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Nursing Students' Perceptions of Briefing in Simulation

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This is to certify that the doctoral dissertation by

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Abstract

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MSN, Chamberlain College of Nursing, 2013

BSN, All India Institute of Medical Sciences, 1987

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Briefing for a clinical simulation in nursing school is an information session that sets the stage for a meaningful simulation activity. Improper or inadequate briefing practices can impact the quality of learning nursing students receive through clinical simulation experience. The purpose of this study, guided by the novice to expert and social cognitive theories, was to explore accelerated baccalaureate nursing (ABN) students' perceptions of their briefing experiences and how the briefing experiences influenced the acquisition of clinical skills and knowledge. Twelve ABN students from a school of nursing in one of the Northeastern states were interviewed through e-mail correspondence. Thematic coding was conducted on the data and the themes derived were inconsistencies in briefing practices, a sense of uncertainty, and inefficient acquisition of clinical skills and knowledge. The inconsistencies in the practice of briefing varied between courses and instructors and improper briefing generated a sense of uncertainty among participants and feelings of ineffective acquisition of clinical skills and knowledge from simulations. The results will enable nurse educators in the local setting to improve briefing protocols and adhere to the briefing standards to facilitate students' learning. The use of rigorous research designs involving a larger sample size from multiple research sites in different geographical regions is recommended for future research to examine if this problem is relevant to all nursing schools. The implications for positive social change include the potential impact of proper briefing practices in enabling ABN students to acquire clinical skills and knowledge effectively so that they can safely provide quality care to their patients.

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Dedication

I dedicate this doctoral study project to the nursing and education professions, to my nursing students and colleagues, as well as my husband, Philip, and my two children, Allen and Della. Your support is appreciated and has given me the opportunity to personally and professionally develop through education and experience. I recognize and value the dedication and hard work of nursing students, nurses, and educators. A special thanks to the Class of October 2018 for participating in this research as without your participation, this project could not have been possible.

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Chapter 1: Introduction to the Study

Briefing in Simulation

Acquiring clinical skills and experience needed to take care of patients are integral components of a nursing education program. Nursing students obtain clinical skills, experience, and knowledge about nursing interventions by attending clinical rotations in the different specialty units in hospitals (De, Mahadalkar, & Bera, 2016). However, clinical sites are not as abundant as in previous years. Many hospitals in the United States were closed due to lack of government funding (Wishner, Solleveld, Rudowitz, Paradise, & Antonisse, 2016). Due to the decline in the numbers of available clinical sites and increased numbers of nursing students from various nursing programs, it has been difficult to accommodate all students in the available clinical units (Curl, Smith, Chisholm, McGee, & Das, 2016; Jeffries, Thomas-Dreifuerst, Kardong-Edgren, & Hayden, 2015). It was imperative for school administrators and curriculum developers to implement alternative teaching strategies that would enable students to acquire the clinical skills and knowledge required to provide optimal care to their patients.

The Topic of the Study

Simulations are alternative teaching strategies invented by educators. To compensate for the diminishing availability of clinical sites, schools of nursing opened simulation laboratories in which nursing students could practice clinical skills on mannequins (Sundler, Pettersson, & Burglund, 2015). The *Standards of Best Simulation practice* designed by the International Nursing Association for Clinical Simulation and

Learning (INACSL, 2016a) have specific protocols for the implementation of simulation, which were designed to enable nursing students to achieve clinical skills and knowledge.

Simulation allows students to acquire clinical skills and knowledge through attainment of self-efficacy in recognizing and managing early signs of deterioration in health and competency in clinical performance (Berragan, 2014; Stayt, Merriman, Ricketts, Morton, & Simpson, 2015). However, it was unclear how students attain self-efficacy and competency in the simulation. Additionally, recent research suggested that inconsistencies in practice of simulation activities occurred from lack of adherence to briefing protocols by nurse educators, which raised concerns among nursing students (Jeffries, Swoboda, & Akintade, 2015). Of the many aspects of simulation activities, briefing, or preparation of students before simulation, is arguably a prime step because it sets the context for the effectiveness of the entire simulation experience (McDermott, 2016). This evidence showed that proper briefing practice was critical for the simulation to be effective, making it a subject worth exploring.

Need for the Study

Even though students received the briefing, the depth and type of content were inconsistent and inadequate before simulation (McDermott, 2016). Additionally, students were not given proper orientation to the simulation labs, which caused them anxiety (Meyer et al., 2014). Curl et al. (2016) suggested the need for a prelab activity prior to simulation to establish baseline knowledge. Najjar, Lyman, and Miehl (2015) reported a high level of anxiety experienced by students that hindered the cognitive processing of information received during simulation and recommended the preparation of students to

minimize anxiety levels. The majority of studies have been done on students enrolled in the associate degree and traditional baccalaureate degree nursing programs (Brackney & Priode, 2015; Curl et al., 2016; Najjar et al., 2015).

Even though researchers have reported the inconsistencies and inadequacies existing in the delivery of briefing (McDermott, 2016; Meyer et al., 2014), no studies had been done to explore accelerated baccalaureate nursing (ABN) students' perceptions on their experiences with the briefing in the simulation. Additionally, researchers had recommended further research to explore nursing students' perceptions of the briefing process they underwent and its influence on their acquisition of clinical skills and knowledge, irrespective of the program they were enrolled in (McDermott, 2016; Najjar et al. 2015). The ABN program is completed in one year, and students have only a few exposures to simulations as opposed to the traditional baccalaureate nursing students. In that respect, it was essential to explore the role that briefing plays in establishing the effectiveness of simulation in the ABN group of students, considering the short duration of the program and improper practices of briefing generating anxiety in students. Therefore, there was a need to explore ABN students' perceptions about the briefings they received before simulation and to examine the different components of an effective briefing.

Social Implications of the Study

It was crucial to understand students' perspectives about their briefing experiences because broad ranges of students are still learning clinical skills using simulation. This knowledge will enable faculty to decide how to prepare students during

the briefing phase to make the simulation sessions more meaningful and effective (Page-Cutrara & Turk, 2016). This study is relevant to society as the quality and safety of patient care in the clinical units are dependent on the competencies nurses develop during their training period (Jeffries, Rodgers, & Adamson, 2015). For that, briefing in simulations must take place in a way that would enable nursing students to acquire such competencies (Page-Cutrara & Turk, 2016). The findings of this study contribute to positive social change in the form of better simulation practices beginning with proper briefing sessions that would enable new graduates to become competent nurses (Botma, 2014). By analyzing nursing students' perspectives on their briefing experience, educators could design better briefing practices.

Background

Literature Related to Scope of Study

A review of the literature on the topic of briefing for simulations led to the revelation of issues in this field. Simulation in nursing is considered an effective teaching/learning strategy (Curl et al., 2016; Jeffries, Swoboda et al., 2015; Stayt et al., 2015; Sundler et al., 2015). The pedagogical strategy of simulation offers students opportunities to practice and acquire clinical skills and knowledge in the era of inadequate clinical sites (National League for Nursing, 2015). However, Curl et al. (2016) posited that briefing prior to simulation was lacking and simulation modules should have included a prelab activity to establish baseline knowledge. According to De et al. (2016), the barriers to learning by simulation that students faced included

inadequate equipment, short clinical time, restrictions in practice of nursing interventions due to hospital policies, and lack of prior knowledge about specialized interventions.

In addition, Rokenes, Smith, and Larsen (2014) and Meyer et al. (2014) pointed out that nursing students experienced performance anxiety as they demonstrated skills in simulation settings. Meyer et al. (2014) suggested that there was a need for more preparation for the assigned roles, clearer instructions, allotment of more time, and involvement of all students in the multiple phases of scenarios, which would alleviate some of students' anxiety. McDermott (2016) identified the need for further inquiry regarding the depth and type of content in the briefing before simulation activity and argued that simulation educators play a vital role in preparing students for the successful simulation-based learning experience. Additionally, Phillips (2016) asserted that it is the responsibility of the nursing faculty to ensure that all clinical simulations are practical and realistic. All this evidence has established the relevance of the study on briefing and the various aspects delineated within the briefing that were worth exploring.

A Gap in Knowledge

According to INACSL (2011), there is information on standards of best simulation practice and specific protocols to be followed by nurse educators during simulation activities. The standards were revised in 2013 and currently include nine criteria, in which briefing was included in the fourth and fifth criteria that explain the facilitation and facilitator characteristics (INACSL, 2016a; Sittner et al., 2015). These characteristics include the establishment of a trusting and engaging learning environment, delivery of cues that assist participants in interpreting the simulated reality, and a needs

assessment of participants such as current experience, knowledge, skills, attitudes, and behaviors (INACSL, 2016b; Sittner et al., 2015). Lioce et al. (2015) reported briefing guidelines to include a written plan for the establishment of an environment of integrity, trust, and respect, identification of expectations for participants and facilitators, and orientation to the simulation lab. Clearer instructions and preparation for the different roles assigned are the main important aspects delineated in the briefing phase of simulation.

In spite of those guidelines, Jeffries, Swoboda et al. (2015) pointed out that there were inconsistencies in practice of simulation activities and lack of adherence to briefing protocols by nurse educators, which affected students' acquisition of clinical skills. These studies pointed out that there were issues embedded in the pedagogical strategy of simulation, but results did not reveal information obtained on students' perceptions of their experiences with the briefing, which is a key step in the overall simulation experience. Additionally, studies exploring perceptions of ABN students on briefing had not been conducted. ABN programs complete in one year and students are expected to achieve clinical skills and knowledge with the few simulation courses included in their curriculum. It was this gap in knowledge in the discipline that this study addressed.

This study was needed to bring about evidence-based knowledge on the briefing process in simulation and its effects on students' acquisition of clinical skills and knowledge. By obtaining students' perspectives on their first-hand experience with the briefing process, educators and curriculum developers can decide on how to implement the briefing protocols as designed by INACSL (2016b). Opening a dialogue regarding the

briefing process between students and nurse educators is essential in analyzing the effectiveness of the briefing phase, which sets a context for the overall simulation experience. This study did empower nursing students to express their concerns regarding the briefing process. The findings of this study would persuade nurse educators to adhere more closely to the briefing guidelines.

Problem Statement

Inconsistencies in the practice of briefing in the simulation had been identified as an issue that raised concerns among nursing students regarding their acquisition of clinical skills and knowledge (Jeffries, Swoboda et al., 2015). Even though students received the briefing before simulation, the depth and type of content were inconsistent and inadequate (McDermott, 2016). Additionally, students were not given proper orientation to the simulation labs, which caused them anxiety (Meyer et al., 2014). Furthermore, nurse educators' lack of adherence to the briefing protocols designed by INACSL (2011) had been noted to be an issue that raised concerns among nursing students (Jeffries, Swoboda et al., 2015). It was crucial to understand students' perspectives about their experiences because broad ranges of students are learning clinical skills using simulation. This knowledge was essential to enable faculty to make changes to the existing practices of briefing and shed insights on how to better prepare students during the briefing phase to make the simulation sessions meaningful and effective, as suggested by Page-Cutrara and Turk (2016). This evidence provided a consensus that the problem was current, relevant, and significant to the discipline of nursing.

Researchers who established the effectiveness of simulation as a learning strategy investigated many phenomena. They included self-efficacy (Berragan, 2014; Meyer et al., 2014), improved self-confidence (Najjar et al. 2015; Sundler et al. 2015), clinical judgment, decision-making, and problem-solving (Coram, 2016; Sharoff, 2015), and critical thinking, delegating, prioritizing, and teamwork (Ballangrud, Hall-Lord, Persenius, & Hedelin, 2014). What was known about these aspects was that the simulation activity and the debriefing enabled students to reflect on their actions and learn from what they did wrong and what they did not do during the simulation activity. What was controversial was that literature so far had not revealed how students learned to apply critical thinking and how to make the best judgment for problem-solving instances in simulations. What remained to be studied were the existing briefing practices to determine if there was a standardization process of briefing (Chamberlain, 2015), if briefings were delivered properly (McDermott, 2016), and if students could perform better during a simulation activity because of proper briefing. It is during the briefing that students are taught the problem-solving skills using critical thinking and clinical decision-making (Tyerman, Luctkar-Flude, Graham, Coffey, and Olsen-Lynch, 2016). This evidence helped this study address a meaningful gap in the current research literature.

Purpose of the Study

The purpose of this study was to explore the perceptions of ABN students' experience with the briefing process and the depth and type of content shared in the briefing as preparation for simulation lab activities. Preparation for simulation lab

activities includes the introduction of the clinical scenario, orientation to the simulation lab, information on the equipment and supplies used in a simulation activity, and an overview of the potential nursing interventions specifically used in a simulation activity (Lioce et al., 2015). I used a qualitative approach using case study analysis as there was a need for increased understanding of this issue. The phenomenon of interest in this study was the briefing in simulations. I used analysis of data obtained from individual interviews to develop an understanding of the current briefing practices and areas in briefing that needed improvement to enhance students' acquisition of clinical skills and knowledge. I chose students from the ABN program to do this study as their program completes in one year, and they have limited exposure to simulations. Therefore, during that minimal exposure, if proper briefing is not provided, the simulation will not be effective in helping them acquire clinical skills and knowledge.

Research Questions

RQ 1. How are nursing students prepared for a scheduled simulation activity?

RQ 2. What are nursing students' perspectives about their briefing experience?

Theoretical Framework for the Study

Theoretical Foundation

I developed the theoretical framework for this study by combining parts of two theories: Benner's (2001) from novice to expert theory and Bandura's (1991) social cognitive theory. These theories borrowed from the discipline of social science fit very well in nursing to support the clinical practices. The Dreyfus model of skill acquisition developed by Dreyfus and Dreyfus (1980) was adopted by Benner (2004) for clinical

nursing skill acquisition. Because this theory addresses the steps in acquisition of skills, Benner's theoretical work has been used extensively in clinical nursing in the associate as well as undergraduate programs. The approach provides details on skill acquisition in incremental steps such as novice, advanced beginner, competent, proficient, and expert. The central concepts of this theory include skill acquisition, clinical knowledge, practical knowledge, experience, and competence (Benner, 2004; Lyon, 2015). Because the central concepts of skill, knowledge, and competency acquisition can be gained in incremental steps starting from the proper briefing, this theoretical foundation was applicable in guiding this study.

The basic tenets of the social cognitive theory are the intellectual, behavioral, and environmental factors of learning (Bandura, 1991). These factors interact simultaneously and reciprocally with each other and with the individual learners. The components of the briefing session in a simulation where students get prepared for the upcoming simulation activity align with these factors. The introduction of the clinical scenario and the orientation of the students to the simulation lab comprise the intellectual or cognitive factors. These factors enable the students to process the information provided, retain it in their memory, and retrieve it later for subsequent simulations and use in clinical settings. Likewise, the different role assignments and expectations of students' performance during a simulation activity include the behavioral factors, which explain students' shaping up of their behaviors during the briefing phase. The environmental factors of the social cognitive theory are compatible with the contributing factors in briefing such as assurance of properly functioning equipment and supplies, as well as the amount of time

provided to students to practice skills during a simulation. Therefore, the simultaneously and reciprocally connected factors of the social cognitive theory support the activities in a briefing resulting in a meaningful simulation experience.

The applicability of these theories provided insights to the research problem and questions posed. In the case of clinical simulation, the briefing is the initial step on which the rest of the activities are built upon, and skill acquisition must start at the briefing stage. Because the skill acquisition model and briefing appear to elicit the same results, Benner's and Bandura's theories could explain the process in the briefing that enhances acquisition of skills and knowledge among nursing students in a simulation (Bandura, 1991; Benner, 2004; Lyon, 2015). The interplay of these two theories was a major theoretical proposition for this study. The research questions were answered in incremental steps starting from the basic information such as the introduction of the simulation scenario and advancing to the specific details of the briefing process. The details included preparation of students for the simulation activity and orientation to the simulation lab equipment and supplies. Preparation of students further includes assignment of different roles such as charge nurse, primary nurse, treatment nurse, medication nurse, and documentation nurse and a clear understanding of the objectives of the course. The case study approach used yielded valuable information from individual interviews from the lowest level of briefing such as the introduction of the clinical scenario, up until the acquisition of clinical competence.

Nature of the Study

The nature of this study was qualitative, and I used the case study approach. The rationale for the selection of this design derived from my philosophical orientation of constructivist worldview. A constructivist researcher's focus is on interpretation rather than quantification, and the emphasis is on subjectivity rather than objectivity (Redmond, Davies, Cornally, Fegan, & O'Toole, 2016). I liked to have flexibility in the process of conducting research, while my orientation was towards the process rather than the outcome. There was an increase in the need for greater understanding of the phenomenon of interest—briefing in simulation—and the best approach was through exploring students' perspectives on their briefing experiences.

The key concept or phenomenon investigated was the briefing in simulations. The briefing is an information session before the simulation scenario with suggested activities of orientation to the environment and review of learning objectives (Chamberlain, 2015). I selected 12 students in an ABN program from one nursing school to participate, which I considered as one case. This study was an exploratory case study, as its purpose was to explore nursing students' perspectives on the briefing process they underwent before a simulation activity.

The original plans to collect data were through individual one-on-one interviews, using an interview protocol for interviews to be conducted in an empty classroom inside the participants' school of nursing. Interviews were to take 5 weeks to finish with three participants in each week on three separate days. The length of each interview was to vary depending on the way participants responded. Interviews were to be audio recorded

to ensure the accuracy of the information collected. Recorded data were to be transcribed, and analysis was to start on the same day of interview for each participant and to be continued on a daily basis until all the data were analyzed. However, there was a variation in data collection plans, which I discuss in Chapter 4.

Definitions

Briefing: Also known as prebriefing, is "an information session before the simulation scenario with suggested activities of orientation to the environment and review of learning objectives" (Chamberlain, 2015, p. 319).

Nursing students: Individuals who enroll in a program such as the ABN to obtain training in nursing (Kelly, Hopwood, Rooney, & Boud, 2016).

Simulation: "A pedagogy using one or more typologies to promote, improve, and validate a participant's progression from novice to expert" (INACSL, 2011, p. 56)

Skill acquisition: Attainment of ability to perform tasks by following formal abstract rules conveyed by instructors and through experience with concrete cases (Dreyfus & Dreyfus, 1980).

Student perception: Feelings and outlook of learners about a topic, event, or skill taught.

Assumptions

For this study I made several assumptions. The first one was that nursing students desire a meaningful simulation experience. If the depth and type of content in the briefing were consistent and adequate and practiced in the way it was designed, then it would be meaningful to students. Another assumption was that students could not assume control

of their educational attainment. They depend on their instructors for the most applicable educational experience. Instructors have to be the role models for their students by exhibiting the behavior and attitude that foster learning. The behavioral factors in the social cognitive theory show that students mimic the behavior and attitude their instructors exhibit.

A third assumption was that participants in a case study would answer questions honestly based on their own experiences. Students are aware of the experiences that most affect their educational attainment. These assumptions were necessary in the context of this study as they influenced the logic of the study and were recognized as leading to further development and implementation of the research process planned for this study. For nursing students to attain competency of clinical skills, they need to be taught such skills in incremental steps as explained by the novice to expert theory and by assimilating the learning factors in the social cognitive theory. Participants' honest opinions would provide insights to educators who may improve the briefing practices, which eventually would prepare students to become competent nurses who can provide safe and quality care to their patients.

Scope and Delimitations

The specific aspects of the research problem addressed in this study included the type of preparation students received prior to a simulation activity and students' perception about the briefing or preparation they received. These aspects were addressed through e-mail interviews of a purposive sample of 12 ABN students. These students were recruited from a school of nursing in one of the Northeastern states in the United

States. Students who have had at least one simulation activity were included, without discriminating for their age, gender, or prior experience. The study was set to be conducted in one semester. Nursing students from other programs were excluded as they might have more exposures to simulations and a longer duration of the training period.

The novice to expert theory of skill acquisition had not been previously applied to the briefing session of simulation, which sets the stage for effective skill acquisition. Additionally, the intellectual, behavioral, and environmental factors that constitute the social cognitive theory would contribute to the acquisition of clinical skills and knowledge as well. I chose the individual, one-on-one or e-mail interviews as the data collection method with a hope to yield in-depth descriptions of students' perceptions through an open dialogue with me, the investigator. Focus group discussions and surveys were other methods that could have been used but might not have yielded a thick, rich description of participants' perspectives. The population for this study was students enrolled in an ABN program that would complete in 12 months' time. The informants were interviewed about their briefing experience in simulation.

The briefing was selected as the focus of this study as this phenomenon was poorly studied in the literature of simulation, and it is a key step that sets the context for the overall simulation experience (McDermott, 2016). The majority of studies had focused on simulation as a whole or the debriefing phase of simulation (Berragan, 2014; Stayt et al., 2015). Also, prior studies had focused on educators' perceptions about students' performance (Sundler et al., 2015; Zakari, Hamadi, Audi, & Hamadi, 2017) or students' perceptions on the debriefing and simulation as a whole (Najjar et al., 2015).

The different variables delineated in the phenomenon of the briefing included the number of simulations students attended up until the interviews and the time nurse educators spent on briefing before each simulation activity. The type and depth of the contents of the briefing session introduced to the students was another variable that was explored.

Participants were asked to describe the orientation they received in the simulation scenario, mannequin, as well as the equipment and supplies that were available in the simulation lab. The interviews sought answers to the kind of learning environment the participants experienced regarding trust and integrity, and how good the simulation facilitators were in consistently following the briefing protocols in each of the simulation activity they underwent. Exploration of these areas associated with the briefing had generated a thick-rich description of students' experience with the phenomenon. I chose exploring students' perceptions about their briefing experience to gain an in-depth understanding of students' meaning of briefing and how it had set the context for their acquisition of clinical skills and knowledge.

This study has contributed significant information to advance the existing knowledge on the briefing in simulation as I employed multiple strategies to ensure the trustworthiness of the findings. One of the strategies was obtaining a thick, rich description of students' perceptions about briefing experience in the simulation, which were collected through semi structured interviews using an interview protocol to ensure transferability. I employed member checking after data analysis using a follow-up e-mail with the participants that ensured the credibility of the data collected. I was not a faculty member of the nursing program where data were collected, so the students shared their

honest opinions and feelings as their responses did not affect them with their grades or academic progress. I did employ bracketing to give utmost importance to participants' meanings. Moreover, the reflexive journal I maintained throughout the research process and the audit trail ensured dependability and confirmability of the findings in addition to credibility and transferability.

Limitations

Because this study was qualitative, there were some limitations of transferability and dependability. This study took place in the participants' natural setting, and would be difficult to replicate as participants in similar studies might have different natural settings. Participants in this study represented only students from the ABN program in one geographical region in the United States and one nursing school. Therefore, the findings derived from this study might not apply to similar studies conducted with students in other nursing programs. Schools of nursing in other states could have different simulation curricula in the accelerated baccalaureate format, and the way they practice briefing might be different.

Additionally, simulation experiences could be varied in number and sequence of each course in the curriculum. The circumstances in the ABN program where students have not had much exposure to simulations were another limitation of this study. The experience of one unit of analysis (ABN students) might not reflect the experience of similar groups. The case study approach employed in this study was unique to the particular case of the ABN students recruited. For the above reasons, the findings of this study have limitations of transferability.

Nursing students who had very positive or very negative simulation experiences would be more inclined to participate and share their perceptions than those who did not. Additionally, just one form of data collection using interviews would cause limitations of dependability. Data collection through observation of students during a simulation activity might provide information on students' performance, the level of anxiety exhibited by students, and the dexterity of their nursing skills. The limitations of the data collection method planned for this study might question the trustworthiness of this study's results. Also, my personal bias about past exposure to a negative simulation experience might influence this study's outcomes. This issue was addressed through personal bracketing, reflexive journaling, as well as by obtaining in-depth descriptions of study participants about their experience. Their responses are added as quotes in the analysis section. An audit trail conducted during analysis provided evidence of the confirmability of this study's findings.

Significance

This study has contributed new knowledge to the existing literature on nursing simulation where exploring students' perspectives about the briefing process in the simulation were lacking. The responses of participants in this study brought in new insights about how briefing should be constructed and practiced before simulations. This information would help fill the gap in nurse educators' knowledge about the briefing by revealing the perceptions of nursing students' experiences with the briefing process and the depth and type of content in the briefing, such as what was lacking and what was needed in preparation for simulation. The findings of this study would also help nursing

curriculum developers and nurse educators reflect on the current practices of rendering simulation activities. This reflection would help them make appropriate changes to improve the processes to enable students to develop competency with skills and knowledge for delivery of care in the clinical setting.

This research would fill the gap in nursing curriculum developers' understanding of their students' perspectives about the briefing provided by nurse educators before simulation activities (Sharoff, 2015). This project was unique because it addressed an under researched area in simulation learning among a group of learners who use the simulation labs for their clinical experience (Page-Cutrara, 2015; Zakari et al., 2017). The results of this study have provided much-needed insights into the processes by which increasing numbers of new students achieve their clinical skills (Rutherford-Hemming & Alfes, 2017). Insights from this study would aid curriculum developers, nurse educators, and academic programs in helping students to succeed in their clinical rotations, thus supporting eventual degree attainment. In addition, this research has empowered nursing students to voice their concerns about their experiences so that improvements can be made to benefit students of the future generations. Students who have attained competency in clinical skills and knowledge through proper briefing practices in the simulation would ensure safe and quality care to their patients, thus contributing to positive social change (Sharoff, 2015).

Summary

In summary, this dissertation was an exploratory study of nursing students' perspectives on the briefing process they encountered before simulations. The case study

was an appropriate methodology to understand this poorly researched area in nursing simulation using in-depth, email interviews with a purposeful sample of ABN students. In-depth individual interviews provided the participants with the advantage of expressing their unique and sensitive experiences at their own pace and without reluctance to an investigator who was an outsider. An evidence-based knowledge of the briefing process and its impact on nursing students' acquisition of clinical skills and knowledge obtained from the first-hand experiences of these students are essential for nurse educators and curriculum developers to reexamine the current briefing practices. The knowledge gained from this study would improve the briefing process and assist students in attaining their simulation objectives. Chapter 2 provides an in-depth review of the literature on this topic and includes evidence of the current briefing practices and a need for this study.

Chapter 2: Literature Review

The literature review was focused on the topic of briefing practices in simulations and their effects on nursing students' acquisition of clinical skills and knowledge. For the ease of reading, the review of the literature is divided into four sections. In the first section, the literature on the effectiveness of simulations is discussed. The second section is devoted to the literature on the briefing in simulations and the issues surrounding briefing. In the third section, I explore studies that focused on students' perspectives on various aspects of simulation. In the fourth section I discuss literature on theories applied in simulations that guided students' learning. However, before getting to the review of the literature, it is appropriate to review the research problem, its relevance in the discipline of nursing, and the purpose of this study.

Simulation in nursing education is considered an effective teaching/learning strategy for the following reasons. In an era of inadequate traditional clinical sites, the pedagogical strategy of simulation offers students opportunity to practice and acquire clinical skills and knowledge in the simulation labs (Curl et al., 2016; Jeffries, Swoboda et al., 2015; Stayt et al., 2015; Sundler et al., 2015). For the simulation to be effective, the briefing phase, during which students are prepared for the simulation activity, must be carried out in the way it was designed by the INACSL. In addition, there are other aspects of the INACSL design that need to be considered while preparing students for the simulation experience. According to Jeffries, Rodgers, and Adamson (2015), the INACSL design includes the specific learning objectives for the simulation course that

guide the development or selection of activities and scenarios with appropriate content and problem-solving complexity.

Conversely, inconsistencies in the practice of briefing before a simulation activity had been identified as an issue that raised concerns among nursing students regarding their acquisition of clinical skills and knowledge (Jeffries, Swoboda et al., 2015). Even though students received the briefing, the depth and type of content were inconsistent and inadequate before simulation (McDermott, 2016). Additionally, students were not given proper orientation to the simulation labs, which caused them anxiety and fear of not knowing what to expect (Meyer et al., 2014; Nielsen & Harder, 2013). Nurse educators' lack of adherence to the briefing protocols designed by INACSL (Lioce et al., 2015) was an issue that negatively affected the acquisition of clinical skills among nursing students (Jeffries, Swoboda et al., 2015). In this instance, it was crucial to understand students' perspectives about their briefing experiences because broad ranges of students are learning clinical skills using simulation.

Preparation for simulation lab activities includes the introduction of the clinical scenario, objectives of the simulation course, orientation to the simulation lab that includes the equipment and supplies used in a simulation activity, and an overview of the potential nursing interventions specifically used in a simulation activity (INACSL, 2016a). The participants were recruited from a school of nursing in one of the Northeastern states in the United States.

In an era of inadequate clinical sites, where students have traditionally acquired clinical skills, the discipline of nursing education was forced to implement innovative

teaching strategies such as simulation. Researchers had concluded that simulation in nursing is an effective teaching/learning strategy (Berragan, 2014; Schwindt & McNelis, 2015; Stayt et al., 2015). However, Curl et al. (2016) posited that briefing prior to simulation was lacking and suggested that simulation modules should include a prelab activity to establish baseline knowledge. It is during the briefing that students get the opportunity to understand the clinical scenario planned for the simulation activity, the objectives of the course, the different roles assigned to them, and the potential nursing interventions required to ensure safe and quality care to their patients (Curl et al., 2016). Students who do not receive proper briefing may not attain the objectives of the course and not acquire efficient clinical skills and knowledge required to provide competent care in actual clinical sites. Therefore, for the simulation to be effective, proper briefing should be delivered prior to the activity.

Even though simulation is considered an effective teaching strategy, there are many barriers and challenges that hinder its effectiveness. According to De et al. (2016), the barriers to learning by simulation that students faced included equipment malfunction, short clinical time, restrictions in practice of nursing interventions due to hospital policies, and lack of prior knowledge about specialized interventions. These barriers can be overcome by proper briefing practices during which educators can reinforce the proper functioning of the simulation equipment and supplies as well as review the possible nursing interventions already taught to students (Curl et al., 2016).

In addition, Rokenes et al. (2014) and Meyer et al. (2014) pointed out that because of the inadequate briefing, nursing students experienced performance anxiety as

they demonstrated skills in simulation settings. It is natural for students to feel overwhelmed and intimidated in an unfamiliar environment while performing a group activity. Additionally, Meyer et al. (2014) found that there was a need for more preparation for the assigned roles, clearer instructions, allotment of more time, and involvement of all students in the multiple phases of scenarios. McDermott (2016) identified the need for further inquiry regarding the depth and type of content in the briefing before simulation activity and argued that simulation educators play a vital role in preparing students for the successful simulation-based learning experience.

This study was needed to bring about evidence-based knowledge on the briefing process in simulation and its effects on students' acquisition of clinical skills and knowledge. By obtaining students' perspectives on their first-hand experience with the briefing process, educators and curriculum developers can decide on how to implement the briefing protocols as designed by INACSL (2016b). In addition, opening a dialogue regarding the briefing process between students and nurse educators was essential in analyzing the effectiveness of the briefing phase, which sets the context for the overall simulation experience. This study would empower nursing students to express their concerns regarding the briefing process, which would persuade nurse educators to adhere more closely to the briefing guidelines. This chapter includes the literature search strategy used to retrieve relevant literature on this topic, the theoretical foundation that guided this study, the literature review related to key concepts, and a summary of the chapter.

Literature Search Strategy

The search strategy was aimed to locate both published and unpublished studies. The databases that I used to search the published studies included Medline, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), the Educational Research Information Center (ERIC), and Google Scholar. I chose these databases for the search because of their broad content coverage of healthcare specialties including nursing, medicine, and other specialty areas that usually use simulation as a teaching strategy. The articles searched were published between 2012 and 2018, and search for the keyword *simulation* elicited over 130,000 articles. Due to the overabundance of articles on simulation, the search was narrowed down using the keywords *patient simulation, nursing simulation, nursing education, student perceptions, prebriefing, prebrief, brief, prescenario, presimulation, pretrain, preparation, orientation*, and *clinical skill competency*. The specific search in multiple steps using different combinations of these keywords yielded 1,536 articles.

After that, the search was further narrowed to articles from 2014 onwards to conform to the last 5 year period requirement as the manuscript of this research was planned to be published in 2018. Further along, keywords specific to the topic such as *nursing students, perceptions, clinical skills in simulation, briefing,* and *competency* yielded 256 articles within the past 4 years. Using the Boolean operators *and, or,* and *not* along with the keywords listed yielded 64 articles that were relevant to this study. I selcted full texts of peer-reviewed articles published in the English language only. The search for unpublished studies included dissertation abstracts.

The published dissertations were reviewed from ProQuest Central. Textbooks were also used as supplemental resources to understand social cognitive as well as novice to expert theories. Additionally, I reviewed conference proceedings from the National League for Nursing (NLN) on simulation guidelines series. Thus, the literature search was performed until the point of saturation was reached.

Theoretical Foundation

The theories that guided this study were Benner's (2001) from novice to expert theory and the social cognitive theory by Bandura (1991). The novice to expert theory, borrowed from the discipline of social sciences and known as the Dreyfus model of skill acquisition (Dreyfus & Dreyfus, 1980) was adopted by Benner to use in nursing for clinical skill acquisition (Benner, 2004). Benner (2001) modified the Dreyfus model of skill acquisition in developing a model to measure professional nursing skill acquisition for a more objective way of evaluating progress in learning any new subject or skill. Because this theory addresses the steps in acquisition of skills, Benner's theoretical work had been used extensively in clinical nursing in the associate as well as undergraduate programs.

This theory has the potential to affect the nursing practice and preparation of nurses for practice materially. The Benner model contains five levels to define stages of growth in clinical learning that can be applied to any healthcare professional role. The approach provides details on skill acquisition in incremental steps such as novice, advanced beginner, competent, proficient, and expert. The central concepts of this theory

include skill acquisition, experience, clinical knowledge, practical knowledge, and competence (Benner, 2004; Lyon, 2015).

From Novice to Expert

In the Benner model, the novice is a new nurse whose practice is rule-driven. The advanced beginner demonstrates acceptable performance but lacks a well-developed knowledge base and strong management skills (Benner, 2001). The competent professional can prioritize and use past knowledge to care for patients. The proficient professional will evaluate the patient situation, then automatically prioritize needs and predict outcomes. The expert professional exhibits confidence and has developed an extensive knowledge base allowing for an intuitive grasp of complex patient situations (Benner, 2004).

Only the first two stages of Benner's model were applied in this study to focus on the briefing phase of the simulation. It is in the novice stage that students need detailed information about the simulation activity, and it can be delivered via proper briefing practices. In the subsequent simulation experiences, students can assess their progression from the novice level to an advanced beginner stage and from there to the more advanced levels.

Assumptions for Novice to Expert Theory

The assumptions for the novice to expert theory were that humans are integrated, holistic beings who create meanings of actions, that are embedded in skills, practices, intentions, expectations, and outcomes (Benner, 2001). Those meanings could not be made completely explicit because they were attuned to the particular person being cared

for in a particular situation. The implied meanings could be interpreted by someone who shares a similar background. The caring practices in nursing are embedded in knowledge and skill. The intelligence embodied in an individual enables skilled activity that is transformed through experience and mastery.

A second assumption was that people, who share a common culture and language such as in nursing, create a background of common meanings that allows for understanding and interpretation (Benner, 2001). A third assumption was that there are no interpretation-free data and there are no non-reactive data (Benner, 2001). Interpretation and reaction to data are often taken for granted and not recognized as knowledge. A fourth assumption was that clinical knowledge is embedded in perceptions rather than precepts (Benner, 2001). Those perceptions lead to an independent reality whose meaning could be represented by abstract terms or concepts.

An example to explain these assumptions would be a laboring patient in a labor and delivery unit who is feeling rectal pressure and wanting to use the bathroom. The nurses working in this unit would interpret it as an imminent delivery of the fetus. This meaning cannot be made completely explicit as it is attuned to this particular patient in this particular setting. For a female patient in a medical-surgical floor feeling rectal pressure could be interpreted as a need for a bowel movement. The implied meanings are interpreted by individuals, who share the same background. Therefore, the nurse would provide caring practices such as a vaginal examination to assess the progress in labor and reassure the patient, which are embedded in the knowledge and skills achieved by the nurse. This example could also be used to explain the other assumptions of this theory

because nurses working in a particular setting such as labor and delivery share a common culture and language and they develop the common meaning of rectal pressure as a sign of imminent delivery. The assumption that the knowledge is embedded in perceptions is true in this case because the patients' complaints of rectal pressure (an abstract concept) are perceived by the nurse as an independent reality (an upcoming delivery).

The assumptions of this theory were in alignment with the context of this study as they influence the logic of the study and were recognized as leading to further development and implementation of the research process planned for this study. The context of this study was a simulation, and the logic was that proper briefing leads to the effective acquisition of clinical skills and knowledge among nursing students. Therefore, the research process planned for this study was to explore students' perceptions about their briefing experience to see if the meaning they created would lead to any independent realities that could be expressed in abstract terms or concepts. It is during the briefing, nursing students, who are integrated holistic beings; develop common meanings of actions embedded in the skills taught to them. In this context students who share a common culture and language create a common meaning for the concepts taught for easy understanding and interpretation. The data collected in this study were interpreted and analyzed to develop new knowledge, which was the result of students' perceptions of their briefing experience.

Strengths of This Theory

Benner's theory provides important insights into the complex interaction between nursing theory and practice. It is strong enough to explain the progression of skill

acquisition from a novice level to an expert level where a nurse can apply problem-solving skills. The focus of this theory is on the actual performance and outcomes in particular situations. The model is developmental in that changes in the performance situations can be compared across time (Benner, 2001).

Good practice requires that the nurse develops skillful ethical comportment as good clinical judgment informed by scientific evidence and technological development. Benner (2001) combined the concepts of knowing-how (practical knowledge) and knowing-that (theoretical explanation). Benner also studied the difference between nurses that worked in special care units and regular units. The skill acquisition process was uniform in all settings and all disciplines.

The Weakness of This Theory

Benner's theory, also termed as a model, does not account for the development of expertise and intuition well when compared to empirical data (Gobet & Chassy, 2008). A key aspect of the theory is the presence of stages of expertise development. However, these stages were poorly documented in the literature, and some of the evidence from nursing practice explicitly adduced to support their existence was rather weak (Gobet & Chassy, 2008).

Social Cognitive Theory

Social cognitive theory (SCT) postulates that intellectual factors, behavior, and environment exert simultaneous and reciprocal influence over each other and the individual (Bandura, 1991). The intricately and reciprocally connected cognitive, behavioral, and environmental factors affect learning by bringing about the conscious

desire to self-regulate future behavior (Bandura, 1991). Using SCT as a framework for planning and implementing simulation learning activities optimizes task and content mastery as well as supports student analysis of one's own learning or thinking process (Burke & Mancuso, 2012). The effective simulation requires an environment conducive to learning and introduces activities that foster symbolic coding operations and mastery of new skills (Burke & Mancuso, 2012). Symbolic coding operation means, the learner classifies and stores learning in the form of images or words for later retrieval (Burke & Mancuso, 2012).

In the case of simulation, briefing introduces students to the cognitive factors where they comprehend the information shared about the clinical scenario and made meaning out of it. Students also tend to undertake observational learning through modeling the behavior of others such as simulation facilitators as well as peers in the group activity. In addition, a simulation environment that is conducive to learning, built by instructors before the briefing phase, set the stage for effective acquisition of knowledge and skills. The environment conducive to learning is within a simulation lab where the manikin and other equipment and supplies are available and in the proper functioning state.

Assumptions for Social Cognitive Theory

The social cognitive theory (SCT) was formulated under the assumptions that individuals learn behaviors and cognitive strategies by observing the behavior of others without being directly reinforced (Bandura, 1991). In addition, the behavior learned is directed toward particular goals. Behaviors learned, eventually become self-regulated and

cognition plays a role in learning. Self-regulation refers to the process by which people control their thoughts, emotions, and motivations and direct their actions (Nabavi, 2012). Some cognition features could influence behavior such as expectations of future consequences and responses made based on current situations. Expectations about future consequences affect how we cognitively process new information and make decisions about how to behave. Vicarious experiences of others' consequences, as well as non-occurrence of expected consequences, can also influence behavior (Bandura, 1991).

Strengths of This Theory

The SCT has accumulated an impressive research record in studies concerned with important human social behaviors (Nabavi, 2012). It is considered as an evolving theory that is open to change. Its focus is on important theoretical issues such as the role of reward in learning and the stability of behavior. A reasonable view of people and concern with the social implications add strength to this theory.

Weaknesses of This Theory

This theory's comprehensiveness and complexity make it difficult to operationalize concepts. Many applications of this theory focus on one or two constructs such as self-efficacy while ignoring other concepts. It is not a fully systematized or unified theory; and is loosely organized based solely on the dynamic interplay between person, behavior, and environment (Nabavi, 2012). It is unclear the extent to which each of these factors penetrates into actual behavior and if one is more influential than another.

There are some controversial issues about this theory. Researchers (Hyde, 2014; Nabavi, 2012) had been questioning the necessity of reinforcement for both learning and

performance and its influence on the achievement of self-efficacy. The theory assumes that changes in the environment will automatically lead to changes in the person, when this may not always be true. The theory heavily focuses on processes of learning and in doing so disregards biological and hormonal predispositions that may influence behaviors, regardless of experience and expectations (LaMorte, 2016).

The Rationale for Selection of These Theories

The research framework for this study was developed by identifying and combining parts of the existing theories of novice to expert from nursing (Benner, 2001) and social cognitive theory by Bandura (1991). In addition, the framework was the result of synthesizing frameworks from research findings (Burke & Mancuso, 2012; Lyon, 2015; Meyer et al., 2014), and proposing a framework from clinical practice (Benner, 2004). Both Benner's model and Bandura's theory guide the practical implications of briefing in the simulation. While Benner lays out the stages of skill acquisition, Bandura explains how cognitive, behavioral, and environmental factors influence students' learning in the process of skill acquisition. The briefing is the phase in a simulation where these factors get implanted which paves the way for gradual and steady progression in the acquisition of knowledge and skills.

The items covered in the briefing are also connected to the factors in Bandura's theory. For example, the introduction of the clinical scenario and its comprehension by the students involve cognitive factors that affect learning. Likewise, the assignment of specific roles for the simulation activity and the expectation of student performance during activity encompasses the behavioral factors that novices develop by mimicking

instructor and peer behaviors. Lastly, the orientation to the simulation lab and familiarization of the functioning of the manikin and other equipment and supplies come in the environmental factors that contribute to effective learning.

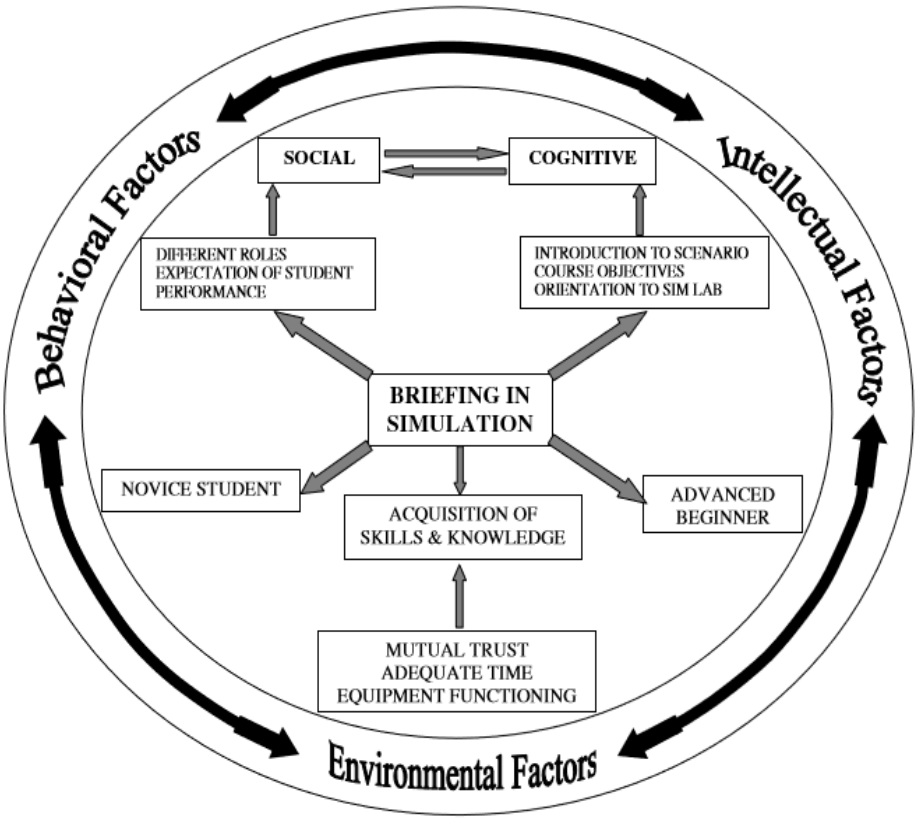


Figure 1. Theory diagram.

Relation of Selected Theories to the Present Study

For nursing students to attain competency of clinical skills, they need to be taught such skills in incremental steps as explained by the novice to expert theory. A novice as a beginner has no experience of the situation in which they are expected to perform (Benner, 2001). Novices must be taught about a patient's condition in objective and measurable parameters so the novice can recognize features of the patient's condition

without any situational experience. The advanced beginner develops principles based on experience and begins the use of these experiences to guide their actions, knows the rules and follows the rules exactly and without deviation. Benner (2001) stated that competence develops when the nurse starts to see or plan his or her actions regarding long range goals.

The applicability of these theories provided insights to the research problem and questions posed. In the case of clinical simulation, the briefing is the initial step on which the rest of the activities are built upon, and skill acquisition must start at the briefing stage. Therefore, major theoretical propositions for this study are that, because skill acquisition model and briefing appear to elicit the same results, Benner's theory could explain the process in a briefing that enhances acquisition of skills and knowledge among nursing students in a simulation (Benner, 2004; Lyon, 2015). The research questions were answered in incremental steps starting from the basic information such as the introduction of the simulation scenario and advancing to the specific details of briefing process such as preparation of students for the simulation activity and orientation to the simulation lab, equipment, and supplies.

Likewise, because the cognitive, behavioral, and environmental factors of social cognitive theory influence the activities included in the briefing, Bandura's theory can also explain the acquisition of skills and knowledge in simulations (Burke & Mancuso, 2012). Therefore, the research questions probed into students' memory of their experience about the preparation they received during briefing such as an overview of the scenario, shaping up of their behaviors to conform to the caring attitude delineated in

nursing interventions, and the orientation students received to the simulation lab. The orientation ideally should include inspection of the proper functioning of the equipment and supplies used during simulation. Additionally, student assignment of different roles such as charge nurse, primary nurse, treatment nurse, medication nurse, and documentation nurse was also explored and the kind of understanding they had about the objectives of the course.

Whatever skills and knowledge acquired in the initial simulation activity through the proper briefing, would be reinforced in the subsequent simulations and would help students to advance to higher levels of skill acquisition. The concepts delineated in the proper briefing practices could also be explained by the social cognitive theory developed by Bandura. Providing proper briefing might alleviate some of the anxiety students experience during simulations and would thus set the stage for a meaningful simulation experience that nursing students are entitled to get. Participants' perspectives on the briefing experience would provide insights to educators who would improve the briefing practices which eventually would prepare students to become competent nurses who can provide safe and quality care to their patients. The case study approach undertaken for this study yielded valuable information from individual interviews from the lowest level of briefing such as the introduction of the clinical scenario to students, up until the acquisition of clinical competence.

Literature Review

An exhaustive review of the current literature from the past five years had been done on topics in simulation that were related to the constructs of interest and chosen

methodology and methods that were consistent with the scope of this study. The chosen studies had been grouped to belong to the subheadings of the effectiveness of simulation, pre-briefing in simulation, perceptions of students, and theories applied in the simulation.

Effectiveness of Simulation

In nursing education, simulation is being used to enable students to acquire the multiple facets of knowledge and skills required to provide competent care to patients in clinical settings. Jeffries (2015) explained that simulation provides students an opportunity to rehearse the critical decision-making, acts of delegation, prioritization, and teamwork skills that are essential for beginning professional nursing practice, in a safe, non-threatening environment. The rehearsing capability in the subsequent simulations reduces clinical errors and improves patient outcomes (Kelly et al., 2016). Curl et al. (2016) asserted that during a simulation activity, students had accomplished clinical objectives of improved critical thinking and increased self-confidence in performing nursing skills. Additionally, Coram (2016) noted that simulation prepares students for the complex role of managing patient care by providing a safe environment to practice clinical decision-making and clinical judgment. While evidence shows that simulation is effective in shaping and scaffolding students' learning, it is imperative to take measures to preserve the effectiveness of this innovative and technological teaching by implementing proper briefing practices.

Prebriefing in Simulation

The briefing, also known as prebriefing, during which students are prepared for the upcoming simulation activity is a key step that facilitates the effectiveness of the

teaching strategy of simulation. Curl et al. (2016) while asserting the effectiveness of simulation, pointed out that the simulation module should include a prelab activity to establish baseline knowledge. Tyerman et al. (2016) identified the activities delineated in the presimulation or briefing phase. The authors explained the effects of briefing on students' acquisition of knowledge and skill performance, as well as their attitudes, self-confidence, self-efficacy, and anxiety level. In addition, Sharoff (2015) concluded that the prebriefing preparatory materials distributed to students before the activity provided students with essential information that allowed them to engage fully in the simulation activity. In addition, the preparatory materials promoted critical thinking, clinical reasoning, and confidence in performing skills, and decreased students' anxiety. Thus, it was understood that briefing prepared students to develop the attributes needed to withstand the complexities embedded within the healthcare settings so that they could ensure optimal care to their patients.

The process of simulation could be overwhelming, causing stress and anxiety to the students, thereby interfering with the learning process. One of the reasons for this stress and anxiety is the lack of clear roles and directions. A study by Whitman and Backes (2014) assessed the importance of role directions before a simulation activity. The authors pointed out that students who received minimal information, directions, and instructions on performance expectations during simulations did not achieve the desired learning outcomes. For a simulation to be successful, nursing students must have clear, concise directions and well defined roles. Since the end users could provide insights into

what enabled them, or what would enable them in attaining the course objectives, it was crucial to gain students' perceptions of their experience.

Perceptions of Students

Perceptions are peoples' beliefs or opinions about a particular event, activity, or topic based on the experience they had about them. There was literature that described nursing students' perceptions of different aspects of the simulation. Those include simulation's impact on preparing students for practice as well as challenges and benefits of simulation (Meyer et al., 2014). Other studies explored students' perceptions of acquisition of knowledge, skills, and competence (Sundler et al., 2015), and self-efficacy and clinical judgment (Najjar et al., 2015). Team training for building patient safety (Ballangrud et al., 2014), and critical thinking, clinical reasoning, and reflective practice (Sharoff, 2015) were other aspects of simulation learning that were explored. In all these studies, it was students' perceptions that shed insights on the problems and issues related to simulation learning that further opened avenues for future studies. Therefore, this study was aimed at exploring students' perceptions about the briefing practices to understand its role in students' acquisition of clinical skills and knowledge. It would also be appropriate to examine the application of theories in simulation studies that guide the current practices of simulation learning.

Theories Applied in Simulation

One theory could not be used to explain simulation as it encompasses a multitude of activities that take place in different phases. The three main phases are a briefing, simulation activity, and debriefing. Many different concepts are embedded in each of the

three phases, which could be explained by a specific theory. The briefing phase is the preparation stage where students are introduced to a clinical scenario. The simulation facilitator must explain the objectives of the course, and what is expected of each student who is assigned a particular role, in detail.

After that, the students are given a detailed orientation to the simulation lab where they familiarize themselves with the manikin, the equipment, and supplies needed for the simulation activity. The instructor also provides orientation about the activity of the simulation. These activities could be explained by the novice stage of Benner's skill acquisition model as nursing students are dependent on the instructors. Bandura's social cognitive theory also applies in this context as students learn through observation and retain information they received from the instructor. The information gets processed in their memory and can be regained during the subsequent simulation courses during which, they advance from the novice level to the advanced beginner stage. Teaching clinical skills in incremental steps from novice to advanced beginner ensures attainment of course objectives.

The basic tenets of the social cognitive theory are that learning occurs because of the combined effects of intellectual, behavioral, and environmental factors (Bandura, 1991). The intellectual or cognitive factors refer to the basic knowledge regarding the clinical scenario in a simulation, imparted to students by instructors. The behavioral factors are learned from observation of instructors and peers. The environmental factors include the context, the place and time of an event, and the specific tools or equipment

used in the learning activity. According to social cognitive theory, these factors are simultaneously and reciprocally connected.

This theory could be applied in simulation because the simulation is a group activity and students learn new knowledge and skills that are imparted by instructors and by observing the instructor and peers while performing an activity. By learning from one another as each one fulfills a particular role, it can be termed as a social activity. Moreover, an environment that is conducive to learning is essential, and that can be ensured by keeping all equipment and supplies available and in proper functioning order.

Approaches and Methodologies Used

The majority of studies mentioned in this literature review used qualitative designs with various approaches. They were narrative inquiry, ethnography, phenomenology, grounded theory, and case study (Ballangrud et al., 2014; Berragan, 2014; De et al., 2016; Meyer et al., 2014; Najjar et al., 2015; Rokenes et al., 2014; Sundler et al., 2015). In addition, the methodology used to collect data in those studies included interviews, either individual-face-to-face or focus groups. Many of the researchers have approached the problems surrounding simulation by exploring participants' experiences through interviews. The constructs of interest, methodology, and methods selected by researchers in those studies were consistent with the scope of this study. There were also some quantitative studies done on issues related to simulation that used an online survey or questionnaire method (Curl et al., 2016; Stayt et al., 2015).

Strengths and Weaknesses of the Approaches Used

Researchers use different approaches based on the context of their studies and their philosophical assumptions. In this respect, the approaches used in the studies mentioned in this chapter were strong enough to elicit the desired outcomes of those studies (Ballangrud et al., 2014; Berragan, 2014; De et al., 2016; Kelly et al., 2016; Schwindt & McNelis, 2015). However, every qualitative study has limitations in their criteria for meeting trustworthiness. In-person interviews were an effective method of collecting in-depth information as it allows clarification of unclear or missed data at the same time (Ballangrud et al., 2014; Meyer et al., 2014; Nel & Stellenberg, 2015). Most interviews were conducted using a semi-structured interview protocol that provided flexibility with the interviewing process. Focus group discussions were also used in some studies, but anonymity and confidentiality of the data collected were not possible in that method (Najjar et al., 2015). Moreover, if the researcher could not control the participants responding at the same time in a focus group, transcription of data collected would be cumbersome.

Justification of the Selection of Concepts

I selected the concepts based on the research problem, the research purpose, and the research questions developed for this study. The simulation was the context and briefing was the phenomenon of interest chosen for this study. By utilizing ABN students' perceptions about their briefing experience, I was able to gain in-depth understanding of the phenomenon and its influence on students' acquisition of clinical skills and knowledge. The literature selected provided an overview of the existing

problems in simulation such as lack of briefing and its social implications in the discipline of nursing (Jeffries, Thomas-Dreifuerst et al. 2015; McDermott, 2016; Lioce et al. 2015). Other researchers had explored the lack of briefing in simulations impacting students enrolled in associate and traditional baccalaureate programs. For this study, I chose ABN students as they have limited exposure to simulation during their 1 year program. Therefore, a case study approach selected for this study was meaningful in eliciting students' perceptions about their briefing experience and its influence on their learning.

Synthesis of Studies Related to the Key Concepts

Studies that established the effectiveness of simulation as a learning strategy investigated many phenomena. They include self-efficacy (Berragan, 2014; Meyer et al., 2014), improved self-confidence (Najjar et al. 2015; Sundler et al. 2015), clinical judgment, decision-making, and problem-solving (Coram, 2016; Sharoff, 2015), and critical thinking, delegating, prioritizing, and teamwork (Ballangrud et al. 2014). What was known about those aspects was that the simulation activity and debriefing enabled students to reflect on their actions and learn from what they did and what they did not do during the simulation activity. What was controversial was that literature so far had not revealed how students learn to apply critical thinking and how to make the best judgment for problem-solving instances. What remained to be studied were the existing briefing practices to determine if there was a standardization process of briefing (Chamberlain, 2015), if briefings were delivered properly (McDermott, 2016), and if students could perform better during a simulation activity, because of the proper briefing. It is during the

briefing that students are taught the problem-solving skills using critical thinking and clinical decision-making (Tyerman et al., 2016). Therefore, the influence of briefing on nursing students' acquisition of clinical skills and knowledge was worth exploring.

Synthesis of Studies Related to the Research Questions

In qualitative studies, the research questions are formulated using the open-ended words such as *what* and *how* to allow participants to explain in detail their experiences about the central phenomenon and the meanings they created for it. Brackney and Priode (2014) studied nursing students' perspectives about their overall simulation experience to explore what they perceived as beneficial to their learning. Another study by Meyer et al., (2014) primarily focused on students' perceptions of simulation preparing them for clinical practice and the challenges and benefits of simulation they perceived. The research questions posed in those studies were related to the questions formulated for this study. In addition, the questions flowed from the theoretical foundation that guided this study. Therefore, the approach selected to obtain answers to the questions seemed meaningful.

Summary and Conclusions

The major themes that emerged from the literature review for this study include the effectiveness of simulation, pre-briefing in simulation, perceptions of students, inconsistencies in briefing practices, and theories applied in the simulation. What was known about the topic of briefing in nursing simulations was that there were inconsistencies in the practice of briefing in spite of the INACSL guidelines. What was not known about this topic was that if the lack of proper briefing does affect nursing

students' acquisition of clinical skills and knowledge or not. This study filled the gaps in the literature about the inconsistencies in briefing practices and their influence on nursing students' acquisition of clinical skills and knowledge. The knowledge gained from this study would enable faculty to make changes to the existing practices of briefing and shed insights on how to better prepare students through the briefing process to make the simulation sessions more meaningful and effective (Page-Cutrara & Turk, 2016). Since the process of teaching and learning using simulations in nursing is complex, multifaceted, and challenging proper briefing practices would contribute to the achievement of learning outcomes. To obtain valid data on this issue, ABN students were interviewed through email using a semi-structured interview protocol, which is discussed in detail in chapter 3 as methodology.

Chapter 3: Research Method

The purpose of this qualitative study was to explore the perceptions of ABN students' experiences with the briefing process as preparation for simulation lab activities. Preparation for simulation lab activities is essential and includes the introduction of the clinical scenario, objectives of the simulation course, the expectation of student performance based on the assigned roles, and orientation to the simulation lab (McDermott, 2016). The orientation encompasses the provision of enough time for students' familiarization with the equipment and supplies used in a simulation activity and an overview of the potential nursing interventions specifically used in a simulation activity (Lioce et al., 2015). The strategy of inquiry I used was a case study approach, as there was a need for increased understanding of this issue among ABN students. This chapter includes the research design and its rationale, the role of the researcher, ethical procedures, and procedures for participant selection, recruitment and data collection, data analysis plan, and issues of trustworthiness.

Research Design and Rationale

The research design selected for this study was qualitative with a case study approach. A research design is an overall strategy that a researcher uses to integrate the different components of a research study coherently and logically to link the research questions and research problem to data collection, analysis, and interpretation (Gorard, 2013). A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident (Ridder, 2017). The contemporary phenomenon on which I

focused in this study was the briefing in simulations, and the real-life contexts were the clinical settings. The rationale for the selection of this design stemmed from the knowledge that case studies are widely used in organizational processes (Ridder, 2017). Therefore, this design would connect the components of this research process logically.

The case study method allows investigators to retain the holistic and meaningful characteristics of real-life events such as organizational and managerial processes (Yin, 2014). The briefing in simulation contains the initial steps of managing the real-life clinical events mimicked in a simulation activity. This activity is set as a teaching strategy to educate nursing students, which is part of an organizational process. Case studies are the preferred strategies when *how* or *what* questions are posed, when the researcher has little control over the event, and when the focus is on a contemporary phenomenon in some real-life context (Yin, 2014). The research questions posed in this study also contained *how* or *what* questions to focus on the phenomenon of briefing. I had no control over the briefing that students received before the simulation activities they experienced. Thus, this method allowed me to retain the holistic and meaningful characteristics of the organizational process of teaching through simulations.

Research Questions

The research questions for my study were:

RQ 1. How are nursing students prepared for a scheduled simulation activity?

RQ 2. What are nursing students' perspectives about their briefing experience?

Central Concepts of the Study

The central concept or phenomenon of the study was briefing in the simulation. The briefing is defined as "an information session before the simulation scenario with suggested activities of orientation to the environment and review of learning objectives" (Chamberlain, 2015, p. 319). It is also known as prebriefing, and the two terms have been used in literature interchangeably. The information session prepares students for the impending simulation activity (Sharoff, 2015). The preparation includes the introduction of the clinical scenario, orientation to the simulation lab, and an overview of the course objectives. The orientation further includes the functioning of the manikin and other equipment and supplies used in a simulation activity as well as a review of the potential nursing interventions specifically used in a simulation activity. In this study, I addressed these various aspects delineated in the central concept of briefing.

Research Tradition

I followed the qualitative research tradition as this topic evolved from one of my professional concerns that required a naturalistic inquiry. On the basis of my experience as a new educator with nursing students learning through simulation, I wanted to know more about the existing practices of student preparation before simulations and students' perspectives on the preparation they received. My concern about preparation before the simulation was connected with my background and experiences. Therefore, I wanted to focus on the single phenomenon of briefing and explore the details where factors that influence this phenomenon might emerge. My strategy for dealing with this problem was contiguity-based, which means, as an educator, I wanted to be in close proximity with my

students providing them educational services to the maximum extent (Moreno & Mayer, 1999). The information gained from this study would make me determine the type of knowledge, skills, and equipment training students would need for a meaningful simulation experience.

Rationale for the Chosen Tradition

The rationale for selection of this research design derived from my philosophical orientation of constructivist worldview. A constructivist researcher's focus is on interpretation rather than quantification, and the emphasis is on subjectivity rather than objectivity (Redmond et al., 2016). I liked to have flexibility in the process of conducting research, while my orientation was towards the process, rather than the outcome. The flexibility inherent in a qualitative design allowed the process to evolve as the data collection progressed. I also believed that a learner's behavior and attitude towards learning is inextricably linked to the context and the situation in which learning takes place. Therefore, the constructivist focus, the flexibility in doing the research study, and the connection with the context and situation made my choice of research design the most apt for this study. The research was an exploratory case study that would serve as a precursor to a larger study in the future on this phenomenon.

Role of the Researcher

My role in this study was as an interviewer. I conducted e-mail interviews of the participants using a semi structured interview protocol that I developed to guide me through the interviewing process. The e-mail responses came on different days and times according to participants' convenience. I did not have any personal or professional

relationships with the participants in this study as I had no prior involvement with the school of nursing where the participants were studying. The participants were selected from a school of nursing that was located far from where I lived and worked. Therefore, there was no question of supervisory or instructor relationships involving power over the participants.

To minimize any researcher bias, I maintained a reflexive journal in which I wrote down my day-to-day activities related to the research process and reflected on my thinking and actions. The reflexivity about my interest in the research topic and my role as a researcher enabled me to conduct the research activities without exerting any bias on this study. I set aside my preconceived beliefs and attitudes towards briefing in simulation and upheld the participants' perspectives about their experience on briefing. I performed member checking with my participants during a follow-up e-mail to clarify their responses as needed to ensure the accuracy of my interpretation of the data collected. There were no conflicts of interest such as any products, services, facility, or person embedded in this study. By conducting this study, I did not receive any financial benefits in the form of higher salary, research grants, or consultation fees. The literature sources used in this study have been properly cited and referenced to give full credit to the authors of the information. I developed the research instrument I used in this study, which was an interview guide.

To avoid power differentials between a nurse educator/researcher and nursing students, I was very polite in my dealings with the participants. I did establish a rapport with the participants and gained their trust in me. I maintained the trusting relationship by

honestly explaining the research objectives and assuring the privacy and confidentiality of the data they shared with me. By doing this study, I did not anticipate any conflicts of interest as I did not teach at the research site, and I did not know any of the participants or their faculty members. However, I rewarded the participants in this study with a gift card worth $10 to a nearby café as a token of gratitude for their participation at the conclusion of my interviews with them. The use of this incentive was permitted as per the school's institutional review board (IRB).

Methodology

The data collection method planned for this study included individual one-on-one or e-mail interviews of participants, using open-ended questions formulated in a semi structured interview protocol. The open-ended questions were designed to invite opinions and personal views on the topic. Participants were to be observed during one-on-one interviews to grasp their attitudes, behavior, emotions, and feelings as they shared their experiences on briefing before simulations. But all the participants opted to do e-mail interviews, and therefore, the collection of data using observation was not possible. Further e-mail interviews were conducted as a follow-up session as needed on items that required further clarification after the initial interviews.

Participant Selection Logic

The population identified in this study was students of an ABN program. This population was selected to identify the influence of improper briefing in simulations on students' acquisition of clinical skills and knowledge within the short duration of their entire program of one year. ABN programs are very intense, and students move through

the courses at a fast pace. During those fast-moving courses, a part of the clinical experience is obtained through simulations. Therefore, proper delivery of briefing exerts a significant impact on the meaningfulness of their simulation experience (Page-Cutrara & Turk, 2016). Students who volunteered to participate in this study were issued a demographic questionnaire that asked for their age, gender, race, ethnic and socio-economic background, English language proficiency, number of simulations encountered in their program, and prior experience with simulation outside their program (see Appendix A).

Identifying and Justifying the Sampling Strategy

To obtain meaningful data in a case study, participants must have had experience with the phenomenon under study. Additionally, students belonging to one school and enrolled in one program make up one case. I selected purposive sampling as the most appropriate method for this study because it includes participant selection for the enhancement of the understanding of experience, theory, or concept (Van Rijnsoever, 2017). Individuals who have experienced the phenomenon composed the purposive sample. Participants were selected based on the inclusion criteria.

Inclusion Criteria

1. Students enrolled in the ABN program at the school of nursing selected for this study.
2. ABN students who had at least one simulation course as part of the ABN curriculum.
3. ABN students who understood and spoke English.

ABN students possess a baccalaureate degree in other disciplines such as sociology, biology, or psychology, but not in nursing. Those disciplines seldom use simulation; hence prior educational experience was not an exclusion criterion.

Exclusion Criteria

1. Non-English speaking students.
2. Students who had no simulation experience in the ABN program at the selected school
3. Students who had prior experience with simulation either at work or school other than the current nursing school.

Twelve participants who had one or more simulation experiences in the courses enrolled were recruited from the entire ABN student body from the selected school of nursing. For most qualitative studies, the number of samples ranges between 10 and 15 as the intent is to obtain data in depth rather than in breadth (Van Rijnsoever, 2017). I interviewed the participants to explore their perceptions of the briefing in the simulation setting and to conceptualize their acquisition of nursing skills. The participants' description of briefing experience was the key data for analysis.

Procedures for Contacting Participants

I notified Walden University's IRB office that the research site I had chosen wanted me to get IRB approval from Walden first. So, I sought conditional IRB approval from Walden and submitted it to the research site's IRB and obtained their letter of cooperation and submitted it to Walden's IRB. Once I had obtained approvals from both universities' IRBs, I obtained the contact information of students enrolled in the ABN

program such as their school email IDs from the school of nursing selected. This information was only used for this research study.

Procedures for Identifying Participants

I posted invitation flyers on the bulletin board in the nursing department at the school and inside their classrooms. I also distributed flyers to all ABN students present on the day on which I posted the flyers. The initial contact with potential participants was in-person, in their classroom, where I presented my study briefly to the group of ABN students. Thereafter, I e-mailed the invitation flyer to the ABN students. I also received contacts through phone calls from students because of my flyer. My initial e-mail and invitation flyer listed the inclusion criteria so that students could decide themselves if they fit the study or not. Additionally, a demographic data form was e-mailed to students with a request to fill the required fields and send back to me (see Appendix A for demographic data).

Procedures for Recruiting Participants

Once I got responses from student volunteers indicating their willingness to participate in this study, I collected and saved their e-mail addresses. I thanked students for their voluntary decision to participate in my study and notified them of the tentative dates during which data collection interviews would take place. I also requested that they look for my e-mails regarding the research activities such as signing of consent forms and setting up of dates and times for interviews. I e-mailed the consent form to the participants to give them adequate time to read and think through any clarifications they might require. My e-mail also stated that I would call them one by one to discuss the

components of the consent form before they signed it. I informed them that their school administrator had agreed to allow me to use a classroom where I could meet with participants in a quiet, private setting.

I contacted participants one by one through e-mail to see if they needed to discuss the components of the consent form and ensured that they understood the terms and conditions fully. When they agreed with all the terms and conditions, I requested them to send the e-mail back with the word "I consent." At that time, I wanted to set up dates and times for their interviews. However, all the participants chose to do e-mail interviews. I saved signed consent forms obtained through e-mails in electronic folders assigned to each participant that carried their assigned code numbers.

Procedures for Data Collection

I planned to use the nonacademic time for the interviews, either before or after school as convenient for the students. But when all the participants opted to have e-mail interviews, I e-mailed them the semi structured interview protocol (see Appendix B). I also followed up with participants via. e-mail when clarifications on parts of their interviews were needed.

The Relationship Between Saturation and Sample Size

The sample size in a qualitative study is generally smaller compared with other research methods. The concept of saturation should be the guiding principle for sample size in qualitative research (Mason, 2010; Saunders et al., 2018). Saturation would be attained when responses to the interview questions are similar from multiple participants, and the themes derived from the data are repeated, and no new themes derive (Fusch &

Ness, 2015; Moser & Korstjens 2018). I carefully examined if the saturation was attained prematurely due to the sampling frame being too narrow or if my analytical perspectives were skewed or limited. Additionally, I examined if the method employed was not resulting in rich, in-depth information and if I was unable to get beyond the surface or *status quo* with respondents. Above all, I ensured that the saturation achieved met the purpose of the inquiry.

Instrumentation

The data collection instrument used in this study was an interview protocol (see Appendix B) I developed that contained open-ended, semi structured interview questions. The basis for the interview protocol I developed was from literature sources on qualitative studies (Brackney & Priode, 2014; Sharoff, 2015), dissertations on qualitative studies (Phillips, 2016; Magnetico, 2017), and the basic and advanced qualitative courses that I attended as part of the doctoral program study.

The participants were asked the following sub questions.

1. Describe the information you received regarding the clinical scenario.
2. Tell me your understanding of the objectives of the simulation course.
3. What was your assigned role and what were the expectations of your performance during the simulation activity?
4. Explain the orientation you received in the simulation lab.
5. Tell me more about the kind of learning environment you experienced prior to the simulation activity.

6. In reflecting on your briefing experience, what are the challenges you encountered during that time?
7. What are your opinions about briefing, in setting up a stage for a meaningful simulation experience that has enabled you to acquire clinical skills and knowledge?
8. What is your understanding about briefing now and how is it different from the beginning of your program?
9. What is your opinion about briefing in simulations and why is it so?
10. What else would you like to add or share that was not covered in these questions?

Establishment of Content Validity

The content validity was established by the attainment of participants' thick, rich description of the phenomenon, member checking, audit trail, reflexive journal, and the frequent feedback and guidance from the dissertation supervisory committee on the research process. The data collected from participants were reviewed during a follow-up session at the end of the data collection period to perform member checking to validate my interpretation of participants' responses. I maintained an audit trail and a reflexive journal throughout the research process from the beginning of data collection until the end of the data analysis.

Sufficiency of Data Collection Instruments

The interview protocol contained sub questions related to each of the central questions developed. 10 sub questions addressed participants' perspectives about the type

of preparation they received prior to a simulation activity, their opinions about the briefing in simulation, and briefing's influence on students' acquisition of clinical skills and knowledge. Pilot studies were not required in this qualitative study as per the Chair of the supervising committee as I had taken the role of an instrument in this study and had developed the interview protocol myself.

Duration of Data Collection Events

I collected the data from students enrolled in an ABN program in a school of nursing in one of the Northeastern states in the United States. The data collection was planned to take place within five weeks, for the one-on-one interviews, in the months of June-July, 2018 by interviewing 1-2 participants per day for two days in each week and a possible follow-up session for clarification of data. Individual data collection interviews were to last for about 50 minutes, and the follow-up interviews were to last for 5 to 10 minutes depending on the extent of clarification. The plan for data collection was tentative as it might change according to the availability of participants and the conference room and the method of interviews the participants choose. Follow-up interviews were to take place over the telephone. If enough participants were not obtained in the initial recruitment, the selection process was to be extended to a few more weeks to recruit more participants. The data collection period also was to extend through one more semester depending on the number of participants obtained or until saturation attained. Since participants chose to do email interviews, the above plan did not take place.

Data Recording and Storing

I had planned to record the participants' responses on an audio recorder I bought and tested prior to the interviews to ensure proper functioning. Since participants opted to do email interviews, data recording did not take place. I reminded the participants that their responses were saved in electronic folders that carried the assigned code numbers for each participant to maintain the privacy and confidentiality of the data obtained. I stored the saved folders on an external flash drive, which is kept in a locked cabinet in my office at home.

Follow-Up Recruitment Plans

My original plan for follow up recruitment was that at the time of initial recruitment, if too few participants had indicated their interest in participating in this study, I would proceed with data collection interviews as planned rather than waiting for the attainment of the target sample size of 15 students. Along with that I would extend the data collection period and redistribute the invitation flyers to see if any more students would be interested in participating. Since the method employed was a case study, I could only recruit students from the ABN program at the chosen research site. If unable to obtain the desired number of 15 participants, this issue would be included as one of the limitations of this study.

Participants' Exit From the Study

At the end of data collection, participants were rewarded with a $10 gift card to a nearby café as a token of appreciation for participating in this study. At the end of the data analysis, the participants were given a summary of the results of this study. I thanked

them for their valuable time, willingness to take part in my study, and for sharing their honest opinions. I encouraged them to reach out to me in the future if they had any questions or clarifications about their responses or any other issues related to the research process that took place.

Follow-Up Procedures for Data Clarification

I contacted participants through e-mails to follow up with clarifications on the data collected that was deemed necessary. I utilized that opportunity to perform member checking to establish confirmability of my interpretations derived from the data.

Data Analysis Plan

The data analysis started taking place soon after the interview responses came in through emails from each participant. I had planned to analyze the data myself, and to perform manual coding. Data management software programs were not used in this study as it required more time and skills to master the functions of the software programs. Additionally, the human brain is needed to interpret and analyze the data collected.

Coding Procedures

As the data collected were in large volumes, it took a few days to complete the initial reading of the data. The process of analyzing data continued simultaneously until all the participants were interviewed, and all the data were saved. I read the data several times to enable me to understand and interpret the participants' responses clearly. As I read the data one by one in a systematic order, I sorted out codes that pertained to the specific questions asked and placed them in a Word document. Similar codes were grouped and placed in a node, also on Word documents. This coding process continued

until all the data were analyzed. From the nodes, similar codes were grouped to form patterns, categories, and themes. Some of the quotes from participants were selected as supportive statements to the themes derived to demonstrate confirmability of the data.

Connection of Data to a Specific Research Question

The data obtained from sub questions 1 through 5 were connected to RQ1—How are nursing students prepared for a scheduled simulation activity?—and responses to sub questions 6 through 10 were connected to RQ2—What are nursing students' perspectives about their briefing experience?

Issues of Trustworthiness

Qualitative studies are generally critiqued for their lack of generalizability to a larger population. Qualitative researchers must establish the trustworthiness of the research process (Cope, 2014). It is imperative to explain the criteria of credibility, transferability, dependability, and confirmability to address issues of trustworthiness. Credibility was established by taking appropriate strategies such as prolonged engagement with participants from the distribution of invitation flyers until disclosure of study findings and audit trails (Cope, 2014). Member checks, data saturation, and reflexivity of the researcher were other strategies that established the credibility. The qualitative sub-questions developed to address each of the central questions yielded a thick description of the phenomenon studied. In addition, an all-inclusive purposive sample of ABN students contributed to the richness of the data obtained on this topic. These strategies established the criterion of transferability of this study to similar groups and settings (Cope, 2014).

Dependability is another criterion that would establish the trustworthiness of qualitative studies. In this study, the audit trail of the data collection and analysis process planned ensured the establishment of this strategy (Cope, 2014). I maintained a reflexive journal, in which I documented the day-to-day progress of this research study, my thoughts, and aspirations, as well as the roadblocks and other issues I encountered during this research study. This information contributed to the establishment of the strategy known as confirmability.

Ethical Procedures

The ethical procedures applied to this study were included in the formal IRB application form and the associated documents such as collaborative institutional training initiative (CITI) certificate, the invitation flyer, the demographic data form, the informed consent form, and the interview protocol. The agreements to gain access to participants and data were included in the actual documents in the IRB application. Institutional permissions including IRB approvals were obtained after approval of the proposal and oral defense procedures.

Ethical concerns related to recruitment materials and processes and plans to address them were included in the IRB application form as well. In addition, ethical concerns related to data collection activities such as students refusing participation or early withdrawal from the study and plans to address them were also included in the IRB form. This particular study did not impose any research-related adverse events or risks of any sorts to its participants. There was minimal chance for breach of confidentiality, given the data collection, storage, and archiving methods described herein.

Summary

The methodology section of this dissertation described the components of data collection and analysis as well as the rationale for the chosen method to study the phenomenon of briefing in the simulation. The ethical procedures involved in this study were included in the IRB form and hence not included in this chapter in detail. After the committee approval of the proposal and oral defense, participant recruitment and data collection were officially started. Details of data collection and data analysis procedures are included in Chapter 4 and were compared with the proposal planned in this chapter.

Chapter 4: Results

Introduction

The purpose of this research study was to explore the ABN students' perceptions of the briefing in simulation and its influence on their acquisition of clinical skills and knowledge. The research questions that explored students' perceptions on their briefing experience yielded answers on the type of preparation students received for scheduled simulation activities. I obtained detailed descriptions of participants' experiences on the briefing phase of simulations they encountered. In Chapter 4 I describe the setting in which data collection took place, the demographics of the participants, the data collection procedures, and data analysis methods employed. In addition, I present evidence of trustworthiness established in this study in detail along with the results of this study.

Setting

The participants belonged to a school of nursing at a reputable university in one of the Northeastern states in the United States. A classroom in the school of nursing building was allotted for individual one-on-one interviews, but all the participants opted for e-mail interviewing. I had included multiple options for data collection methods in the invitation flyer as suggested by Namageyo-Funa et al. (2014) such as face-to-face interviews or interviews through e-mail, phone, or Skype. Participants were students enrolled in the ABN program. After gaining the IRB approval from Walden University and the research site, I went to the school of nursing and posted an invitation flyer on their bulletin board. I also went into their classroom at the end of a class session and presented my study to the group of ABN students.

The data collection interviews took place during the third semester of their program. By then most participants had four or more simulation experiences. This phase of their program favored the data collection as participants were information-rich sources who had experienced the central phenomenon in this study, briefing. The participants stated that they were thrilled to participate in a formal research study, which they considered as an additional experience before finalizing their program. Moreover, participants shared their honest opinions without fearing repercussions from their instructors as their final grades for the semester had been posted by the time the interviews commenced.

Demographics

Twelve participants took part in this study, of which nine were females, and three were males. The participants' age ranged between 24 and 41 years. Eight of them were European American, 1 African American, 2 Hispanic, and 1 Asian. All of them belonged to the middle class socio economic level. All of the participants had four or more simulation experiences in the different courses they attended before entering this study. This attribute ensured the sampling strategy of a purposeful sample proposed for this study. The multiple exposures to simulation activities enabled participants to describe their briefing experiences in different courses in detail. This detailed description contributed to the gaining of in-depth knowledge about the phenomenon as planned in the proposal.

Data Collection

I collected the data using a semi structured interview guide, which contained two central questions and five sub questions to probe into each of those central questions. The data collected using the ten open-ended questions that started with the words *what* and *how* yielded in-depth information about the phenomenon of interest, briefing. Because the interviews were through e-mail, I collected data from all 12 participants on each of those ten questions. The interview guide had instructions to participants to provide a detailed description of their experiences and perceptions. E-mails from all the participants came through over a period of 3 weeks. I had also instructed the participants not to mention any names of courses or instructors to maintain the anonymity of the data, and the participants followed my instructions.

Data Storage

I transferred the data collected through e-mails to Word documents that carried the code numbers assigned to each participant. The associated documents received from participants such as the demographic data form and consent carried the assigned code numbers. All these documents were securely stored in electronic folders on an external flash drive that is kept in a locked cabinet at my home. While using the flash drive for data analysis, I used a password-protected laptop. I will keep this data safely for the next 5 years.

Variation in Data Collection

There was a variation in data collection method from the plan presented in Chapter 3. I had planned to conduct one-on-one interviews, but while applying for IRB

approval, I added more options of data collection methods such as e-mail, phone, and Skype in addition to the one-on-one interviews to encourage volunteers to choose any one method. The provision of these multiple choices for data sharing worked out well, and all the participants opted to use the e-mail medium. I did not encounter any unusual circumstances in data collection.

Data Analysis

Before starting the analysis, I laid out the chain of operations that I wanted to undertake with my project. I chose the theories that guided my study and the data I collected as input from which my analysis would start (Namageyo-Funa et al., 2014). According to Bengtsson (2016), having a desired output in mind is a logical starting point for planning the method of analysis in the case where the project aims at finding knowledge that is needed for a specific purpose. My desired output was an in-depth understanding of the briefing process that ABN students experienced in their 1-year program. To achieve the intended results, I decided to use qualitative content analysis and to manage the analysis using the thematic coding process. Vaismoradi, Turunen, and Bondas (2013) stated that content analysis is intended to provide knowledge and understanding of the phenomena under study through a systematic method of coding and classifying text to reveal patterns and themes. Proper data organizing is important in attaining a systematic method of coding.

Data Organizing

Data organizing precedes data analysis and involves several steps that require a lot of time and planning. According to Leung (2015), the initial steps of data organization

include preparing the data by transcribing the recorded interviews. In this study, transcription was not needed as participants e-mailed their responses to the interview questions in the text form. After that, reading transcripts repeatedly is essential to achieve immersion in order to obtain a sense of the whole. As the first step in data analysis, I read the interview responses several times as the emails came in one by one. Bengtsson (2016) suggested that making notes on the transcripts or listing the different types of information found in the text are good practices that would help with attaining a whole picture. The next steps in the process are developing a coding scheme to organize data in a comprehensible way and to code all texts (Leung, 2015). Thus, following these steps diligently made the data analysis more efficient and meaningful.

Coding Scheme

Data can be coded before beginning analysis and categories can emerge during analysis. According to Hartley as stated in Kohlbacher (2006), data collection and analysis are developed together in an iterative process, which adds strength to the process because it enables researchers to confirm theories based on empirical evidence. The data collected on participants' preparation during the briefing phase of simulation indicated that students needed detailed explanations in incremental steps as explained by the skill acquisition model in order to develop skills, thus confirming the novice to expert theory. Additionally, the participants' perceptions of their briefing experiences confirmed that learning would occur only through the simultaneous and reciprocal interactions of the intellectual, behavioral, and environmental factors delineated in the social cognitive

theory. Therefore, the coding scheme I generated to analyze the data was based on these two theories.

Data Interpretation

The correct interpretation of the meaning of data shared by participants is important when analyzing the contents. Numerous key steps are necessary to support authentic and credible interpretations derived from the data (Elo et al., 2014). I kept this idea in mind while reading the data from each participant, and clarified my interpretations of participants' meaning of the concepts they shared with me through follow-up e-mails. This way I was able to grasp the essence of the content they shared with me and write down my interpretations. I then sorted out the meaningful segments in the data and placed them on a table with the title "initial themes." Hartley (as quoted in Mohd Noor, 2008; 2004) stated that a careful description of the data and the development of categories in which to place experiences or perceptions have proven to be important steps in the process of analyzing the data.

Inductive Process from Codes to Categories & Themes

Qualitative data analysis prompts researchers to define their data document and the unit of analysis they select for analyzing the data. According to Mayring (2000), the data document can be the entire transcript or selected responses from a group of questions chosen from the interview protocol. I considered the whole transcript from 12 participants as my data document, and my unit of analysis was each participant from the group of 12 ABN students from a nursing school. After reading the data repeatedly and obtaining a sense of the whole, the analysis consisted of examining and categorizing the

evidence collected to address the initial propositions of this study and searching for patterns of data. To undertake this process, I broke down the chunks of data into smaller meaningful units by making notes in the margins and highlighting them with different colors. Thereafter, I assigned labels to the key words in my research questions known as anchor codes and highlighted them in red and yellow colors. The anchor codes I named were preparation and perception. I placed the smaller units under their designated anchor codes and made sure that the units made sense in answering the questions set out in the purpose of this study.

Meaning of a Code

While analyzing the data, it is important to understand what constitutes a code. A code is a word, phrase, or sentence that captures the essence or features of data (Chowdhury, 2015). Identifying and sorting out the smaller units from the larger blocks of information is known as data reduction, and it is done without losing the meaning of the original data shared by participants (Castleberry & Nolen, 2018). Therefore, I was careful in reducing the data and sorting out small units of meaning. Thereafter, I chose the relevant statements and put them under their respective anchor codes with colors that matched the anchor codes. I included those statements in the results section of this chapter as direct quotes from participants to establish the criteria of trustworthiness of the data.

Formation of Patterns and Categories

I compiled a list of initial themes selected using the data reduction process. After that, I grouped the initial themes and arranged them alphabetically and tallied the

frequency. The repeated themes from the whole data were grouped as patterns, and the initial themes were analyzed to form categories. Once a pattern was identified, it was interpreted in terms of the social cognitive theory (Bandura, 1991) and the novice to expert theory (Benner, 2004) applicable to the sample and the setting from which the sample was selected. While generating categories and themes, I looked for relationships among codes and paid close attention to address the research questions. By employing within case analysis (Meyer, 2001), I formulated the patterns and categories and derived the final themes.

The themes derived provided answers to the central questions of student preparation for scheduled simulations and students' perceptions of briefing experiences. I then re-examined the data to ensure that they fit the expected categories and that I have attained the desired output. The themes identified in this case study enabled me to understand the process of briefing in the selected site and its influence on students' acquisition of clinical skills and knowledge. According to Patton and Appelbaum (2003), the ultimate goal of a case study is to "uncover patterns, determine meanings, and construct conclusions" (p. 67). I used Yin's (2003) general analytic strategy of "relying on theoretical propositions" to analyze the case study evidence (p. 111). Using this strategy, I employed specific techniques of *pattern matching* and *knowledge building* through constant comparison of the data from different participants (Yin, 2003, p. 109).

I then generated a Word Cloud using the software Wordle (http://www.wordle.net/create) that displayed the word frequencies. Bigger fonts indicated a higher frequency of words. Additionally, to display the relationship between

the codes, categories, and themes, I created a concept map. While presenting study results, I inserted direct quotes from participants and the narrative descriptions of their perspectives to ensure authenticity and confirmability of the data. Even though most of the responses received through emails were complete, I emailed back the participants to incorporate member checking, and to relay the findings of this case study, which is one other strategy to ensure trustworthiness of the qualitative data analysis (Hartley, 2004). All throughout the analysis, I paid close attention to the existing literature on the phenomenon of briefing and raised questions about whether my findings are consistent with or different from the extant research.

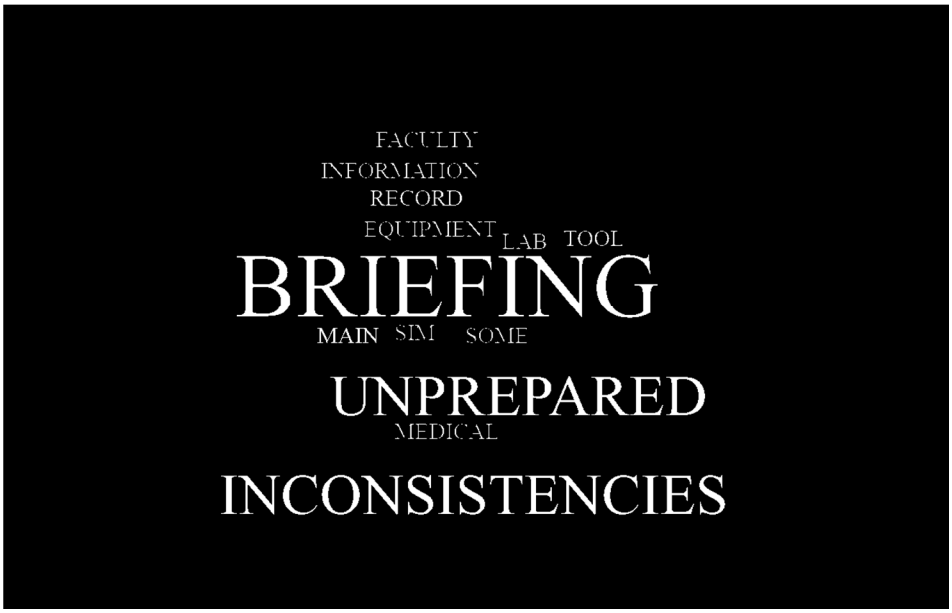


Figure 2. Word cloud on briefing.

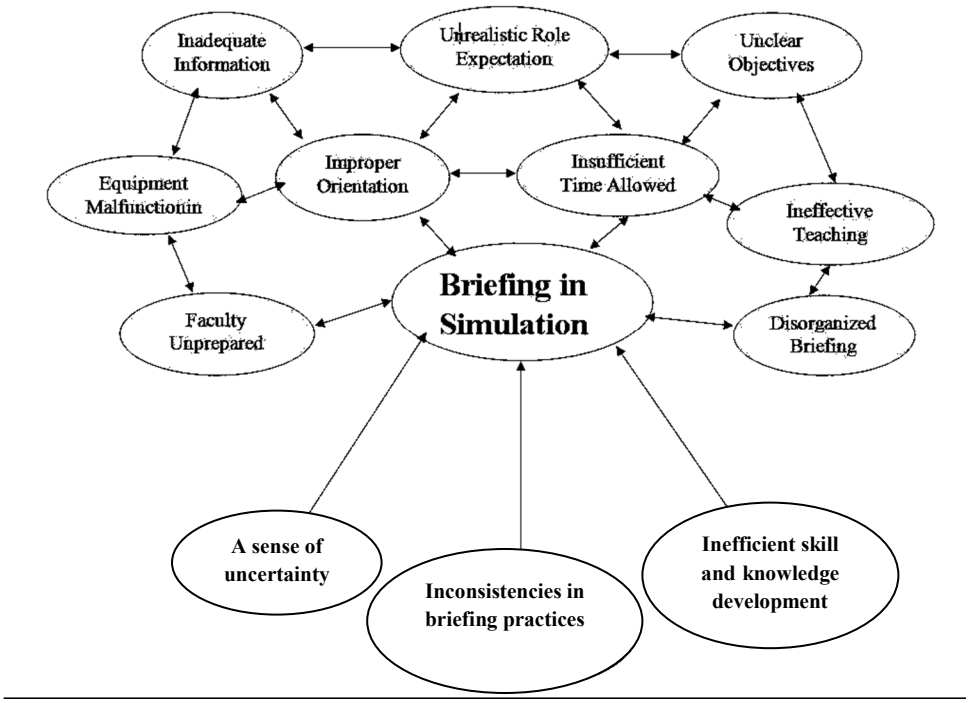


Figure 3. Concept map showing the relationship between codes, categories, and themes.

Results

The participants were asked ten interview questions related to their perception of briefing in the simulation. The following section highlights the codes derived and the study results in the participants' own words. Two research questions were explored in this study. Each of the two research questions correlated with specific questions within the interview protocol. Based on the results three major themes derived from the interviews. The themes derived were centered on faculty-related and technology-related categories. These categories were in alignment with the components of the theoretical

framework developed from novice to expert theory and social cognitive theory that was highlighted in Chapter 2.

Research Question 1

RQ1: How are nursing students prepared for a scheduled simulation activity?

The first research question corresponded with questions one through five of the interview protocol. The participants were asked a series of questions about how they would describe the preparation they received before a scheduled simulation activity.

Research Question 2

RQ2: What are nursing students' perspectives about their briefing experience?

The second research question corresponded with questions six through ten of the interview protocol. The participants were asked a series of questions to explore their perceptions on their briefing experience.

P1	P2	P3	P4	P5	P6
Little bit of information	Basic preparation	Some information about the pt. right before going into the sim lab	A fake medical record had pt. data	If students wanted to get the information, they could look on the board	Not every professor uses the fake medical record
No foundation to build critical thinking skills	A quick overview before heading into the simulation	Staff wanted us to be surprised	Not to react to the patient based upon their diagnosis	Some information about the patient was projected on the screen	A medical record was projected on the smart board
Information varied depending upon the professor	Everything was done very quickly and no time to reassess the pt.	Use of manikins for easy control of the experience	A real person with a psych diagnosis was our pt. But actually that person was not a psych pt.	A safe environment to make mistakes with patient care	The individual will not be adversely affected by the wrong choice
A fake medical record was kept on the bedside table	Opportunity to learn from stressful situations	Learn from mistakes	Come out as better nurses	Know how to handle things better	Role of a family member
If students wish, they can look on the board	Role of a primary nurse for the patient	I was quite anxious as professors were watching me through the glass window	I wanted to ask the professor what should I do first	As a family member, I was upset with the students because they were not doing a good job	I felt helpless because I was looking for a tourniquet to draw the blood
Not every professor used the fake medical record	Professor summed up the information quickly	I did not know what to do when I first went in	We could not get a proper blood pressure reading	I checked vital signs and assessed the patient	I did not know what was expected of me
Cover only the main problem	We were bumping into each other	I forgot to do the initial assessment as the patient's condition was deteriorating very fast	I had to push some I/V medication, but I did not know how to mix it	The professor was running in and out of the sim lab as the audio was not working	I wish I were told what to do in a crisis
I was assigned as the treatment nurse	I was not familiar with the items in the crash cart	The audio was not clear	We were waiting for the lab results	Every time I checked the blood pressure, I got a normal reading	The charge nurse was just standing there
I thought it was a waste of time	The professors should give us more details	I think I have got improved a little bit now after the fourth sim	In the first two sims, I had no clue what I was doing	The audio was too loud	In between, I was helping the documentation nurse

P7	P8	P9	P10	P11	P12
Medications patient take	I was looking for the suction apparatus, and it was nowhere to be found	I did not know how much deeper I had to insert the NG tube	I was the treatment nurse and I could not find a kit for wound dressing.	I want to do better because it is embarrassing in front of everyone during debriefing	I was panicking when the patient's lips turned blue
Patient's vital signs were normal when I checked them.	The professor told me I was getting a wrong reading	It was creating stress to me because for every sim the info given to us was different.	They told us simulation is an effective learning tool	The orientation was a tour of the simulation lab	We were able to ask questions about some of the items available
Professor sums up the information briefly	I think the Sim-man was not functioning properly	I inserted a Foley's catheter without any difficulty because the urethra was wide open.	We were able to explore the equipment, mannequins, and the layout of the room quickly	I am not sure if I maintained the sterile technique	I could not hear the heart/lung sounds of the mannequin
We reviewed the PowerPoint slides that covered the pertinent information	I could not identify the rhythm that was shown on the EKG monitor	We were told that the staff was able to change the vital signs	I tried to call the professor using the phone, but she could not hear me	We were told about the two-way glass through which the staff can see us	We could not hear the professors when they were speaking to us
I did not know what to do when I saw the abnormal rhythm on the EKG monitor	We had to speak loudly and clearly as staff could not see what we were doing	Summed up information very quickly	There was very little classroom discussion	The only prior experience was from clinical rotations	Each one of us had different experiences in clinical
Cover only the main problem	Medications patient take	Patient's vital signs were normal	Professor summed up the information	I could not hear my patients' responses	No information was given for Psych simulation
I was assigned as the documentation nurse	No information was given for Psych simulation as the staff wanted to surprise us	We had normal classroom lectures prior to simulation	Ask questions about what students are doing	We were waiting on the professor or looking at each other when we got stuck	Honestly, I don't think simulations are effective because the staff confuse us with varied information
Not every professor uses the fake medical record	Some information about the patient right before going into the sim lab	A fake medical record was projected on the smart board	Not all professors use the fake medical record	The professor gave us some information about the patient right before going into the sim lab	A fake med rec had patient data such as face sheet, history and physical examination findings.

Figure 4. Initial codes from 12 ABN students' interviews about briefing in simulation.

Preparation	Perceptions
Basic preparation	Little bit of information
Little bit of information	If students wanted to get the information, they could look on the board
Some information about the patient right before going into the sim lab	Not every professor uses the fake medical record
A fake medical record had patient data	No foundation to build critical thinking skills
Staff wanted us to be surprised	Everything was done very quickly
Not to react to the patient based upon their diagnosis	Staff wanted us to be surprised
Some information about the patient was projected on the screen	Information varied depending upon the professor
Medical record projected on the smart board	Use of manikins for easy control of the experience
A quick overview before heading into the simulation	A safe environment to make mistakes with patient care
A real person with a psych diagnosis	The individual will not be adversely affected by the wrong choice
A fake medical record was kept on the bedside table	Opportunity to learn from stressful situations
Role of a family member	Learn from mistakes
If students wish, they can look on the board	Come out as better nurses
Role of a primary nurse for the patient	Know how to handle things better
Professor summed up the information quickly	I was quite anxious as professors were watching me through the glass window
Cover only the main problem	I wanted to ask the professor what should I do first
Medications patient take	As a family member, I was upset with the students because they were not doing a good job
I was the treatment nurse	I felt helpless because I was looking for a tourniquet to draw the blood

The professor told me I was getting a wrong reading	Not every professor uses the fake medical record
They told us simulation is an effective learning tool	I did not know what to do when I first went in
The orientation was a tour of the simulation lab	We could not get a proper blood pressure reading
We were able to ask questions about some of the items available	I checked vital signs and assessed the patient
Professor sums up the information	The professor wanted us to do things quickly
We were able to explore the equipment, mannequins, and the layout of the room quickly	We were bumping into each other
We reviewed the PowerPoint slides that covered the pertinent information	I forgot to do the initial assessment as the patient's condition was deteriorating very fast
We were told that the staff was able to change the vital signs	I had to push some I/V medication, but I did not know how to mix it
We were told about the two-way glass through which the staff can see us	The professor was running in and out of the sim lab as the audio was not working
Sum up information quickly	I wish I were told what to do in a crisis
Cover only the main problem	I was looking for the suction apparatus, and it was nowhere to be found
Medications patient take	I did not know how to measure the length of the NG tube
Professor summed up the information	I want to do better because it is embarrassing in front of everyone during debriefing
No information was given for Psych simulation	Patient's vital signs were normal when I checked them.
I was assigned as the documentation nurse	It was creating stress at times
No information was given for Psych simulation	I think the Sim-man was not functioning properly
Ask questions about what students are doing	I inserted a Foley's catheter
We had normal classroom lectures prior to simulation	I am not sure if I maintained the sterile technique
	I could not hear the heart/lung sounds of the

	mannequin
	I could not identify the rhythm that was shown on the EKG monitor
	I tried to call the professor using the phone, but she could not hear me
	We could not hear the professors when they were speaking to us
	We had to speak loudly and clearly as staff could not see what we were doing
	There was very little classroom discussion
	The only prior experience was from clinical rotations
	Each one of us had different experiences in clinical
	Patient's vital signs were normal

Figure 5. Anchor codes from research questions.

Codes Derived

The following is a list of codes that emerged from the data analysis of the answers to the interview questions:

- incomplete or inadequate information provided to students about the simulation scenario;
- lack of explanation regarding the expectation of student performance based on the different roles assigned to them;
- improper orientation to the sim lab, the mannequin, and other equipment and supplies used for the activity;
- malfunctioning audio and telephone systems; and

- insufficient time allowed for briefing and simulation activity.

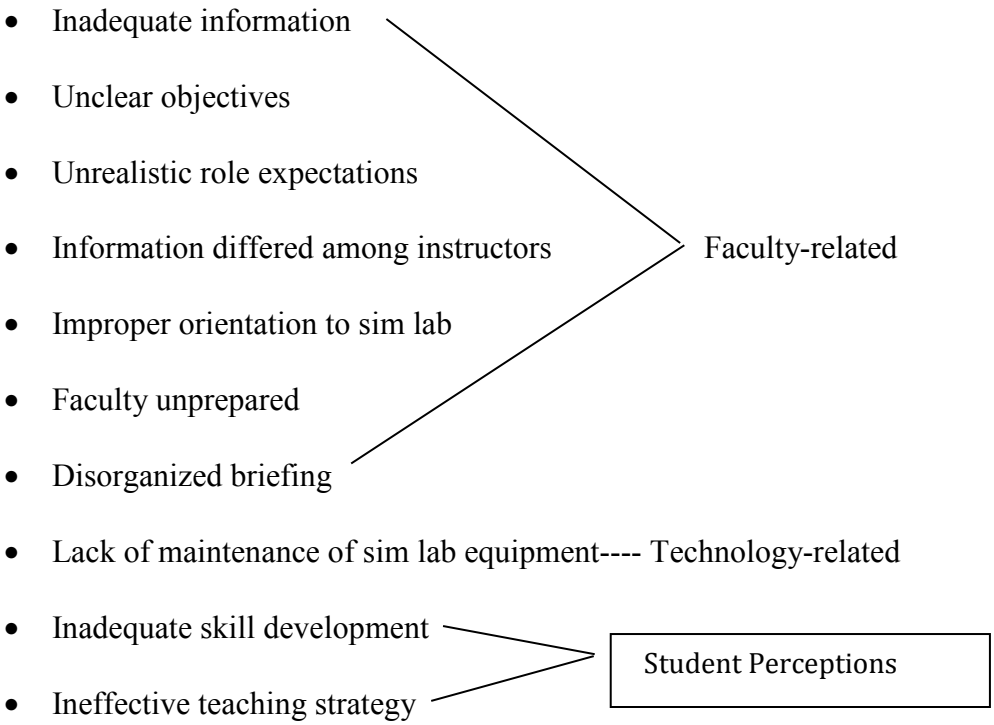
The following are some of the direct quotes from the participants.

- "We have a little bit of basic preparation before entering a simulation activity" (P1).
- "A fake medical record has been projected on the board for students to look at if they wish to" (P4).
- "Not every professor goes over the fake med rec with us and may only cover the main problem" (P6).
- "The professor has just summed up the information for us quickly" (P2).
- "In our psyche simulation, we were not provided with any information about the patient or diagnosis" (P8).
- "The information provided to us before the simulation activity varies depending upon the professor" (P3).
- "I could not hear the heart/lung sounds of the mannequin" (P12)
- "I wanted to ask the professor what should I do first" (P5)
- "The professor wanted us to do things quickly" (P7).
- "I was looking for the suction apparatus, and it was nowhere to be found" (P9).
- "I tried to call the professor using the phone, but she could not hear me" (P10).

- "The professor was running in and out of the sim lab as the audio was not working" (P11).
- "I felt helpless because I was looking for a tourniquet to draw the blood" (P6).
- "We were able to explore the equipment, mannequins, and the layout of the room quickly" (P10).
- "We were able to ask questions about some of the items available" (P12).
- "I could not identify the rhythm that was shown on the EKG monitor" (P8).
- "I did not know what to do when I saw the abnormal rhythm on the EKG monitor" (P7).

Categories Formed

From the initial codes, I developed the following categories:



Themes Emerged

The themes emerged from the data analysis include:

- A sense of uncertainty
- Inconsistencies in briefing practices, and
- Inefficient skill and knowledge development

Discrepant Cases

There were no discrepant cases as all the participants belonged to the same group of ABN students and they had simulations together. The total number of students in their batch was 16, and during simulations, they were divided into two groups. When the first group took part in the activity, the second group watched the video recorded and vice versa. Therefore, all of them had similar experiences and the same perceptions.

Evidence of Trustworthiness

This study received IRB approval from both Walden University and the host site. My approval numbers were 03-20-18-0518250 and 18-X-015 respectively. Strategies to maintain trustworthiness such as credibility, transferability, dependability, and confirmability were established and maintained throughout the data collection process.

Credibility

This study achieved credibility of its findings from participant validation through member checking. At the end of the data analysis of each interview responses, I summarized my initial interpretation of the data shared to validate the participants' views. Additionally, I read back direct quotes and asked participants for further comments or

clarifications. Member checking helped me avoid misunderstanding or misinterpretation of data and ensure that the participants had confirmed their answers to questions.

Transferability

The individuals who participated in this study were information-rich sources, and the thick-rich descriptions of their experiences shared through the email interviews ensured the transferability of its findings to similar settings and sample. I have given detailed descriptions of the setting to which the participants belonged, their demographic data, and the recruitment procedures. The participants provided detailed descriptions of their experiences as answers to the open-ended questions, and I included direct quotes in the write-up. I also maintained a reflexive journal that captured the detailed accounts of participants' experiences, as well as my thoughts as I was reading their responses.

Dependability

Throughout this research process, I maintained an audit trail of the study events which enabled me to achieve the criteria of dependability of its findings. I collected data using a semi-structured interview protocol, and all interview responses came through emails. After receiving each interview response, I wrote memos that captured my initial impressions and thoughts on the data. In addition to the audit trail, the reflexive journal and member checking ensured the dependability criteria of this study's findings.

Confirmability

Confirmability was achieved from thick-rich descriptions, audit trail, member checking, and reflexive journal. I gave detailed accounts of how my data were collected, analyzed, and processed. I was able to explain the analysis I undertook. My reflexive

journal was reflective of the research process. I also wrote about my personal experience with simulations and briefing and why this topic was so vitally important. Member checking was done after each interview analysis, where I summarized and confirmed the main points with the study participants.

Summary

In summary, the answers to the research questions revealed that ABN students had unpleasant experiences with the briefing in simulations due to faculty related and technology related issues. The students' perceptions about their briefing experience indicate that simulation is not an effective teaching strategy and their acquisition of clinical skills and knowledge were poor. The findings of this study were consistent with the information retrieved from the literature on simulation effectiveness. Chapter 5 will provide a detailed interpretation of the findings as well as recommendations for future practice and its implications in nursing education.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Writing Chapter 5 provided me "an opportunity to move beyond the data and integrate creatively, the results of my study into existing theory and research" (Rudestam & Newton, 2015, p.229). This chapter includes an overview of significant findings of the study, a reflection of how the study results reproduced previous research findings, and the inferences that were drawn from the results to current theory. Furthermore, I discuss the strengths and limitations of the study, recommendations for further research and implications for positive social change at the individual, organizational, and societal levels.

The purpose of this study was to gain an in-depth understanding of the existing briefing practice in simulations and its effect on ABN students' acquisition of clinical skills and knowledge. The nature of the study was qualitative with a case study approach that used e-mail interviews with a purposeful sample and content analysis to interpret their perceptions. The focus was on the benefits of the process where the study provided a comprehensive understanding of the phenomenon, briefing for simulations of ABN students. This study would help readers examine this particular case so that they can learn from it. It would also allow stakeholders in nursing education to apply the principles and lessons learned from this case to other cases or situations. The findings of this study have led to transferability rather than generalization. The perspectives of ABN students about their briefing experience could certainly help simulation educators design better briefing protocols that could be applied to nursing students in general.

The key findings of this study include ABN students' unpleasant experiences and dissatisfaction with the briefing phase of simulations that caused them a sense of uncertainty while learning from simulations. The factors that led to the feelings of uncertainty were categorized as faculty-related and technology-related. Participants perceived that there were inconsistencies in the way briefing was implemented between instructors in different courses. They also felt that faculty members were unprepared to teach students utilizing the innovative strategy of simulations. Lack of maintenance of the equipment and audio/video settings used in simulations contributed to the technology-related factors that participants perceived hindered their acquisition of skills. From the findings, it was evident that the simultaneous and reciprocal interactions between the intellectual, behavioral, and environmental factors of social cognitive theory (Bandura, 1991) that support student learning lacked for the participants in this study due to instructors' unpreparedness. Additionally, the skill acquisition did not systematically take place from novice to advanced beginner stage as theorized by Benner (2004) due to the inconsistencies in the briefing practices by different instructors in different courses.

Interpretation of the Findings

While interpreting the findings of a study, it is important to consider the literature available on the topic and analyze the results to ensure that they confirm or disconfirm the existing knowledge. The briefing is a key component in a simulation that sets the stage for a meaningful simulation experience (McDermott, 2016). There is a gap in the literature regarding how briefing influences students' acquisition of clinical skills and knowledge. The results of this study addressed this gap.

A Sense of Uncertainty

Feelings of uncertainty can originate when there are unclear instruction and improper preparation. The findings of this study confirmed the existing knowledge on the inconsistencies and inadequacies prevalent in the briefing practices and their resultant influence on nursing students' acquisition of clinical skills and knowledge (e.g., Jeffries, Swoboda et al., 2015; McDermott, 2016). Additionally, the findings confirmed what past researchers had presented in their studies regarding anxiety caused by simulations (see Meyer et al., 2014; Najjar, Lyman, & Miehl, 2015; Sundler et al. 2015). The authors of these studies concluded that the perception of anxiety jeopardized students' attainment of self-efficacy and self-confidence in performing clinical skills. The cause of anxiety among students could be from the sense of uncertainty perceived from lack of preparation during the briefing phase.

Inconsistencies in Briefing Practices

Another finding that contributed towards extending the knowledge in the discipline was the need for faculty education on proper briefing practices that emanated from the inconsistent briefing sessions students encountered in different courses. Even though briefing protocols have been established by the INACSL (2016a), schools of nursing have not been providing adequate education to their faculty members or emphasizing the need for consistent briefing practices (INACSL, 2016b). Chamberlain (2015) suggested a need for research to study the existing briefing practices to determine if there is a standardization process of the briefing. McDermott (2016) called for

initiatives to ensure briefings are delivered properly so that students can perform better during a simulation activity.

Carson and Harder (2016) argued that additional training on the complex functions of manikins as well as student preparation during an enhanced briefing session would enable the instructors to teach their students effectively using the innovative technology of simulations. A study by Shapiro (2018) pointed out that nurses transitioning from clinical practice to academia as educators require proper guidance and mentoring by expert peers to help them adapt well to their new roles. Since simulation is one strategy that is being used in nursing schools, faculty education is required on proper briefing techniques and procedures so that the briefing will set the stage for a meaningful simulation activity (McDermott, 2016). Thus, the findings of this study confirm and extend the knowledge available on the process of briefing in simulations. Ongoing research to explore students' perceptions of their briefing experience in different nursing programs is required to establish best briefing practices for nursing simulation.

Inefficient Skill and Knowledge Development

The participants in this study were dissatisfied with their briefing experience as it did not contribute effectively to their acquisition of clinical skills and knowledge. The skill development and knowledge building includes the ability to make a prompt clinical judgment, decision-making, and problem-solving (Coram, 2016; Sharoff, 2015; Tyerman et al., 2016) through the use of critical thinking, delegating, prioritizing, and teamwork skills (Ballangrud et al. 2014). This study's findings confirmed that because of the disorganized briefing employed by the unprepared faculty and the inconsistencies in

briefing in different courses by different faculty members, skill and knowledge development during the entire simulation courses were inefficient and ineffective. The participants expressed their aspirations to have experienced better briefing sessions, which would have facilitated their acquisition of clinical skills in a more meaningful way.

Limitations of the Study

The selection of a case study design, sample selection from one geographical area, and choice of students enrolled in one nursing program are factors that limited the generalizability or transferability of the findings to a larger population. The sample size projected in the proposal of this study was 15, but only 12 volunteers participated in this study. The inability to meet the projected sample size was a limitation of this study. However, I attained saturation of data as no newer themes were emerging from individual interviews once I passed analysis of eight interview responses. Because simulation is a group activity, participants who belonged to the same group had the same perceptions and experiences.

The selection of a qualitative methodology could not yield statistical evidence applicable to similar settings and population (Patton & Appelbaum, 2003). The data collection method of email interviewing provided data from only a single source of information. Yin (2003) reminds researchers that multiple sources of information are key characteristics of case studies. Moreover, the data analysis conducted by a single researcher does not validate the findings as multiple viewpoints could emanate from other analysts' analysis. I did not conduct a pilot study to refine the data collection plans and procedures as recommended by Yin (2003), which I think would have forced me to add

other sources of data collection such as observation of students during the briefing phase of a scheduled simulation activity. The additional source of data would have certainly strengthened the study.

Recommendations for Future Research

The recommendations for further research are grounded in the strengths and limitations of this study, as well as the literature reviewed in Chapter 2. Future studies should explore the use of more rigorous research designs such as quantitative or mixed methods designs to examine the impact of briefing on students' acquisition of clinical skills and knowledge (Carson & Harder, 2016; Creswell, 2009; Howard-Payne, 2015). Additionally, a larger sample size from multiple research sites for a quantitative study would yield significant statistical evidence that can be generalized to larger populations (Stolarova, Wolf, Rinker, & Brielmann, 2014). Longitudinal studies are recommended, which would allow researchers to have prolonged engagement with and persistent observation of the participants (Korstjens & Moser, 2018). Conducting a pilot study would enable researchers to refine the data collection plans and procedures as recommended by Yin (2003). In addition to obtaining data from information-rich sources, data from multiple sources would readily establish credibility and confirmability of the findings.

The incorporation of triangulation in data collection such as observation of students during a briefing session and records of student evaluation of their performance during prior simulations would be more effective in obtaining substantial findings. The multiple sources of information would also allow researchers to assess participants' level

of acquisition of clinical skills and knowledge more effectively (Kim, Noh, & Im, 2017). The validation of data analysis by another expert in qualitative studies known as peer-debriefing would contribute to the credibility and confirmability of this study's findings (Given, 2008). Similarly, the inter-rater reliability in a quantitative study by more than one analyst would ensure the validity and reliability of the findings as well (Stolarova et al., 2014). These measures would strengthen the findings of future studies on this topic so that school administrators can revise their policy on this important phenomenon and students can benefit from better briefing practices (Lubbers & Rossman, 2016). However, the findings from this study should be integrated into the overall body of evidence that supports best practices in simulation education.

Implications

Positive Social Change

The findings of this study will contribute to positive social change at the individual, organizational, and societal levels. The implications for positive social change include a better understanding of briefing in simulations and its influence on students' acquisition of clinical skills and knowledge. This study's findings suggest that a potential revision of the current briefing protocols is needed which may result in enhanced student learning through implementation of consistent briefing practices by nurse educators.

At the Individual Level

Students who graduate a nursing program where briefing practices have contributed to the optimum acquisition of clinical skills and knowledge will develop confidence and self-efficacy in the provision of safe, quality care to their patients in

clinical settings. Because briefing prepares nursing students for a meaningful simulation experience, students need clear and detailed information on the objectives of the simulation activity, their roles, and how to perform nursing interventions as the scenario unfolds. Through repeated exposures to simulations, the skill acquisition and knowledge building becomes easy, and students acquire self-efficacy and self-confidence in taking care of patients.

At the Organizational Level

Institutions that contribute to higher standards of education resulting from following the proper briefing practices will maintain their reputation in the arena of academia. School administrators and policymakers can use this study's findings in formulating policies and protocols for better briefing practices. Additionally, institutions that provide faculty education on proper briefing practices and ensure the proper delivery of briefing prior to a simulation activity (Jeffries, Thomas-Dreifuerst et al., 2015) would entice their students to embrace the innovative technological learning strategies such as simulations.

At the Societal Level

The study findings have positive social implications at the societal level as individuals who seek health care services from hospitals, and other healthcare organizations will receive quality care delivered safely by nurses trained by utilizing proper briefing practices. Because using briefing practices make a better simulation experience which leads to better knowledge of care, provision of optimal care by such nurses is possible. The current healthcare field is embedded with multiple complexities

and to meet them effectively, students have to be provided with distinctively different strategies such as proper briefing sessions (Chamberlain, 2015). The proper briefing would enable them to acquire adequate knowledge and competency in performing nursing skills in the simulation setting. Skills attained in the simulation setting can be transferred to the clinical setting where nurses provide optimal care to their patients that would reduce the length of hospital stay and improve the health and well-being of individuals in a community.

Methodological Implications

It was necessary to ensure that the participants were English speaking individuals who could generate quality interview data and that they could express their experiences and perceptions in a comprehensible way (Howard-Payne, 2015). I spent extensive time formulating interview questions to probe into the central questions developed to answer the research problem identified. Email interviewing was convenient for participants regarding time and for sharing their honest opinions without having to face the researcher. Data received through emails was also convenient for me as I did not have to spend time on transcribing data.

Theoretical Implications

The social cognitive theory (Bandura, 1991) and the novice to expert theory (Benner, 2004) guided this study in formulating research questions to find answers to the research problem identified. The interview questions enabled participants to recollect the minimal presence or moderate absence of the intellectual, behavioral, and environmental factors that were supposed to be delineated in the briefing phase. The sense of uncertainty

that students perceived was due to the lack of interplay of these factors. Additionally, the participants were amazed at how disorganized the skill acquisition was from novice to advanced beginner levels. The disorganized skill training resulted from the inconsistencies in briefing practices rendered by different faculty members. Thus, the study findings confirmed that learning would occur only through the simultaneous and reciprocal interplay of the factors of social cognitive theory and skill acquisition would be attained only through the systematic and incremental progression of skill building through proper briefing practices.

Conclusion

In conclusion, this study was a preliminary investigation to explore ABN students' perceptions of their briefing experience in simulations and its influence on their acquisition of clinical skills and knowledge. Despite the limitations of a case study design, this study yielded significant data that add to the body of knowledge, especially concerning the inconsistencies in briefing practices among nurse educators. This study also showed that educators were unprepared to undertake effective simulation activities which hinder students' acquisition of clinical skills and knowledge. These findings point to the need for educational preparation of faculty members on proper briefing procedures as well as revision of the existing briefing protocols to facilitate student learning. The school administrators in academia should implement policies that support the recommendations put forth by the findings of this study to ensure high-quality education to their students. Better briefing practices will have significant implications for healthcare professionals as well as the patients who seek care in healthcare organizations.

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