increasing knowledge. Improving student learning processes would ensure that the students develop proficiency with the handoff communication skill while in nursing school. Patient safety is directly linked to the communication processes used by health care professionals. Patient safety can only be improved if there are foundational procedures put in place for students to help them be successful with handoff communication before transitioning to professional practice. Students need supportive mentors and a specific directive to follow in order to learn proper handoff communication.

Problems with handoff communication in clinical practice continue to plague the health care profession. The discourse regarding how to address issues identified with handoff communication is ongoing. However, issues surrounding inefficient communication that directly impact patients and the negative financial consequences to the health care system needs to be addressed both in academia and clinical settings to effect change.

In an experiential learning process, learner centeredness is a dominant part of student learning. Improving student learning is directly related to imperatives that engage both the teacher and the student. Making effectual long-term changes in student nurses'

learning require a concerted effort to face head-on the challenges that are evident to remedy this ongoing dilemma of limited training and ineffective communication among nurses.

This study was significant as it included information about student nurses' participation in the change-of-shift report, which can be used to enact changes that impact nursing education and nursing practice. This information can also be used to make policy changes and direct further nursing research about handoff communication. The account of the students' experiences presented in this study provides valuable information on how students learn about, engage in, and understand the handoff communication process.

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Appendix A

IRB Approval for Study

NOVA SOUTHEASTERN UNIVERSITY
Institutional Review Board

MEMORANDUM

To: **JUANITA HANLEY-GUMBS**

From: [redacted]
Center Representative, Institutional Review Board

Date: **February 21, 2019**

Re: **IRB #: 2019-109; Title, "Handoff communication among senior nursing students: A Phenomenological study"**

I have reviewed the above-referenced research protocol at the center level. Based on the information provided, I have determined that this study is exempt from further IRB review under **45 CFR 46.101(b) (Exempt 1: Educational research in educational settings)**. You may proceed with your study as described to the IRB. As principal investigator, you must adhere to the following requirements:

1) CONSENT: If recruitment procedures include consent forms, they must be obtained in such a manner that they are clearly understood by the subjects and the process affords subjects the opportunity to ask questions, obtain detailed answers from those directly involved in the research, and have sufficient time to consider their participation after they have been provided this information. The subjects must be given a copy of the signed consent document, and a copy must be placed in a secure file separate from de-identified participant information. Record of informed consent must be retained for a minimum of three years from the conclusion of the study.

2) ADVERSE EVENTS/UNANTICIPATED PROBLEMS: The principal investigator is required to notify the IRB chair and me [redacted] respectively) of any adverse reactions or unanticipated events that may develop as a result of this study. Reactions or events may include, but are not limited to, injury, depression as a result of participation in the study, life-threatening situation, death, or loss of confidentiality/anonymity of subject. Approval may be withdrawn if the problem is serious.

3) AMENDMENTS: Any changes in the study (e.g., procedures, number or types of subjects, consent forms, investigators, etc.) must be approved by the IRB prior to implementation. Please be advised that changes in a study may require further review depending on the nature of the change. Please contact me with any questions regarding amendments or changes to your study.

The NSU IRB is in compliance with the requirements for the protection of human subjects prescribed in Part 46 of Title 45 of the Code of Federal Regulations (45 CFR 46) revised June 18, 1991.

Cc: [redacted]

[redacted]

Appendix B

Letter of Permission for Adaptation

From: Alice Kolb <aliceykolb@gmail.com>
Sent: Monday, July 9, 2018 12:17:32 PM
To: Juanita Hanley-Gumbs
Subject: Re: EBLS: Question from website

Dear Juanita:

You are welcome to use the experiential learning cycle in your dissertation.

Good luck on your dissertation.

Best wishes

Alice Kolb Ph.D.
President
Experience Based Learning Systems, Inc.
www.learningfromexperience.com
phone: 808-798-6639

Alice & David Kolb *The Experiential Educator: Principles and Practices of Experiential Learning* Kaunakakai, HI: EBLS Press 2017
Are you an Experiential Educator? Take the FREE Kolb Educator Role Profile at http://survey learningfromexperience.com/

On Mon, Jul 9, 2018 at 9:10 AM, Formspree Team <submissions@formspree.io> wrote:

Hey there,

Someone just submitted your form on learningfromexperience.com/contact/.

Here's what they had to say:

---

name: JUANITA HANLEY-GUMBS

_replyto: jh2075@mynsu.nova.edu

message: Dear Dr. David Kolb,
My name is Juanita Hanley-Gumbs and I am a PhD in nursing candidate at the Ron and Kathy Assaf College of Nursing at Nova Southeastern University. I am conducting a qualitative research study on handoff communication among senior nursing students. I am writing to request permission to adapt the Experiential Learning Cycle to the handoff communication process with student nurses to be used in my dissertation.

Sincerely,

Juanita Hanley-Gumbs
jh2075@mynsu.nova.edu
954-829-6482
Nova Southeastern University
3301 College Avenue, Fort Lauderdale, Fl 33314

This form was submitted at 01:10 PM UTC - 09 July 2018.

Appendix C

Interview Guide

1. Please tell me about the first time that you conducted a change-of-shift report.
2. What is it like conducting a change-of-shift report?
3. Would you explain who or what helped you with the shift change report?
4. What does handoff communication mean to you?
5. How did you first learn about the handoff communication process?
6. What are your perceptions of the handoff communication process?
7. Would you describe any difficulties, barriers or challenges you encountered when conducting the shift change report?
8. Would you describe any positive experiences you experience when conducting the change-of-shift report?
9. Please tell me how participating in change-of-shift report helped your understanding of the handoff communication.
10. How prepared do you feel to safely conduct the change-of-shift report as you prepare to transition from student nurse to professional nurse?

Appendix D

Informed Consent Form

General Informed Consent Form
NSU Consent to be in a Research Study Entitled

Title of Study: Handoff Communication Among Senior Nursing Students: A Phenomenological Study

Who is doing this research study?

College: [redacted]

Principal Investigator: Juanita Hanley-Gumbs, MSN, MMI

Faculty Advisor/Dissertation Chair: Chitra Paul Victor, PhD

Co-Investigator(s): Eve Butler, PhD; Terry Ogilby, PhD

Site Information: [redacted]

Funding: Unfunded

What is this study about?

This study will provide information on how students experience and perceive the handoff communication process during the change of shift report while in the final clinical practicum. The results of this study will provide useful information to make curricular changes to improve handoff communication training for student nurses in the classroom and the clinical setting. Currently, there are no studies that address the handoff communication of nursing students during the change of shift report while in clinical practicum. This research will add to the body of knowledge about handoff communication among nursing students.

Why are you asking me to be in this research study?

You are being asked to be in this research study because you are a senior nursing student in clinical practicum who have had experience with the change of shift reporting process. This issue has not been studied and will provide an opportunity for you to share your lived experience with the handoff communication process.

This study will include about 15 to 20 senior nursing students.

What will I be doing if I agree to be in this research study?

While you are taking part in this research study, you will participate in a single face-to-face interview session.

Research Study Procedures - as a participant, this is what you will be doing:

Participate in a face-to-face interview session lasting about 45-60 minutes. Each potential participant will receive an invitation to participate in the study via their [redacted] e-mail.

Are there possible risks and discomforts to me?

This research study involves minimal risk to you. To the best of our knowledge, the things you will be doing have no more risk of harm than you would have in everyday life. There are no expected physical, psychological, social, or economic risks for participating in this study. There is minimal risk to privacy as a pseudonym will be used to protect the identity of each participant.

What happens if I do not want to be in this research study?

You have the right to leave this research study at any time, or not be in it. If you do decide to leave or you decide not to be in the study anymore, you will not get any penalty or lose any services you have a right to get. If you choose to stop being in the study, any information collected about you **before** the date you leave the study will be kept in the research records for 36 months from the end of the study, but you may request that it not be used.

Are there any benefits for taking part in this research study?

The possible benefit of you being in this research study is being able to give voice and share your experiences with the change of shift report while in the clinical practicum. We hope the information learned from this research study will provide valuable information which will support changes in nursing education and promote additional research about handoff communication among student nurses.

Will I be paid or be given compensation for being in the study?

A $25 Visa gift card will be provided as a token of appreciation for participation in this study. The gift card will be given at the conclusion of each interview session.

Will it cost me anything?

There are no costs to you for being in this research study.

How will you keep my information private?

Information we learn about you in this research study will be handled in a confidential manner, within the limits of the law and will be limited to people who have a need to review this information. A pseudonym will be used for each participant. This data will be available to the researcher, the

Ron and Kathy Assaf College of Nursing
NOVA SOUTHEASTERN UNIVERSITY
NSU Florida

Institutional Review Board and other representatives of this institution, and any regulatory and granting agencies (if applicable). If we publish the results of the study in a scientific journal or book, we will not identify you. All confidential data will be kept securely maintained in a locked file cabinet including all audio recordings. All data will be kept for 36 months from the end of the study and destroyed after that time by shredding paper data and deleting all audio files.

Will there be any Audio or Video Recording?
This research study involves audio recording. This recording will be available to the researcher, the Institutional Review Board and other representatives of this institution, and any of the people who gave the researcher money to do the study (if applicable). The recording will be kept, stored, and destroyed as stated in the section above. Because what is in the recording could be used to find out that it is you, it is not possible to be sure that the recording will always be kept confidential. The researcher will try to keep anyone not working on the research from listening to or viewing the recording.

Whom can I contact if I have questions, concerns, comments, or complaints?

If you have questions now, feel free to ask us. If you have more questions about the research, your research rights, or have a research-related injury, please contact:

Primary contact:
Juanita Hanley-Gumbs, MSN, MMI can be reached at [redacted]

If primary is not available, contact:

Chitra Paul Victor, PhD can be reached at [redacted]

Research Participants Rights
For questions/concerns regarding your research rights, please contact:

Institutional Review Board
[redacted]

You may also visit the [redacted] for further information regarding your rights as a research participant.

Research Consent & Authorization Signature Section

Voluntary Participation - You are not required to participate in this study. In the event you do participate, you may leave this research study at any time. If you leave this research study before it is completed, there will be no penalty to you, and you will not lose any benefits to which you are entitled.

If you agree to participate in this research study, sign this section. You will be given a signed copy of this form to keep. You do not waive any of your legal rights by signing this form.

Ron and Kathy Assaf College of Nursing
NOVA SOUTHEASTERN UNIVERSITY
NSU Florida

SIGN THIS FORM ONLY IF THE STATEMENTS LISTED BELOW ARE TRUE:

- You have read the above information.
- Your questions have been answered to your satisfaction about the research.

Adult Signature Section

I have voluntarily decided to take part in this research study.

Printed Name of Participant	Signature of Participant	Date
JUANITA HANLEY-GUMBS, MSN		
Printed Name of Person Obtaining Consent and Authorization	Signature of Person Obtaining Consent & Authorization	Date

Appendix E

Participant Recruitment E-mail

Dear Senior Nursing Student,

My name is Juanita Hanley-Gumbs, APRN and I am a PhD candidate in the Ron and Kathy Assaf College of Nursing at Nova Southeastern University. I am conducting a research study on handoff communication during clinical practicum entitled "Handoff Communication among Senior Nursing Students: A Phenomenological Study." My academic advisor is Stefanie La Manna, PhD and my dissertation chairperson is Chitra Paul Victor, PhD.

This e-mail correspondence is an invitation to participate in this research study about handoff communication. The purpose of this study is to understand the student nurse experiences with handoff communication during change-of-shift report while in the clinical practicum. This issue has not been studied and will provide an opportunity for you to share your experience with the handoff communication process. This research will add to the body of knowledge about handoff communication among nursing students.

If you voluntarily agree to participate in this study, you will be asked to join in a one-time interview and allow approximately 45 minutes to 60 minutes of your time for a face-to-face interview. A written consent will be obtained before the interview. All responses to the interview questions will be, and your identity will never be revealed. The interview will be tape-recorded, and no identifiable information will be on the tape recording. The taped recordings will be securely kept in a locked file and discarded once they are no longer needed. Participating in this study is voluntary and choosing not to participate or to withdraw from the study will not have any negative consequences.

As a token of appreciation, you will receive a $25 gift card once your interview is completed. If you are in interested in participating in this study or have questions about this study, please contact me, Juanita Hanley-Gumbs, e-mail jh2075@mynsu.nova.edu or call [redacted]. You may also contact Chitra Paul Victor, PhD via e-mail cpaulvicto@nova.edu or call [redacted]

Sincerely,

Juanita Hanley-Gumbs, APRN, PhD (c)

Appendix F

Demographic Questions

Instructions: Please complete the follow information

1. Gender ☐Male ☐Female

2. Prior health care experience ☐ Yes ☐ No

   ☐Licensed practical nurse/LVN ☐Certified Nurse assistant/CNA

   ☐Other_____

3. Did you have any training/exposure to handoff communication prior to clinical practicum?

   ☐Clinical setting ☐ Classroom/Lecture ☐Simulation Lab

4. Experience with handoff communication

   ☐Face-to-Face communication ☐Taped report ☐ Bedside report

   ☐ Written paper report ☐Computer report

5. In which clinical area did you complete your final clinical practicum?
   ☐Critical care ☐Emergency room
   ☐Medical/Surgical unit ☐Pediatric/Obstetrics
   ☐Other_____