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Graduate Nurse's Perspective of Simulation to Address the Theory-Practice Gap in Nursing

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Joset Brown

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Walden University
2018

Abstract

Graduate Nurse's Perspective of Simulation to Address the Theory-Practice Gap in Nursing

by

Joset Elaine Brown

MSN, Walden University, 2013

BSN, Kaplan University, 2007

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

February 2018

Abstract

Graduate nurses are being employed to provide care in high acuity care areas, and this becomes a problem of significance as the literature suggests that graduate nurse's experience a deficit in integrating theoretical concepts in the clinical environment, described as the theory-practice gap; which can result in a risk to patient safety and the potential for negative outcomes. Cognitive constructivism was the conceptual framework that guided this study. A qualitative phenomenological design was used to explore the lived experiences of 13 graduate nurses employed at a community hospital in northern New Jersey. After recruiting the participants through purposive sampling, semi structured interviews were conducted with them utilizing a researcher-developed interview protocol based on the Casey-Fink Graduate Nurse Experience Survey. The research questions addressed the graduates' clinical experiences and their perceptions of simulation in facilitating the integration of theory to practice. Interviews were transcribed verbatim, coded, and analyzed to identify 4 themes: (a) the theory-practice gap, (b) effective educational pedagogy, (c) theory-practice integration, and (d) simulation-based learning. The crucial finding was that graduate nurses perceived the theory-practice gap could be reduced through the use of high-fidelity simulation utilizing scenario-based learning exercises in prelicensure programs prior to entry to practice. Based on these findings, the recommendations presented in a white paper will help the administration of the school of nursing at the local site make informed decisions to effect curricular changes that promote the students' integration of theory into practice. Further, the results of this study impact social change by serving as a model for similar programs to improve the preparation of graduate nurses to provide care to optimize positive patient care outcomes.

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Dedication

I would like to dedicate this to my family; my husband, Earl, and my children, Nia Abigail and Leah Gabrielle. I am nothing without you, and without you my purpose for pursuing my dreams would not exist.

Acknowledgments

I am in awe of God's grace and his faithfulness; he provided everything I needed to complete this project. I would like to acknowledge my husband, Earl, who provided unwavering support and encouragement and afforded me with the time and space to pour my attention and energy into the completion of this project. To my children, Nia Abigail, whose wisdom supersedes her age and makes the best cups of coffee, and Leah Gabrielle, whose silent presence at my side through my early Saturday morning writings was a reminder of why I needed to complete this project. You are my motivation! I acknowledge the village it took to support my academic dream. To my mother, my aunts, my siblings, and my sister-friends, for endless cups of coffee, words of encouragement, play dates, shared tears, and for coaching me through my moments of self-doubt; this achievement would not have materialized without the love and support of each of you. Heartfelt gratitude to Dr. Mary-Ann Ramirez, Dr. Shannon Decker, and Dr. Mark Early for the guidance, support, patience, and wisdom extended to me during the process. I am grateful to Kathy Casey and Regina Fink for permitting me to utilize their survey tool to develop my interview questions. To the 17 graduate nurses who volunteered their time either to participate in the pilot study or the research itself, this final product would not be possible without you and your valuable insight. I thank you!

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Section 1: The Problem

The Local Problem

The delivery of safe nursing care and the assurance of optimal health care outcomes rely on the caregiver's ability to incorporate sound scientifically-based principles in clinical practice. Literature suggests that a gap exists between knowledge and clinical practice within the discipline of nursing, specifically affecting recent graduates (Gardiner & Sheen, 2016; Hatlevik, 2012; Saifan, AbuRuz, & Massa'deh, 2015; Scully, 2011). The theory-practice gap in nursing refers to graduate nurses who are theoretically but not practically equipped to apply theory and knowledge to practice in the clinical environment (Gardiner & Sheen, 2016; Scully, 2011).

At the time of this study, this theory-practice gap was of concern related to the hiring of a high number of newly-licensed graduate nurses for a community hospital located in northern New Jersey to provide nursing care in an acute patient care setting. At the new employee orientation held September 2016, there were 28 registered nurses, 10 of whom were newly-licensed graduate nurses with no clinical experience as practicing clinicians. The expectation was that these graduates would be able to provide safe and effective care to promote quality patient care outcomes (Decker, 2012). However, there was a concern whether this would possible since research suggests that new graduates experience a hardship in applying learned theoretical concepts in the actual clinical environment translating into a theory to practice gap for the graduates.

As a result of this concern, the organization has implemented a graduate nurse program to further promote clinical preparedness to practice for the new graduate nurses. This period of orientation spans a minimum of 6 months and includes a single day dedicated to a simulated exercise in addition to their unit specific clinical experience. According to the director of simulation, the exercise utilizing a high-fidelity patient simulator is geared towards assisting the nurse in applying learned theoretical concepts in providing care for a critically ill patient with a deteriorating clinical status. The expectation is that these graduates will provide safe and effective care to promote quality patient care outcomes as a result of the training. However, in a conversation with two graduate nurses, they reported difficulty in transitioning to this role and meeting the clinical expectations due to a self-reported difficulty in their ability to apply the knowledge-based concepts in the clinical area, despite participation in the orientation program.

This hospital is the parent organization for a hospital-based school of nursing that offers a diploma in nursing upon completion of the prerequisites and co requisites in preparation for the National Council Licensure Examination (NCLEX). Upon successful attainment of this license, the students transition as graduate nurses in an area of their choice. Annually, a varying percentage of the newly-licensed nurses the hospital employs are graduates of this school.

The school has a simulation laboratory equipped with low to medium-fidelity mannequins, which had been underutilized; as a result, in 2012 a faculty member was

assigned as the simulation coordinator to oversee integration of simulated activities in the curriculum. According to the simulation coordinator, over the past 4 years, the students have been gradually exposed to simulation to support classroom content and enhance skill mastery in multiple formats throughout their training. Formal student evaluations of the simulated experience for the years 2012 and 2013 revealed students felt they were challenged to think critically and explore different possibilities during the exercise, that the exercise reflected concepts relevant to the course in which it was conducted and that it provided better comprehension and hands on learning than lecture only, and that the instructor feedback was constructive. However, recurrent themes in responses were the need to include more scenarios, to include one simulation for each major disease process, and to have more simulated experiences. One graduate stated, "Experiences in simulation as a student provided exposure to critical events such as codes that I couldn't participate in during clinical, and it helped me prepare and work confidently during my first code."

Though theoretical concepts are taught in the classroom, the ability to independently apply these concepts are limited in the clinical area related to the lack of instructor control of patient acuity (Kaddoura, 2010), reducing the student's opportunity to reinforce or apply the theory learned in the classroom to practice. A decreasing number of qualified faculty and limited access to clinical placement sites contributes to a reduction in clinical learning opportunities for students to apply theoretical concepts (Robinson & Dearmon, 2013; Zapko, Ferranto, Blasiman, & Shelestak, 2018). My rationale for investigating this problem on a local level was to examine the graduates'

opinion of the gap between their knowledge and their clinical performance and to determine if introducing simulation with increased frequency in prelicensure training programs might reduce the effects of the theory-practice gap for new graduate nurses before entry into practice. Addressing the theory-practice gap prior to entry to practice may reduce the difficulties experienced by the graduates and increase the likelihood of their ability to integrate their knowledge appropriately in the practice setting.

Rationale

For graduate nurses, the impact of the theory-practice gap results in a demonstrated lack of clinical competence and the manifestation of unsafe clinical practices promoting hazardous clinical environments for patients with a potential risk to human life. With increased patient acuity and a high focus on patient safety, institutions of nursing must integrate approaches to improve graduate nurse preparedness to function in complex and changing healthcare environments (Motola, Devine, Chung, Sullivan, & Issenberg, 2013). The American Association of Colleges of Nursing (2005) suggests methods be included in prelicensure programs to promote critical thinking, skill mastery, and competence (Kaddoura, 2010).

Though literature supports the use for simulation as a strategy to boost nurse confidence and competence in the learning environment, more research is required to evaluate transfer of knowledge and competence in the real clinical environment and more complex settings (Blum, Borglund, & Parcells, 2010). The Institute of Medicine's (IOM) 2011 report called for safer healthcare delivery systems which prompted reform of the

education of healthcare professionals to include practices and strategies that ensure quality patient care and enhanced patient safety (Robinson & Dearmon, 2013). The recommendations from the IOM addressed approaches specifically geared to a revision in practice for nurse education and preparation prior to entry into practice.

It is imperative that efforts to address the theory-practice gap be initiated and implemented within the institutions where nurses learn because researchers have suggested clinical experience in nursing education may be insufficient to promote safe and quality clinical practice (Sullivan, 2010). According to White and Ewan (1997), exposure to clinical experience varies, affected by the patient census, diagnosis, and unit type resulting in varied degrees of attainment and demonstration of knowledge in the clinical area (Saifan et al., 2015). The inability to connect theoretical knowledge and practice results in compromised patient care, and bridging the discrepancy between theory and practice will strengthen evidence-based practice and promote positive patient outcomes (Hanberg & Brown, 2006). According to Dil et al. (2012), advancements in technology and multifarious client presentations provokes the need for improved methods of nursing preparation (Eyikara & Baykara, 2018).

Definition of Terms

Competence in nursing practice: The nurses' ability to perform safe nursing actions and make effective critical decisions based on an assimilation of knowledge and ongoing experience (Johnson & Webber, 2010).

Debriefing: The instructor-facilitated exercise following the simulated experience that supports learning through the process of reflection on actions, provision of feedback, and the discussion of pertinent elements of the exercise (Johnson-Russell & Bailey, 2010).

Fidelity: The capability or degree of technology to afford realistic characteristics (Bland, Topping, & Wood, 2011).

Graduate nurse: Graduates from a prelicensure program possessing less than 2 years of direct patient care experience in the clinical environment (Wolff, Pesut, & Regan, 2010).

Practice: "The act or the process of doing something: performance or action" (Ajani & Moez, 2011, p. 3927).

Reflection: Deliberate engagement in thought concerning the meaning of an action (Decker et al., 2013).

Simulation: A set of interactive activities that are designed to mimic real life situations and events in a safe, risk-free environment supporting learning through repetition of skill and reflection on practice (Bevan, Joy, Keeley, & Brown, 2015).

Simulation-based learning: Includes a variety of technologic tools ranging from low to high fidelity that utilizes structured and realistic activities replicating real or possible situations to evoke a response or intervention from the participant learner (Pilcher et al., 2012).

Theory: A set of ideas or principles used to develop or explain the basis for a practice, or phenomena (Ajani & Moez, 2011).

Theory-practice gap: A demonstrated inability of the graduate nurse to transfer and apply knowledge obtained in the classroom into clinical practice (Saifan et al., 2015).

Significance of the Study

Globally, the theory-practice gap is problematic in the practice of nursing as it contributes to a safety issue in the provision of care. The resolution of the theory-practice gap is of specific concern to the discipline of nursing education, as the responsibility to prepare graduates who can successfully transition from the role of student to one of a competent practitioner lies within environments where their training occurs. It is the expectation that student nurses are equipped with knowledge and capable of applying that knowledge in their practice upon entering the clinical environment as graduate nurses. The deliberate attempt in creating a method to join theory and practice cohesively in nursing practice must be initiated in nursing education (Hatlevik, 2012).

A 2014 graduate from the school of nursing at the research site stated she had the knowledge but lacked the confidence and ability to utilize this knowledge in the clinical environment during her first year as a graduate. In addition, a graduate of 2015 reported she felt theoretically ready to transition into the role of an emergency room nurse but felt inadequate to integrate the concepts she learned adding to the difficulty of adapting to the role as graduate nurse. Hospital administrators voiced graduate nurses encounter increasing difficulty with the incongruity between clinical practice and the academic

setting related to changes in technology and increased patient care demands (Benner, Sutpen, Leonard, & Day, 2010). According to Smeby and Vagan (2008), discordance exists between what is learned in academia and the demands and expectations of clinical practice (Hatlevik, 2012).

The ability to identify the factors that contribute to the failure in application of theory to practice and initiate strategies, such as simulation, to address this deficit early in prelicensure institutions directly impacts patient care outcomes in the healthcare environment. If the knowledge-to-practice deficit is not addressed, the ability of graduate nurses to provide safe, competent care based on learned theoretical principles will be decreased. Cant and Cooper (2009) suggested integrating simulation with theoretical concepts will promote the necessary skills to achieve high standards of nursing care (Bevan et al., 2015). The findings from this study addressed the gaps in the literature that relate to the theory-practice gap and strategies to reduce the effects in clinical practice. Further, the results of this research were expected to identify the potential for simulation to promote the application of theoretical concepts to practice in the clinical environment when introduced in the prelicensure program and used throughout the curriculum in an effort to address the theory-practice gap.

Research Questions

The data I obtained from my survey of the literature provided the direction for the basis of the following exploratory research question and subquestions that guided the development of the interview protocol and the study:

Central Research Question: Is simulation an effective instructional strategy in prelicensure nursing programs to address the theory-practice gap experienced by graduate nurses on entry to clinical practice?

Subquestion 1: What are the graduate nurses' perceptions of their ability to apply learned theoretical concepts in their clinical practice?

Subquestion 2: What strategies do graduates believe could be implemented in prelicensure programs to facilitate the application of theory to clinical practice?

Subquestion 3: What are the graduates' perceptions of the impact of simulation on their application of theory to practice in the clinical area?

Conceptual Framework

The conceptual foundation for this study was learning through experience, based on the theory of cognitive constructivism. The theory of constructivism implies learners construct understanding, and hence, knowledge, through actively engaging and participating in activities (Fosnot, 2012). Learners individually create knowledge through the construction of meaning acquired through their varied experiences and from reflecting on these experiences (Kaakinen & Arwood, 2009); suggesting learning is an active experience. Constructivism is based on the use of previous knowledge during the encounter to create new meanings and expand understanding (Neil & Wotton, 2011).

Cognitive constructivism implies learning occurs through an individual's active participation in the process reflected by a change in cognition or thinking processes

(Utley, 2011). Participants in simulation-based learning exercises are active experiential learners throughout the experience; the active learning environment cultivates and builds comprehension through participation, reflection, and the feedback received from their educators (Bland et al., 2011). The combination of the activities included in simulation forms the basis on which knowledge and learning are developed.

Cognitive developmental theorist Jean Piaget described a learning environment where experience fosters learning and knowledge is enhanced in relation to the individual's experience in a social and environmental context (Smith & Taylor, 2010). According to Piaget (1972), learning occurs through the process of assimilation and accommodation. Assimilation occurs when new knowledge fits into existing beliefs and thought patterns, conversely accommodation refers to the creation of new knowledge attained during the encounter (Bastable, 2014).

This study was further supported by Lev Vygotsky's zone of proximal development (ZPD) theory. The ZPD exists at the point between what the learner knows and what they can learn through facilitated learning activities (Clapper, 2015). Furthering the work in constructivism, Vygotsky (1978) asserted that learning is a social activity where knowledge is expanded, and learning occurs when there is an interaction with a person's surroundings and through communication and collaboration with each other facilitated by an instructor (Clapper, 2015). Though an individualized process, Vygotsky inferred learning occurs during the interaction between students, through activities within the learning environment, and mediated by the instructor. Social

interaction and collaboration form the basis of Vygotsky's social constructivist approach to construction and expansion of knowledge (Bastable, 2014). Simulation creates a social environment that fosters learning through engagement, interaction, and collaboration with peers and the educator.

Simulation creates realistic patient care scenarios to promote student engagement and promote the connection between knowledge and practice through the student's experience with repetition of action and reflection (McGill, Anderson, & Francis, 2014). Simulated experiences offer an engaging teaching method to reinforce and evaluate competence in practical skills, critical thinking, and decision making through the utilization of knowledge promoting a connection between theory and practice (Brown, 2015). The cognitive constructivist view is that learning occurs internally and that it is a subjective experience based on the individual's perception and application of meaning to their learning experience (Brandon & All, 2010). During simulation, the cognitive and social processes that foster meaningful learning include the learner's recall of previous knowledge, interaction with their environment, the decision making process, and actions based on previous knowledge, concluding with the process of reflection on the experience during the debriefing. Piaget's and Vygotsky's theories were aligned with this project study because the engaging teaching-learning environment that simulation creates offers an active teaching strategy to reinforce learning through the influence on cognitive processes, rather than on mere memorization of data, thereby impacting the ability to apply theory to practice.

Review of the Literature

There is extensive research on the theory-practice gap in the discipline of nursing and on the use of simulation in nursing education. However, more research is required as evidentiary support for simulation to be integrated into the curricula in prelicensure institutions and used as a tool to address the gap experienced in clinical practice, specifically prior to entry into the clinical environment as graduate nurses. Nursing education includes classroom and clinical instruction, with the goal of demonstrating competence in clinical skills based on learned theoretical concepts (Scully, 2011). The literature identifies a deficit between demonstrated clinical skills and theoretical knowledge obtained in nursing prelicensure education or preparation (Ajani & Moez, 2011; Corlett, 2000; Hussein & Osuji, 2016). Faculty involved in nursing education play a significant role in the identification of factors contributing to the gap and can integrate actions to eliminate or reduce its existence (Hussein & Osuji, 2016).

I conducted a literature search to review the extent to which this deficit existed, to identify a research-based teaching and assessment strategy that could be implemented to address this issue, and to provide an explanation of how this strategy can address the theory to practice deficit. I conducted a search for peer-reviewed literature primarily through Walden University library electronic databases that included PROQUEST, SCIENCE DIRECT, CINAHL, OVID, and EBSCOHOST, utilizing the keywords *theory-practice gap, nursing,* and *simulation*. I chose and reviewed a total of 52 articles, with the articles spanning the timeframe of 2006 to 2017 and included seminal studies.

Current State of Clinical Practice

Recent healthcare reform altered the healthcare landscape, including how nurses are expected to practice. An increased focus on comprehensive care management and quality healthcare outcomes incited a need for graduate nurses who are prepared to practice in demanding and dynamic practice conditions (IOM, 2011). Graduate nurses entering clinical practices are encountering hospitalized patients with higher acuities and more complex medical needs (Dyess & Sherman, 2009; Eyikara & Baykara, 2018). The dynamic health care needs within the healthcare environment require graduates to transition with practice readiness and competence (Woods et al., 2015).

The preparation of graduate nurses equipped with the knowledge and competence to apply their knowledge in the practice setting upon entry to practice is paramount for nurse educators (Wolff et al., 2010). Parsh and Taylor (2013) identified unfamiliarity with clinical role expectation and a lack of experience as challenges faced by newly-licensed nurses. With the increasing patient acuity and the complexity of care this shift in patient presentation demands, efforts to prepare nurses who are competent in the application of knowledge and who are practice ready must be initiated early in preparatory training to reduce the theory-practice gap (Dadgaran, Parvizy, & Peyrovi, 2012; Scully, 2011). The need for clinically competent nurses requires transformation in nursing education, specifically adjusting the quality of the education provided in prelicensure programs (Benner et al., 2010).

Effect of High Acuity Care on Nursing Preparation

Irrespective of their clinical environments, newly-licensed nurses are expected to provide care for the acutely ill and function in demanding roles competently (Williams, Richard, & Al Sayah, 2015). Strategies to reinforce and develop the skill and knowledge required to care for patients with increasing medical complexities should be integrated in prelicensure programs to promote such readiness to practice (Dadgaran, Parvizy, & Peyrovi, 2012; Hussein & Osuji, 2016). Nurse educators must determine and utilize instructional strategies that best prepare the graduates for a seamless transition into these dynamic roles and professional environments (IOM, 2011; Williams et al., 2015).

Graduate nurses must be prepared to assume the responsibility and work in their new roles with acutely ill patients with competence (Gardiner & Sheen, 2018). Learner-centered activities amendable to learners' inherent learning style and level of competence can be integrated into curriculums to support individualized learning. Simulated exercises can be adjusted to learner skill and knowledge level, increasing in complexity to reflect the real patient care areas (Cant & Cooper, 2010).

Theory-Practice Gap

Graduate nurses face challenges when transitioning from the role of student to practicing clinician in the healthcare environment. The findings of a correlational study by Hatlevick (2007) indicated graduate nurses reporting a disparity between their acquired basic knowledge and the competence in clinical performance (Hatlevick, 2012). The difficulty incorporating knowledge or theory with practice in the clinical environment results in a theory-practice gap for new graduate nurses. Research by

Landers (2000) and McKenna and Wellard (2004) indicated a deficiency between classroom knowledge and the experience students obtained in the clinical area (Saifan et al., 2015). The deficit between theory and practice suggests that a discrepancy exists between attainment of knowledge and the application of this knowledge into practice.

Though the theory-practice gap is predominantly visible in the clinical environment where nurses work, the problem stems from the educational environments where nurses are being prepared to practice. Nurse educators are pressed to provide solid theoretical and practical experience to support competence in practice (Hussein & Osuji, 2016). There is a responsibility for nurse educators to introduce theoretical concepts but also to socialize students to the practice and environments where they apply the theoretical concepts (Esmaeili, Cheraghi, Salsali, & Ghiyasvandian, 2014). Nurse educators must present situations for students to learn outside of lecture to link theoretical concepts to practice (Montayre, 2015).

Educators tend to teach ideal versus realistic, creating difficulty for students to apply or incorporate their knowledge in real practice settings (Sellman, 2010). Graduates perceive a lack of congruence between what was taught and the actualities faced as new graduates in the clinical area (Gardiner & Sheen, 2016). One suggestion is for nurse educators to ensure that content taught in the classroom be current and consistent with what is experienced in the clinical practice (Corlett, 2000). Sellman (2010) theorized that often unrealistic expectations from the educator, the clinical personnel, and the graduate

nurse may influence the perception of the extent of the disparity, indicating a need for communication and collaboration between all entities involved in the training of nurses.

While researchers have stressed the theory-practice gap as a threat to the delivery of safe and competent care, one researcher supported the benefit of the existing gap. The presence of the gap between theory and practice indicates that the practice and profession of nursing are dynamic and evolving, reflecting the input of current and ongoing research on practice (Haigh, 2009). Educators must enlist updated research guidelines and theories to support the relationship between theory and clinical practice or performance (Scully, 2011).

Factors Contributing to the Theory-Practice Gap

Nursing preparation requires a combination of classroom knowledge with the opportunity to apply these concepts in the clinical environment. According to the National League for Nursing (NLN; 2010), applicants to prelicensure programs have been denied access related to a reduction in qualified faculty to teach and reduced clinical placement sites (Burns et al., 2011). The increased acuity of patients in healthcare agencies with a resultant effect on the patient mix and census influences the quality and access students have to practice and provide delivery of theory-based care (Nehring, 2008). The clinical environment is not static and is altered based on patient presentation and their needs (Landers, 2000).

Shortened hospitalizations and increased acuity of patients decreases the access of students to critically ill patients (Petit dit Dariel, Raby, Ravaut, & Rothan-Tondeur,

2013). Ensuring the safety of acutely ill clients reduces student direct care experiences to observational roles (Kim & Kim, 2017). Student nurses not exposed to acutely ill patients due to the need for more advanced nursing care by graduate nurses lose the valuable experience to practice decision making, problem solving, and critical reasoning that can be gained in the process. Students miss the opportunity to practice and develop critical reasoning through the application of theory if they lack the exposure and experience in the acute care environment (Petit dit Dariel et al., 2013). Skill acquisition and competence in performing nursing functions is an essential element in providing excellent nursing care (McNamara, 2015); yet, students with limited experience are expected to provide care to these acutely ill patients upon entry to practice.

A lack of cohesion between what is taught in the classroom and the experiences the student receives in the clinical area alters the ability of the student to apply their knowledge in the clinical area effectively (Landers, 2000). Nurse educators are unable to control the patient presentation in the clinical area to match what is taught in the classroom. According to a 2016 graduate the nursing instructor attempted to recreate experiences and presented hypothetical cases in class, but that could not replace the hands-on experience she needed to understand the information. White and Ewan (1991) further added that related to the lack of control of the patients in the clinical environment students experience and exposure may be disparate (Landers, 2000).

Though many researchers suggest the onus lies in the level of preparation, other factors contribute to the difficulties experienced by graduate nurses. The degree of

difficulty during the transition process is reliant on the complexities faced within the practice area, prelicensure preparation, and availability of clinical support in the practice area (Wolff et al., 2010). Graduates frequently voiced difficulty adapting to the actualities faced in professional practice, organizational expectations, and their feelings of inadequacies as novice practitioners (Romyn et al., 2009).

Strategies to Address the Theory Practice Gap

My literature search produced little information on efforts to reduce the identified theory-practice gap; however, there was an abundance of literature addressing graduate nurse competence and practice readiness. Practice readiness refers to the deficiency in the graduates' ability to perform skills competently and knowledgeably upon entry into clinical practice (Romyn et al., 2009; Wolff et al., 2010). Romyn et al. (2009) argued that it was unrealistic to expect graduates to be practice ready at the onset of entry to practice as graduates require time to build skill competence, critical thinking, and become engrained in the culture of the institution. The ability to apply theory to practice enhances and supports practice readiness; hence, these actions also contribute to the application of learned theoretical concepts by the graduate, thereby addressing the theory-practice gap (Corlett, 2000; Hussein & Osuji, 2016; Scully, 2011).

Academic-service partnerships between educational faculty and clinical preceptors can foster good educational outcomes for students. The introduction of dedicated education units has been instrumental in the provision of mentoring in the clinical area for students by practicing nurses who are supported by nursing faculty

(Dapremont & Lee, 2013; Moscato, Miller, Logsdon, Weinberg & Chorpenning, 2007). The dedicated education unit approach assures a committed clinical area and staff trained to provide effective clinical instruction in corporation with nursing faculty (Dapermont & Lee, 2013). Dean et al. (2013) added that the ongoing collaboration between faculty, staff, and students promises the development of optimal educational outcomes as students are immersed in a real hands-on approach to boost practice preparedness.

Currently there are three entry points for graduate nurses, all of whom are required to complete the same examination for licensure (Raines & Taglaireni, 2008). Suggestions to have baccalaureate preparation as the single-entry level requirement for nursing optimize chances of graduates being equipped with the proficiencies to practice safely in a dynamic healthcare environment (Wolff et al., 2010). The Nursing Executive Center (2008) implied organizational support for graduate nurse proficiency occurs upon hire with establishments of mentoring; however, mentors lack competence in teaching how to apply theory to practice.

Formalized graduate-nurse residency programs have been designed to enculturate the newly-licensed nurse into their new role and environment. Nurse residency programs foster clinical practice in supporting the novice practitioner transitioning into professional practice (Parsh & Taylor, 2013). Nurse residency programs aim to provide supplemental training and additional knowledge required by newly-licensed nurses to care for acutely ill patients (Linus, Reeder, Bradley, & Polis, 2014). However, this effort occurs after entry to practice.

Post-hire efforts to address the readiness of graduates to practice vary by organization and requires dedicated staff and time. Efforts to bridge the preparation disparity upon entry to clinical practice is insufficient to meet the demands of a decreasing work force of experienced nurses resulting in the need for graduates to be more prepared to fill these vacancies (Nursing Executive Center, 2008). Best practice suggests an urgency to address the deficits prior to entry to practice. Simulated exercises replicate real patient care experiences in an interactive and collaborative manner to promote decision making and problem solving (Bastable, 2014); which can be employed in prelicensure programs to aid in application of theory-to-practice before entry to practice.

Simulation as a Teaching Strategy

Through advancements in technology, simulation is identified as an alternate and additional method of instruction and evaluation for educators (Kenner & Pressler, 2011). Simulation supports classroom and clinical instruction while offering an opportunity to teach and assess competence (Cant & Cooper, 2010; Weaver, 2011). Simulation-based learning includes a variety of methods to address learner specific objectives, including standardized patients, and mannequins in various fidelities to mimic real-life patient care scenarios (Brown, 2015). Practice in the application of critical thinking and decision-making supports competence in practice (Montayre, 2015). Schiavenato (2009) added that the use of simulation benefits safety through identification of erroneous practices in a

safe environment and the potential to learn through deliberate repetition and practice of interventions to correct these actions.

Simulated exercises allow for repetition of skills, allowing students to learn from errors without risk of harm to human life; benefiting the student so they can learn from their mistakes, develop competence, and support theory comprehension (Bevan et al., 2015). Simulation supports learning for students as well as practicing nurses regardless of clinical specialty, as experiences can be tailored to meet all learning needs. Similar results were identified in a phenomenological study evaluating the lived experience of four newly practicing nurses from various clinical units participating in simulated patient care scenarios; the nurses described enhanced communication skills, strengthened confidence in completing nursing skills, and a self-reported development of nursing skills (Stirling, Smith, & Hogg, 2012).

Pilcher et al. (2012) reinforced that participation in the exercise alone was inadequate in guaranteeing transfer of knowledge, and identified the facilitator led debriefing following the simulation-based learning activity as paramount in ensuring comprehension and learning. A critical element to facilitate and safeguard transfer of learning in simulation-based learning is through the provision of deliberate, timely, and purposeful feedback during the debriefing exercise (Motola et al., 2013). Bastable (2014) added that authentic clinical exposure should follow simulated experiences providing an actual experience where skills and knowledge can be combined.

Simulation to Bridge the Theory-Practice Gap

Simulation is identified as a tool to bridge the theory-practice gap and serve as an adjunct to teaching in the clinical area, but should not be a replacement for clinical time. As a teaching method simulation creates a clinical learning environment in which learners can actively engage in the application of their theoretical knowledge and strengthen clinical skills before entering the clinical environment (Tiwaken, Caranto, & David, 2015). Maginnis and Croxon's (2010) mixed methods study, using a survey followed by interviews of nine student nurses revealed simulated exercises strengthened the integration of knowledge in the practice area; however, students acknowledged the experiences as valuable but could not replace the real life experience obtained in the clinical environment

Simulation-based learning utilizes mannequins of various fidelities to achieve specific learning outcomes. Fidelity refers to the degree of realistic characteristics afforded by the technology (Bland et al., 2011). The mannequins used in simulation range from low to high fidelity, translating to a static to a highly responsive mannequin. Mannequins with higher fidelities indicate a more interactive tool which fosters a higher level of engagement (McGill, Anderson, & Francis, 2014). The high-fidelity mannequin has enhanced capabilities of responding in a realistic manner, mimicking real patient responses. In a systematic literature review, Weaver (2011) concluded that high-fidelity patient simulations (HFPS) are appropriate for use throughout the nursing curriculum to support didactic teaching, as the level of fidelity allows for patient care scenarios in increasing complexity based on the level of the student and content.

Findings from a 2014 study conducted by the National State Boards of Nursing (NCSBN) revealed that high quality simulated learning activities that utilized best standards of practice is commensurate to clinical learning and can be used as an alternate for up to 50% of clinical experiences (Barber & Schuessler, 2017; Doolen et al., 2016). According to Kaddura (2010) and Yuan et al. (2012) acuity of illness in the clinical environment diminishes access to learning opportunities; however, simulation offers an ideal option to expose students to similar experiences to prepare them for the realities of the profession (Shin, Park, & Kim, 2015).

As nursing is a practice-based profession, it is imperative that the tools utilized in training promote competence in practice similar to the real clinical environment. Participation in simulated scenarios provides opportunities to engage in "practice" to reinforce and attain new knowledge (Clapper, 2015). Motola et al., (2013) added that simulation is an effective tool that can promote active learning; however, the efficacy relies on the appropriateness of use. Based on a review of literature Weaver (2011), identified that nursing students reported a higher level of realism with HFPS than other tools used to reinforce learning such as case studies, and low to medium-fidelity mannequins. Educators faced with limited clinical site availability and lack of control over patient acuity can employ HFPS to create practice environments that facilitate critical thinking and clinical judgment through the application of taught concepts and knowledge (Yuan, Williams, & Fang, 2012).

In addition, the literature revealed nursing students reported that practicing skills and applying the theory in the simulated environments with HFPS promoted enhanced confidence and competence which reduced the anxiety related to skill performance in the clinical area (Weaver, 2011). Findings from a qualitative phenomenological study of 12 nursing students revealed students who received simulation using HFPS in addition to end of life care classroom content, were better able to reinforce the content and better prepared to apply these concepts at the bedside in the clinical setting than their colleagues who received lecture only (Venkatasalu, Kelleher, & Chun Hua, 2015).

The IOM's 2001 call for reform in nursing education practices to ensure enhanced patient safety, recommended a more hands-on approach to merging theory with practical experiences that foster preparation for real world complex patient care scenarios (Robinson & Dearmon, 2013). The use of HFPS supports skills necessary for safe clinical performance. Problem solving and astute clinical decision-making skills necessary for delivery of safe nursing care is supported through the use of the complex clinical responses provided during HFPS, adding the opportunity to apply classroom taught principles which facilitate learning (Burns, O'Donnell, & Artman, 2010). The potential of HFPS exercises to increase in complexity supports learning at all levels through the nursing preparatory curriculum (Bremner, Aduddell, Bennett, & VanGeest, 2006).

Proponents of HFPS as a teaching-learning strategy suggest that the simulated exercise alone is not sufficient to ensure transfer of learning. Learning utilizing HFPS is

reinforced through reflective practice; active reflection following the simulated exercise occurs during the debriefing process to facilitate application of knowledge and exploration of the participants thought process and actions during the exercise (Decker et al., 2013). Reflection facilitated by the educator following simulated exercises is key in promoting learner clarification and comprehension of concepts linking theory to practice (de Swardt, du Toit, & Botha, 2012). Educator facilitated feedback geared specifically to individual learner needs and deficiencies supports learning and transfer of knowledge in simulation-based learning (Motola et al., 2013).

Implications

My goal for this study was to explore the graduate nurses' perception of simulation as a viable teaching strategy to implement in prelicensure nursing programs to enhance the application of theoretical knowledge to practice before entry to clinical practice, thereby reducing the theory-practice gap experienced by graduate nurses in the clinical environment. The findings from this study can be used to achieve an understanding of the theory-practice gap in nursing from the perspective of the graduate nurse, the effects of this deficit on their practice, and their perspective on the effectiveness of simulation in addressing the deficit if utilized as an additional instructional strategy in institutions of nursing. Integrating simulation into curriculums in institutions of nursing may involve a change in practice for faculty; however, this study identified the benefits in doing so, and provide evidentiary support for this transition in practice.

The implication for practice that emerged related to the findings of this project study includes the provision of evidence for the integration of simulated exercises early in prelicensure curriculums and with increased frequency throughout the program. Efforts to theory-practice gap in prelicensure programs attempt to confront the issue prior to entry to clinical practice. Assisting the student in developing their ability to integrate theory into their practice during preparatory training may alleviate the hardships they face when they transition as graduate nurses.

Implications for Social Change

This study may contribute positively to social change within prelicensure nursing programs and communities of health. Through the findings obtained, I provide valuable insight from the perspective of the consumers of educational services in prelicensure programs on strategies that promote readiness-to-practice and clinical safety by enhancing their ability to apply theory into clinical practice. Through the process of interviews, graduates discussed their clinical experiences and established if simulation-based learning was of value in supporting the transition from student to practicing clinician. These findings may help administrators initiate changes to the curriculum to support and cultivate the potential students have to bridge the theory-practice gap. Further, administrators may use the results obtained from this study to help bargain or solicit funding for simulation equipment or to appoint simulation coordinators to facilitate the integration process. Healthcare organizations may also opt to include

simulation exercises as a strategy to incorporate in continuing education and clinical skill competency updates for nurses.

The ultimate goal of reducing the theory-practice gap is to enhance quality of nursing care. The theory-practice gap describes a deficiency in the ability of the nurse to effectively integrate scientific based and sound theoretical principles in the provision of care (Scully, 2011). This deficiency results in unsafe practices which can be detrimental to the community these nurses serve. Improving the ability to be practice ready and practice safely promotes positive health care outcomes, and can potentially reduce mortality and morbidity rates related to lack of health care provider knowledge and competence.

Summary

The data obtained in the literature review identified the theory-practice gap as a global concern. There is an abundance of evidence in the literature that identified simulation as an effective strategy in reinforcing learning. Simulation, if introduced prior to the student transitioning into the role of the graduate nurse might reduce the identified gap experienced by graduates both locally and globally.

Attainment of expert knowledge in addition to skill acquisition and mastery as per nursing theorist Patricia Benner occurs in stages. Knowledge and skill proficiency is increased with varied levels of competence based on continued exposure and experience (Benner, 1984). Learners build on prior knowledge and construct new knowledge reliant on instructional strategies and methods of content delivery (Clapper, 2015). The

integration of simulated exercises provides the exposure and experience to facilitate application of theoretical concepts to complex clinical scenarios for the student and graduate nurses to become proficient in practice.

In this section, I introduced the local problem that prompted this study, outlined the purpose of the study, the conceptual framework, and provided background on the nature and significance of the study. I provided the research question and sub-questions that served as the basis for data collection. In section two, I will explain my choice of research design and approach, provide details on the recruitment of the participants, methods to assure their ethical protection, and elaborate on data collection and analysis.

Section 2: The Methodology

Introduction

My goal for conducting this qualitative study was to explore the perceptions of graduate nurses regarding their experience with the theory-practice gap on entry to practice and their perceptions of simulation as an instructional strategy in prelicensure programs to address, alleviate, or reduce the effects of this deficit prior to entry into practice. Through a hermeneutic descriptive approach, I utilized an amended version of the Casey-Fink Graduate Nurse Experience Survey (CFGNES) to interview participants. Upon completion of data analysis, I opted to develop a white paper to communicate my findings and recommendations regarding the use of simulation to address the theory-practice gap in prelicensure nursing programs.

Through the use of semi structured interviews, my goal was to answer the following research question and subquestions:

Central Research Question: Is simulation an effective instructional strategy in prelicensure nursing programs to address the theory-practice gap experienced by graduate nurses on entry to clinical practice?

Subquestion 1: What are the graduate nurses' perceptions of their ability to apply learned theoretical concepts in their clinical practice?

Subquestion 2: What strategies do graduates believe could be implemented in prelicensure programs to facilitate the application of theory to clinical practice?

Subquestion 3: What is the graduates' perception of the impact of simulation on their application of theory to practice in the clinical area?

I used the qualitative research approach of phenomenology during this study. In this section of the study, I will discuss the research design, procedures for recruitment of the sample, development of interview questions, methods of data collection, the approach employed in data analysis, and the themes developed during data analysis. The role of the researcher will be established and the process to protect the participants will be defined and explained.

Research Design and Approach

In this study, I employed an exploratory qualitative phenomenological design because the purpose of this study was to explore the graduate nurses' personal perceptions of simulation in prelicensure nursing programs to enhance the application of theoretical knowledge to practice before entry to clinical practice, thereby reducing the theory-practice gap experienced by new graduate nurses in the clinical environment. The objective of qualitative studies is to explore and gain an appreciation or understanding of the perceptions of the participants (Lodico, Spaulding, & Voegtle, 2010). The perceptions and experiences of the faculty were not explored in this study because there is an abundance of literature to support simulation as a teaching strategy and the benefit of simulation from a faculty stance. Further, the primary phenomenon I investigated was the theory-practice gap as experienced by graduate nurses and their perceptions of the value of simulation in prelicensure programs in reducing its effects upon entry to practice.

I used a qualitative, phenomenological approach engaging in one-on-one, face-to-face, semi structured interviews during this study. The phenomenological approach allowed for a detailed exploration of the participants' subjective experience providing a deep understanding of the phenomenon under investigation (Lodico et al., 2010). This research approach allowed for in-depth exploration and clarification of the individual perceptions and lived experiences of the graduate nurses as they related to the theory-practice gap and the use of simulation in nursing education to address this deficit.

The goal of exploring the perceptions of the graduates necessitated the use of in-depth interviews to capture the details of their lived experiences. Interviews are useful to establish a conversation to allow for deliberate exploration of the meanings associated with an individual's experience (Munhall, 2012). The data obtained through interactive interviews provides rich subjective narrations from which to gain an understanding of the concept being investigated or explored (Creswell, 2012). Surveys employing closed-ended questions would have been able to capture information, but would not have allowed for the deep exploration I required to answer the stated research question and subquestions.

Justification/Rationale for Chosen Design

I chose the qualitative method because this approach provides the best means to investigate the insights, experiences, and perceptions of the graduate nurses. The use of open-ended interview questions allowed the participants to express their feelings and opinions in their own words and in detail. The quantitative approach did not align with

the purpose of this study because this approach would not allow for the rich, in-depth explanations required to explore the phenomenon being studied. The quantitative approach is best suited for studies in which the purpose is to identify or compare relationships, test hypotheses, or to investigate trends requiring statistical analysis to produce numerical data (Creswell, 2012). It was not my intent to compare the experiences of these graduates or seek causation for their experiences or perceptions but to explore their individual perspectives on their experience.

A quantitative approach would not be ideal for this study. The goal of quantitative studies is to seek results generalizable to a larger population (Lodico et al., 2010). Phenomenological studies are geared towards understanding and gaining an interpretation of a participants or groups subjective experience rather than generalizability (Munhall, 2012); In addition, I could not locate an appropriate tool that captured the phenomenon being studied in its entirety. Mixed method designs require the collection of both quantitative and qualitative data (Creswell, 2012). A mixed methods approach could have provided comprehensive information and added value to this study but would have required a larger sample size and extensive time to complete. The qualitative phenomenological approach was best suited for this study because it allowed the participants to provide detailed descriptions of their experiences and permitted an examination of the significance of these experiences to them both as individuals and collectively.

Multiple design approaches and research options exist with which to conduct qualitative research, including ethnography, case studies, and grounded theory (Creswell, 2012). Though these design approaches all capture the element of the human experience and or behavior, these approaches were not appropriate to support the purpose of this study. The goal of ethnography is to capture the rich experiences of human behavior and obtain an extensive comprehension of a culture or parts thereof (Bogdan & Biklen, 2007). Ethnography is concerned with investigating patterns of human culture and behavior (Polit & Beck, 2010). My aim was not to investigate the culture of graduate nurses because this would have required a more exhaustive study and research process.

Creswell (2012) stated that the goal of grounded theory research is to examine data to develop or explain a theory; the design would not support my goal of exploring the subjective experiences and the meanings associated with these experiences. Case studies with roots in ethnography involve extensive data collection utilizing a variety of methods to investigate characteristics of a bounded system (Creswell, 2012). A case study investigates a person, event, or group (Polit & Beck, 2010). In a case study design, multiple sources and data collection methods can be employed (Creswell, 2012; Lodico et al., 2010), which could have added depth to this study. However, according to Yin (2009), case studies are most applicable to studies related to investigating a real-life circumstance or experience (Munhall, 2012). It was not my intent to explore the simulated experience as an isolated entity but instead to explore the perceptions of the participants regarding this experience.

The interpretive hermeneutic phenomenological approach was best suited for this study as the phenomenon of interest was the theory-practice gap and effects of simulation in bridging this gap as lived, experienced, and understood by the graduate nurses. Interpretive phenomenology, or hermeneutics, extends further than descriptions of experiences to include an interpretation of the meanings associated with these occurrences as told by the participant (Polit & Beck, 2010). Hermeneutical phenomenology associated with Martin Heidegger allows the researcher to convey the human experience including the valuable, insightful details (Munhall, 2012).

The nature of the phenomenological approach lends itself to gaining a deeper understanding of the meanings individuals apply to their experiences (Lodico et al., 2010). By choosing this approach I was able to complete a comprehensive examination of the experiences shared by the graduates and gain a profound understanding of their perceptions of the benefits of simulation in reducing the theory-practice gap. Ultimately, the goal of phenomenological researchers is to explore and elucidate the meaning of the experiences as described by the participant, the central data source (Polit & Beck, 2010). These experiences can be ascertained through in-depth conversation and discussion. In this study, the phenomenological approach was applicable for my investigation of how new graduate nurses perceived the theory-practice gap on entry to clinical practice and their opinion of the influence of simulation as a strategy to impact and reduce the effects of the deficit.

Research Site and Participants

The research site was a 361-bed, acute care, community-based hospital located in northern New Jersey. In this hospital, there is a school of nursing that confers a diploma in nursing upon successful completion of the program. This prelicensure institution offers a 2-year, six-semester prelicensure nursing program with an average annual enrollment of 70 students at the beginning of the fall semester.

The hospital conducts an annual nurse residency program as part of the orientation process, spanning a period of 6 months, for new graduate nurses employed at the facility. Graduate nurses are admitted into the program from diverse schools of nursing including the school housed within the building. The number of graduates hired depends on the needs of the organization. The hospital houses a simulation center equipped with mannequins of various fidelities where the new graduates participate in simulated exercises tailored to their specialty provided by the staff of the Simulation Institute in conjunction with didactic and additional experiential unit-based learning. I obtained permission from the hospital's administration through the Investigate Committee on Clinical Research to recruit participants and conduct this study at the site.

I expected a total of 12 to 15 graduate nurses to be recruited for this study to achieve saturation in the development of themes. The participants were purposefully selected based on years of clinical experience and their ability to contribute to the purpose of this study. Participants were requested to reference their experience as new graduates in the clinical area, describe their perception of the effects of the theory-practice gap on their readiness to practice safely, and communicate their opinion on the

role of simulation in addressing the theory-practice deficit. Purposeful sampling allows the researcher to select participants who are knowledgeable and experienced in the research topic serving as information-rich sources (Creswell, 2012; Lodico et al., 2010).

The participants must have graduated from an accredited school of nursing within the last 5 years, participated in simulated exercises during prelicensure preparation, have a maximum of 2 years' clinical experience since completing the program, and be employed at the research site. The sample included graduates who participated in simulation at some level or fidelity as student nurses. This variance allowed for an in-depth exploration of the graduates' experience with the theory-practice gap and the role, if any, that simulation played in reducing the effects upon entry to practice.

Sample and Recruitment

After obtaining Institutional Review Board (IRB) approval from Walden University and the research site (Walden University Approval Number: 06-01-17-0246087), I commenced recruiting participants. To recruit the participants, I submitted a letter of intent to the human resource department at the research site resulting in a list of e-mail addresses of all new graduates employed over a 4-month period in 2015. A letter of invitation to participate in the research study was then e-mailed to all 36 graduate nurses (see Appendix B). The letter of invitation included a statement of the purpose of the study and what constituted participation. Graduates indicated an interest and willingness to participate by sending a response to my e-mail address included in the invitation. These respondents received a follow-up e-mail with a research consent. A

return e-mail with the words “I consent” indicated consent for the participant to be contacted for an interview. Following consent to participate, I contacted the participants and scheduled a date and time with them to conduct the interviews.

The population identified for this study consisted of graduate nurses who had relevant experience to contribute meaningfully to the purpose of the study. The sample recruited for the study was from a pool of graduate nurses hired at the research site who had a maximum of 2 years nursing experience since graduating from an accredited school of nursing, and who participated in simulated exercises during their prelicensure preparation. These participants were selected through purposeful sampling grounded in their ability to be rich informants and provide details on the phenomenon being investigated (Creswell, 2007). The total number of participants required before achieving data saturation was estimated to be 12-15 graduate nurses. I continued iinterviews until I achieved data saturation; when data from the participants failed to reveal new themes (Creswell, 2012), resulting in 13 participants for this study.

Ethical Protection of Participants

Attention to the ethical and legal treatment of the participants in a study is an essential component of implementing and completing the study (Bishop-Clark, & Dietz-Uhler, 2012). I received approval from the IRB of Walden University and the Investigate Committee on Clinical Research of the research site prior to initiating recruitment of the participants. Participation in this study was of a voluntary nature. All potential participants in the study received an emailed invitation to participate in the

study via e-mail addresses issued by the research site (see Appendix B). The research consent documented the purpose of the research, the interview protocol, and measures to protect their privacy. Informed consent was obtained from all participants prior to commencing the interviews, through an emailed response containing the statement "I consent." I assigned pseudonyms to all participants to assure anonymity. I developed an interview protocol to ensure consistency and uniformity of interview questions, which was given to each participant to use as a guide for the direction of the questions (see Appendix D).

I audio-recorded the interviews with the participants' permission, and the audio-recordings were kept confidential. I stored the transcribed interviews on a password-protected computer accessible only by myself. I will retain the data for 5 years following completion of the study after which it will be destroyed. The participants will not be exposed to an intervention that may incur harm, and all participants will be made aware of the outcomes of the study.

Data Collection

Instrument

The CFGNES is a valid and reliable 42 item survey tool that evaluates the experiences of graduate nurses on entry and transitioning into the clinical work environment (Casey, Fink, Krugman, & Propst, 2004). The survey tool consists of five sections collecting demographic data, data on self-evaluated performance on nursing skills, measurements of individual comfort or confidence, data on job satisfaction, and

self-reports on work environment and experiences in role transition. The CFGNES survey tool was adapted with permission to create interview questions for this study, which included Likert scale responses and open-ended questions (See Appendix D, C). The questions pertaining to job satisfaction and work environment were excluded as they did not provide relevant information to this study. The researcher-created instrument was a four-section tool designed to meet the specific needs of this study. The categories included demographic data, a retrospective self-assessment rating utilizing a 4-point Likert scale response (*strongly disagree*, *disagree*, *strongly agree*, and *agree*), and open-ended questions geared towards collecting data on clinical experiences and simulation experiences. I used 12 open-ended questions and probes during the interview to aid in gathering deeper explanations from the participants regarding their experiences and allow for summarizing of their responses.

Pilot Study

I obtained permission from the authors of the CFGNES to amend the tool for the purposes of this research. To test the reliability and validity of the amended version of the CFGNES I conducted a pilot test of the questions to be asked during the interview. Five graduate nurses with 2 years or less clinical experience in a similar organization, who participated in simulated exercises in their prelicensure programs were recruited and invited to review the questions for alignment with the research questions. These graduate nurses would not be included as participants in the final study. Four of the five graduates

reviewed the document and provided feedback, the graduates in the pilot study were not required to answer the questions

I tasked the four participants who volunteered to complete the pilot test to review the questions for (a) bias, (b) clarity, (c) ambiguity, and (d) to make suggestions to improve the questions to provide answers that could contribute to the stated purpose of the study. The feedback provided by this pool of participants prompted revisions of the questions in the tool but were not included in the data analysis and results of the final study. From the results of the pilot study I identified questions that were repeated, or that facilitated similar responses. These questions were either eliminated from the interview and interview protocol or reworded to reduce ambiguity and ensure accuracy. I determined from the pilot study the interview would be approximately 30 to 35 minutes in duration.

Data Collection Procedures

I was the primary instrument for data collection in this study through the use of in-depth semi-structured face-face interviews utilizing self-developed questions guided by a pre-prepared interview guide. Participants were encouraged to talk freely and to tell stories using their own words. Semi-structured interviews were appropriate for this study as it allowed me to delve deeper in conversation for more meaningful answers, seek clarification, and summarize the interviewees statements in that setting. The semi-structured approach allowed for the use of probes during the interview that elicited deeper conversation, and further explanations from the participants. At the beginning of

the interview I reiterated the purpose of the research, I obtained their permission to audio-record the interview, advised of the voluntary nature of the study, with the ability to terminate the interview at any time without consequence, at which point they would be withdrawn from the study.

The experiences and perceptions of the 13 graduate nurses were collected based on their retrospective evaluation of their own experiences. The interviews were approximately 40 minutes with variations due to the depth and volume of information provided by individual participants. I audio-recorded each interview with an Olympus digital voice recorder, and transcribed each interview verbatim immediately following the interview. The transcribed interview was forwarded to the respective participant to be reviewed for accuracy. Data collection occurred over a period of 8 weeks.

Transcription. Care was taken to personally transcribe each audio-recorded interview verbatim. Each interview was approximately 40 minutes in duration resulting in each transcription lasting approximately 3 hours. During transcription, all personal data was de-identified and I assigned pseudonyms to each participant to protect their privacy. All transcribed documents including presentation of findings will list the pseudonyms as assigned. I included the field notes recorded during the interview in the transcript. I transcribed lengthy breaks as “pauses” and participant behaviors or actions documented for example as “laughs” or “giggles.” I created a large margin on each side of the document to allow for coding and documenting my comments during analysis as suggested by Bogdan and Biklen (2007).

I stored each transcript in a file on a secure password-protected computer accessible only by myself, and a hard copy was printed and kept in a locked file cabinet when not in use. I was the only person involved in collecting and transcribing the data. Following transcription, I was ready to complete data analysis, the process of methodically appraising, analyzing, and organizing data into meaningful patterns to explain the phenomenon being investigated (Bogdan & Biklen, 2007).

Demographic Data

A total of 13 graduate nurses participated in this study. The demographic data I obtained in this study identified gender, age, duration of practice calculated in months, degree obtained following pre-licensure preparation from five programs, and current area of clinical specialty. Included in the study were 11 females and two males, ages ranged from 23 to 45 years, with 8 to 19 months clinical experience working in varied specialties within the research organization. Participant demographics are presented in Table 1.

Table 1

Participant Demographics

Participants (Pseudonyms used)	Gender	Age	Months in practice	Degree attained	Area of specialty
Rose	Female	28	20	Diploma	Medical /Surgical- Pulmonary
Zinnia	Female	27	9	Diploma	Medical /Surgical – Renal
Maria	Female		9	Diploma	Emergency department
June	Female	26	9	Diploma	Telemetry
Venus	Female	28	9	Diploma	Medical /Surgical- Pulmonary
John	Male	28	8	Diploma	Telemetry
Paris	Female	37	10	BSN	Medical /Surgical- Renal
Alex	Female	23	8	BSN	Medical /Surgical- Pulmonary
Kenya	Female	28	19	Diploma	Telemetry
Diane	Female	28	9	Diploma	Emergency department
Deana	Female	23	10	ADN	Medical /Surgical -Pulmonary
Carlos	Male	35	8	MSN	Emergency department
Kathy	Female	45	8	Diploma	Medical – Neurology

Note: n=13participants

Role of the Researcher

I am a full-time nurse educator in the hospital-based 2-year diploma nursing program located at the research site. My area of specialization is emergency nursing, and have I been employed as a nurse educator for the last 5 years in my career. My primary

responsibilities include didactic and clinical education to the senior (final) level students enrolled in the program. Though I taught some of the participants in this sample, I was not directly responsible for their simulated experiences nor did I develop the simulation-based exercises. I do not participate in the recruitment of nurses for the research organization, and I do not have a role in the new graduate program. I will be the sole researcher during this study collecting and analyzing the data.

Data Analysis

The role of data analysis is to derive and construct meaning from collected data (Polit & Beck, 2010). I commenced data analysis soon after transcription while the information was still fresh in my mind. I adhered to the principles of phenomenological data analysis according to Moustakas's (1994) modified version of the Stevick-Colaizzi-Keen's method as summarized and presented by Creswell (2007, 2012). According to Creswell (2014), the stages of data analysis are interconnected and cyclical and include reviewing and scrutinizing the data to develop codes and advance to specific themes, which is then "shaped into a general description" (p. 200).

I accomplished manual data analysis by using an iterative and inductive process; meaning the process was cyclical and included the generation of codes and themes developed through exploring the meanings derived from exploring the raw data (Creswell, 2012). I completed a comprehensive review of the data as transcribed, I read and reread each transcript several times to immerse myself in the data and gain familiarity with the content to obtain a deeper understanding of the experience and

perspective of each participant. I evaluated every statement based on its own merit and for its own value, a process Moustakas (1994) refers to as horizontalization; and I highlighted significant statements throughout the document. Creswell (2012) suggested a cyclical process of data collection, reading and rereading data, and data analysis that occur simultaneously or concurrently. As I read each transcript multiple times, I highlighted several statements made by the participants that I considered to be significant and meaningful. Through the thorough review of the transcript, elements of data emerged that I deemed significant because of consistency and repetition among the participant's responses, and the relevance to the phenomenon being explored.

Coding and Developing Themes

To derive meaning from the interviews, I extracted the significant statements or responses from the data, which I then tabulated in a matrix and color-coded based on similarity and the meaning elicited from the statements. Coding involves categorizing and labeling sections of raw data into a more defining concept (Fain, 2013; Lodico, Spaulding, & Voegtle, 2010), making sense of the textual data (Creswell, 2012). I selected codes based on their ability to depict or describe the associated statements or phrases. Initially, from the 13 transcripts, I compiled a list of 27 codes identified through reviewing the raw data. Codes that were redundant or deemed to be similar were combined to avoid overlapping. Organizing and revising these codes resulted in four themes and 11 subthemes (see Table 2).

I employed thematic analysis to discern and uncover any patterns and

relationships that were concomitant with the data as they emerged. Themes are broad descriptions that categorize and reduce large quantities of data into implicit terms related to the research questions (Creswell, 2012). The themes resulted from combining the remaining codes and organizing the data into concepts in a manner that explained and accurately echoed the findings of the study. Themes serve as descriptors that indicate major ideas that materialize from the data (Creswell, 2012).

The analytic process to reduce the 27 codes to four major themes and 11 subthemes was rigorous and laborious. I integrated code names that depicted similar concepts, and used a broader term as a theme to identify the concept, resulting in fewer items. Some codes resulted from my initial impression, but as I got more familiar with the transcripts and gained more insight, I refined the process to utilize some codes as subthemes as a more comprehensive and meaningful theme to describe the findings emerged from the data.

Management of discrepant cases. I excluded discrepant data that did not contribute to the study from the coding process. Discrepant findings were organized through the removal of codes that did not align with the research questions or contribute meaningfully to the study. Discrepant cases included discussion of specific ineffective teaching strategies or instructors, and descriptions of perspectives irrelevant to the phenomenon being investigated; this data was expunged from analysis.

Member checking. I contacted the participants following the generation of themes and requested they review the themes to identify if they were consistent with their

perceptions and represented their experiences. Lincoln and Guba promoted member checking as a crucial step in enabling respondent validation of their responses (Polit & Beck, 2010); also, member checks provide the opportunity for clarification based on researcher interpretation. The participants were offered the opportunity to review the analytic themes and provide feedback. The consensus from 11 of the 13 participants confirmed the themes embodied and reflected their experiences, and offered no corrections or additional information. Two participants were unavailable for member checking.

Trustworthiness

Qualitative researchers must employ methods to establish trustworthiness of their findings to assure the data is valid (Polit & Beck, 2008). Methods of ttrustworthiness denote crucial steps geared to establish worth in a study through processes that demonstrate credibility, transferability, dependability, and confirmability (Lincoln & Guba, 1985). I will delineate the steps I employed to establish trustworthiness for this study.

Credibility. I achieved **t**riangulation through the use of multiple informants. Triangulation of multiple data sources contributes to bolstering the rigor of the study (Bogdan & Biklen, 2007; Shenton, 2004; Streubert & Carpenter, 2011). Graduates from five different prelicensure programs, who were employed in varied specialties, and with different levels of degree attainment from their respective programs contributed to the rich informant pool. I compared and verified the individual perceptions and

verbalizations of their experiences which contributed to strengthening the credibility of the data.

Prolonged engagement during data collection aided in securing credibility. Lincoln and Guba (1985) posit prolonged engagement as spending "sufficient time" in the field to learn or understand the phenomenon of interest (p. 301). Interviews were approximately 40 minutes in duration, however individual interviews were extended to cultivate trust between participants and myself, which in turn facilitated the participant time to engage in meaningful dialogue, as well as clarify and elaborate on responses. Two interviews were in excess of 50 minutes. Prolonged engagement plays a role in enabling meaningful communication and building a trusting environment for respondent and researcher (Polt & Beck, 2010). I made contact with each of the participants three times during data collection and analysis.

Member checks allow for respondent corroboration of findings (Creswell, 2012; Lincoln & Guba, 1985). Member checking involves the return of data collected and analyzed during the study to the respondents for authentication and verification of the truthfulness of the findings (Streubert & Carpenter, 2011) and consistency with their perceptions and experiences (Shenton, 2004). I conducted member checks twice during this study. Participants' reviewed the transcribed interviews to ensure their words were recorded accurately; in addition, the themes developed during data analysis were sent to the participants to evaluate and confirm if the findings were consistent with their beliefs. Member checking according to Lincoln and Guba (1985) requires the source of

information (in this case the graduates) to review the final interpretations and articulate if their perceptions and experiences were accurately reflected.

Peer debriefing refers to the use of disinterested parties' knowledgeable in the research philosophy to review the content and scrutinize the research process (Lincoln & Guba, 1985; Polit & Beck, 2010). I engaged the chairperson of my committee and a colleague knowledgeable in the phenomenological approach and simulation in academia to review my work to aid in the elimination of bias, to assure comprehensiveness, and check for accuracy in an impartial manner during data collection, data analysis, and organization of findings. I received feedback from both parties regarding methodology, development of themes, and clarification of vague descriptions.

During the process of data collection and analysis I maintained objectivity and was aware of my own perceptions of the theory-practice gap and simulation-based learning activities. Lincoln and Guba (1985) states no researcher enters the process in a "mindless fashion" (p. 302), inferring there will always be a predetermined or preexisting researcher stance on the phenomenon being investigated. Being aware and making these stances known assists in reducing researcher bias.

Transferability. Refers to the applicability of the research findings to other situations or a wider population with similar characteristics (Lincoln & Guba, 1985; Shenton, 2004), implying the study could be duplicated providing similar findings. I interviewed graduates from five diverse prelicensure backgrounds to maximize variations of experiences which provided consistent findings among the participants; I therefore

anticipate applicability to graduates from other prelicensure programs with exposure to simulated activities. I included comprehensive descriptions of the setting, data collection, steps involved in data analysis, and findings including direct quotes from the participants to contribute to transferability. Provision of a detailed description of the phenomenon being explored and the methodology fosters comprehensive reader understanding and allows readers to determine appropriateness and relevance to other situations (Lincoln & Guba, 1985; Shenton, 2004).

Dependability. Dependability enables credibility (Polit & Beck, 2010). Dependability refers to the ability to duplicate or replicate the study under similar conditions (Lincoln & Guba, 1985). To assure dependability I have provided a systematic outline and description of processes involved in conducting this study including the steps to organize the data contributing to an audit trail. Polit and Beck (2010) refer to an audit trail as an organized and methodical account of the steps taken to achieve the research findings. I ensured comprehensive documentation of interview transcripts and field notes, and the coding procedures were described and presented in detail to allow for replication of the study.

Confirmability. Confirmability references processes to ensure objectivity, ensuring findings are reflective of the participants and not those of the researcher (Polit & Beck, 2010); in other words, steps taken to eliminate researcher bias (Lincoln & Guba, 1985; Shenton, 2004). Audio recorded interviews were transcribed verbatim and submitted to the individual participant to verify that their responses were recorded

accurately. The final themes developed after data analysis was also sent to the participants for member checking, further authenticating the findings as accurately reflecting their perceptions and experiences.

Data Analysis Results

I completed manual data analysis following transcription of the data. Data analysis was conducted with a goal of obtaining answers to the research questions (Creswell, 2012), as stated in sections one and two. Consequent to data collection and analysis, four themes emerged (a) the theory practice gap as experienced by the graduate nurse, (b) effective educational pedagogy to promote application of theory to practice as perceived by the graduate nurse, (c) environments to promote theory-practice integration, and (e) simulation-based learning.

Table 2

Themes and corresponding subthemes

Themes	Subthemes	Alignment with research question
Theory Practice Gap	The graduate nurse experience Clinical orientation Role transition	One
Effective educational pedagogy	Perceived educational best practices Role preparation	Two and three
Theory-practice integration	Pre-licensure environments Pre -licensure preparation Post-licensure environments	Two
Simulation-based learning	Student engagement Cognitive constructivism & cooperative learning Debriefing supporting learning	Three

Theme 1: The Theory-Practice Gap

Respondents verbalized their experience with the application of theory in clinical practice providing answers to satisfy research question one. This was the first and major theme to emerge from the data as all 13 graduate nurses reflected experiencing this phenomenon upon entry to clinical practice. Further analysis of their individual statements revealed three subthemes: *the graduate nurse experience, clinical orientation,* and *role transition*.

The graduate nurse experience. A graduate nurse is one who has 2 years or less clinical experience following pre-licensure preparatory training (Wolf et al., 2010). Participants in the sample had clinical experiences ranging from eight to 20 months. The

graduates described their initial experiences as “overwhelming, knowledge overload, difficult, challenging, and intimidating.”

Rose, a graduate with 20 months experience recalled her experience, “I had difficulty being on the unit, I felt overwhelmed by everything. I felt I forgot everything I learned in nursing school.” June, with 9 months clinical experience added, “I think the first time all the knowledge *kinda* goes out the window, but doing it repeatedly was what helped. Doing it repeatedly in nursing school helped with some things, but nerves *kinda* takes over the first time.”

Diane, who was also an emergency medical technician (EMT) and a patient care technician (PCT) prior to graduating stated, “…What you learn on paper and a patient presentation is different, I felt prepared to complete tasks. Tasks were great…critical thinking not so much.” John, working on the telemetry unit for 8 months described an initial difficulty prioritizing and providing care for the critically ill; He stated, “It was not that I didn’t have an idea in my head of what was going on or what to do, it was just initially hard to pull out what to do in that instance or what to do first.” John also reflected on his experience with prioritization during his pre-licensure training and summarized that the practice environment was quite different from what was given in the classroom when being tested on prioritization.

All participants offered that they experienced the theory-practice gap with varied levels of difficulty, but were confident that experience, exposure, and practice were definite key elements to alleviating the hardships encountered. In general, the graduates

reported a period ranging from 8-18 months before they were comfortable with their independent application of theoretical knowledge in the patient care environment. John reported his level of comfort with some aspects of the nurse's role stemmed from active participation in SBLEs as a student.

Clinical orientation. The research site offers a new graduate orientation program specifically geared to meeting the needs of the graduate nurse. Graduates reported a period of approximately 3-6 months, working closely with a preceptor and gradually increasing their patient workload assignment and clinical responsibility. Graduates working in specialist and acute care areas such as the emergency room were provided with unit based orientations to include critical care nursing specific to their units.

Twelve of the 13 graduates reported the clinical orientation process was a positive experience that facilitated growth and provided constructive feedback to promote professional growth due to knowledgeable preceptors and staff who were open to questions, and providing assistance with unfamiliar tasks and responsibilities. One graduate, however, experienced inconsistencies with preceptors associated with poor communication and the demonstration of different clinical practices, which she felt contributed to the difficulty in acclimatizing to the unit and her role.

Maria, Diane, and Carlos work in the emergency department, an area not frequently included in clinical rotations during prelicensure training. Maria and Diane participated in observational experiences during prelicensure training, while Carlos worked as a PCT in the same department. The three graduates reported staff that provided

a constant presence and positive camaraderie as the basis for their increasing comfort working in the unfamiliar acute care setting. John added his nurse manager, clinical educator, and preceptor presented the clinical orientation as a learning experience for him to grow and learn from his mistakes and develop competence during the process. Paris felt her confidence and ability in progressing through orientation was in part due to the support of her clinical coordinator and preceptor "I was always making sure before I did something I would ask my preceptor, or clinical coordinator. I always made sure if I didn't feel comfortable. I asked first then I did it." The graduates' verbalized working with supportive staff facilitated the transition process and aided in guiding them in application of their knowledge as practicing clinicians.

Role transition. Upon entry to practice the students transitioned to assume roles of a registered nurse, assisted by a preceptor. The common challenges associated with the role transition were reported as "Difficulty communicating with healthcare providers, time management, and prioritization of care." John clearly articulated that some of his initial anxieties were based on the transition moving from being a student working with an instructor to a nurse working independently in the clinical area, and relying on his limited knowledge.

Zinnia, a graduate with 9 months experience working on a medical renal floor who had clinical experiences in the research organization as a student, reported feeling overwhelmed by her responsibilities and workload. She shared, "I had some of the experiences in nursing school but when I became a nurse it was a totally different

experience." John added, "I kind of felt like I got on a train I felt was going to go at 100 mph but it actually went 1000 mph." and " I felt I got run over by that train a couple of days in the beginning." Paris compared practicing prioritizing care as a classroom activity and during testing with prioritization in the clinical environment as being totally different, stating "… thinking and putting it on paper is a lot easier than actually doing it in the clinical area."

Maria with a 9 month clinical experience working in the emergency department reflected on the lack of experience in the setting and with the acuity of the patient presentation, citing these as the basis for her initial and continued fears of emergent cases. Though Maria also had exposure to emergency room nursing as a student, the rotation was purely observational and did not prepare her adequately for a role as a registered nurse in the environment. Maria attributed her increasing confidence in the integration of her knowledge to the presence of the unit educator and supportive experienced senior nurses.

Alex shared her experience transitioning to her role as,

> I feel like I learned about this, the things I would have to do and at that point I could understand it but I think there are some responsibilities that you only learn about when you are actually in the field that are different when you are a student.

Venus reported her initial 9 months on the pulmonary floor was also very challenging with difficulties with prioritization, caring for the critically ill ventilated patient, and time management. With experience as a PCT, Venus attested to repeated exposure and

practice overtime as the key to alleviating the stresses and challenges of her role transition. Kenya reported,

> As a new graduate I was scared, I wasn't as confident for so many reasons…It was overwhelming in the beginning….As students there were things we weren't exposed to and things we didn't know we were supposed to be looking at when we became graduates…so obviously there was a disconnect.

All graduates confirmed there was benefit in participating in simulation in the new graduate program, as they felt it addressed some elements in facilitating the application of theory into practice in the clinical environment.

Theme 2: Effective Educational Pedagogy

The graduates were asked to reflect on strategies that enhanced their ability to integrate theory into practice. Responses to these questions included suggestions on their perceived best practices based on their personal experiences. Interview questions prompted responses which targeted research questions two and three and yielded two subthemes: *perceived educational best practices*, and *role preparation.*

Perceived educational best practices. Most of the participants' referred to their learning style as being visual, kinesthetic, or a combination of both. The learning environments they described portrayed learning activities supportive of both learning styles, with learners benefitting from participating in active learning strategies, specifically simulation. Nursing education involves theory in combination with experiences or activities to apply the theory in practice. The extent of this combination

varies from institution to institution, resulting in graduates with wide-ranging experiences and different levels of competence on entry to practice.

Additional best practices for prelicensure programs to adopt to prepare students to transition as graduates based on their experiences as perceived by the graduates include:

- Have students administer medications during clinical rotations.
- Increase patient assignments, to mimic more realistic care environments and to expose students to the realities of having a typical patient load, time management and prioritization of care.
- Include more simulation-based learning experiences to promote application of theoretical knowledge; in addition, include high-fidelity simulation with realistic patient care scenarios.
- Integrate comprehensive debriefing sessions immediately following simulated exercises to foster recall, and reinforce theoretical concepts.
- Include students in other nursing roles e.g., communicating with other members of the healthcare team.

Role preparation. The graduates' verbalized being unprepared for the comprehensive roles of a nurse was a factor in the hardships they encountered during their transition to clinical practice. One graduate reported, "Nursing school prepared me with textbook material to be successful in the NCLEX, but you don't know about the full extent of your role until you are in the field." The general consensus from the graduates' perspective was that being involved in patient care in the clinical area was not always

reflective of the roles of the nurse in its entirety, which contributed to the deficit they felt upon entry to practice.

Theme 3: Theory-Practice Integration

The participants' responses to questions referencing their prelicensure preparation generated answers to research question two and led to the third theme, environments that promote theory-practice integration. The graduates' answered questions which allowed them to verbalize their perceptions concerning their experiences that impacted their ability to integrate theory to practice. Participants' responses generated the following subthemes: *prelicensure environments, pre-licensure preparation,* and *post-licensure environments.*

Prelicensure environments. Diane shared a unique experience, having been unsuccessful in a previous nursing program, and completing her education at a 2 year diploma program in 3 years following an unsuccessful semester, she had the advantage of comparing both programs during the interview. Diane appreciated the preparation she received in the last program because she felt the simulated learning environments presented were more comprehensive in incorporating realistic patient care scenarios, were not merely task-oriented, and included higher-fidelity technology than what was offered in her former program. She felt her ability to participate in these exercises solidified her knowledge and prepared her to be more effective in the clinical environment as a student and as a graduate. Diane also cited early and lengthy clinical

rotations as a key element in supporting her competence in clinical skills and application of theoretical knowledge in her practice.

In contrast, Alex stated she felt deficient and inadequate as a graduate nurse because her clinical experience and exposure to simulated learning were both limited. Alex reported having one to two patients to care for, with partial responsibilities and rare medication administration experiences, particularly for parenteral routes. With exposure to low to medium-fidelity simulation technology in her prelicensure program, Alex felt these exercises did little to reinforce her knowledge but helped with skill mastery.

Prelicensure preparation. The question seeking to identify what aspect(s) of the preparation during pre-licensure training that was most beneficial in preparing them for practice, yielded the following responses: “A combination of classroom, simulation and clinical,” “ the simulations and clinical instructor teaching style,” “the simulation labs that gave me opportunity to practice,” “the timing of the clinical with the classroom teaching,” “the early, long, and the increased frequency of clinical times,” and “the amount of time spent in clinical.” In general, the graduates reported a combination of clinical, simulation, and classroom lecture time, in addition to increased exposure to patients in the clinical environments as key elements in preparing them to be effective clinicians in the clinical area.

Of the 13 participants three graduates reported deficiencies in clinical hours reporting only one 6-8 hour clinical day with one to two patients, compared to the 13-16 hours per week in clinical with two to four patients of the other respondents. The three

graduates who spent less time in the clinical area as students shared their perceptions of inadequacy upon entry to practice. One graduate reported learning more about being a nurse, managing a patient load, time management, and prioritization during the new graduate orientation program than she did during pre-licensure preparation.

Two graduates explained that in lieu of clinical time they received some simulated experiences to practice low-fidelity task-oriented exercises, while one student also experienced the use of a standardized patient which was very beneficial. The three students rated their competence negatively in the areas of nursing documentation, medication administration, prioritization, and clinical skills to other graduates who had lengthier clinical times, high-fidelity scenario-based learning, and more patient exposure.

Postlicensure environments. For Diane, as a graduate nurse working in the emergency department was very challenging. Diane explained,

> I didn't have the knowledge base that I needed to do things, and even this far in I still don't feel 100% confident doing everything I need to do" and "…I had a lack of experience, even though I had some foundation it wasn't enough though.

Rose reported feeling competent in caring for the stable medical-surgical patient, "…we got a lot of experience with that in nursing school" but encountered difficulties caring for patients requiring additional ventilation support. In general, graduates employed to specialist areas such as the emergency department and the telemetry unit voiced hardships applying their knowledge in these settings, which improved over time with experience and repeated exposure.

Theme 4: Simulation-Based Learning

All participants experienced simulated learning during prelicensure preparation, and their responses to questions related to these experiences satisfied research question three. Two graduates participated in low-fidelity task simulated exercises infrequently during the academic year, unlike the other graduates who participated in medium to high-fidelity simulated exercises with patient care scenarios. The two graduates participated in simulated exercises utilizing high-fidelity technology and scenario-based learning during the new graduate orientation program and perceived the experience as more beneficial and educational than the low and medium-fidelity experiences in their prelicensure program. As graduates voiced their perceptions of their experiences during simulated learning, four subthemes emerged: *student engagement*, *cognitive constructivism/ cooperative learning*, and, *debriefing supporting learning.*

Student engagement. The graduates reported in most instances simulated exercises extended beyond skill acquisition and mastery, and included scenarios where students were faced with opportunities to participate in team communication, practice clinical judgment in prioritization and clinical decision making, and perform nursing interventions in a realistic environment. A recurrent perception among the graduates was the high level of interaction and engagement facilitated through participation in simulated exercises involving groups or teams. Alex appreciated the opportunity to hone in on her assessment skills during simulation with hands-on experience; also having “real actors”

during select exercises enhanced the realism and offered the opportunity to engage in communication particularly suited for history taking.

Cognitive constructivism and cooperative learning. A benefit of simulation is the cooperative learning environment that is created where students learn by doing and learn from each other. John and Kenya reported developing an appreciation for working with other students in these environments as they learned through the interaction, and learned from each other's strengths and weaknesses. Piaget (1970) and Vygotsky (1978) both posit that learning occurs best through interaction and collaboration in instructive environments, suggesting learning is a social process (Bastable, 2014; Clapper, 2015); supporting the conceptual framework of cognitive constructivism.

Debriefing supporting learning. In response to the most beneficial aspect(s) of simulated learning, graduates named the realistic scenarios, the ability to make mistakes without causing harm, the opportunity to practice and repeat skills, and the debriefing session directly following the exercise. Kenya admitted that the videos recorded during the exercise and played back during the debriefing sessions were embarrassing, but offered "…being able to view my actions was an eye opener which allowed me to put things in perspective." The graduates reported debriefing was where they received constructive criticism and were able to reflect on their actions and identify areas of strengths and weaknesses. All graduates asserted the feedback received during de-briefing helped with reinforcing existing knowledge and developing new concepts.

When asked if they perceived simulation as having an impact on their ability to practice, 10 of the 13 graduates responded positively. Most graduates reported their belief that their ability to practice with competence and confidence was directly related to their simulated learning experiences. Finally, all graduates agreed that high-fidelity simulation with the inclusion of realistic scenarios would be most beneficial when introduced early in the curriculum and repeatedly through each semester to promote integration of theory in clinical practice.

Summary of Findings from Data Analysis

In summary, my purpose for completing this research was to explore the perceptions of graduate nurses regarding their experience with the theory-practice gap on entry to practice, and their perceptions of simulation as an instructional strategy in prelicensure programs to address and reduce the effects of this deficit prior to entry into practice. He graduates I interviewed represented five schools located within New Jersey and Pennsylvania. All graduates, regardless of their level of degree attainment or program attended recalled difficulty integrating theory into clinical practice as an adversity they all faced. Many voiced they were adequately prepared in theory but had difficulty when confronted with the complexities of patient care as an independent practitioner. Some graduates opined a shortage of clinical placement sites, inconsistent or limited access to acutely ill patients, and limited medication administration experiences as contributing factors to the hardships faced in being able to apply learned concepts in a practice environment, even as a student.

Reflecting on their pre and postlicensure experiences the graduate nurses shared strategies they believed could prepare students to transition as graduate nurses. The most common suggestion was to integrate more simulation. Graduates benefited from high-fidelity simulation, simulations utilizing complex patient care scenarios, the use of standardized patients, and when simulated exercises were strategically placed to correspond with the content taught in the classroom.

The use of high-fidelity technology enhanced the learning experiences by creating a more realistic experience similar to that of the practice environment. A consistent use of low-fidelity technology and equipment that failed to work during scenario-based learning exercises (SBLE's) detracted from the value that could be achieved from the experiences but was still rated as useful by the participants. One graduate did not appreciate low-fidelity simulated experiences (except when used for task training) but enjoyed the use of standardized patients, stating the lack of realism and use of their imagination did not contribute to learning. These responses are consistent with literature that report simulated experiences that mimic real patient care environments, including patient-focused scenarios eliciting patient-like responses are best suited to engage students, promote critical thinking and integrate classroom and clinical learning (Carson & Harder, 2016; Flood & Robinia, 2014; Sanford, 2010).

The graduates related that active participation in the scenarios strengthened their confidence and competence in skill mastery. However, they report having a more hands-on approach allowed them to obtain a more realistic sense of how to use and integrate the

knowledge they attained in the classroom setting in decision-making, prioritization, and working as a group. Despite these experiences, all graduates felt communicating with healthcare providers was intimidating and suggested that more opportunities to practice communication strategies would be helpful.

In general, the graduates felt overwhelmed at the vast responsibilities and roles of the registered nurse which intensified the difficulties experienced on entry to practice. The challenges they faced were not limited to the integration of knowledge but also adapting to the expectations in the clinical environment. It was unclear to me if the expectations were self-imposed, those of the employment agency, or a combination of both. Socialization to the roles of a nurse and the demands associated with clinical practice is challenging at best for first-year graduate nurses (Bull, Shearer, Phillips, & Fallon, 2015). Some graduates felt they were not prepared or equipped to perform these roles or accept the responsibilities in part, due to inadequate and unpredictable exposure during prelicensure preparation.

A recurrent perception held was being exceptionally prepared for NCLEX but not equipped to fulfill the requirements associated with nursing at the bedside. Graduates felt that staff and preceptor support was advantageous in influencing the transition into these roles. Many voiced 9 to 14 months as the average time to acclimatize to the roles; in addition, they expect an increased exposure to these roles (in the actual clinical or simulated environment) during pre-licensure training may reduce the challenge upon entering clinical practice.

The general feeling was that simulation was a beneficial experience to promote the transfer of learning. Participation in simulation allowed for the opportunity to apply the theory, to learn from making mistakes without personal harm, and to improve confidence and competence as a practitioner. Graduates who participated in SBLE with increasing fidelities and with the use of standardized patients appreciated the added value during pre-licensure training. Two graduates who had experience with high-fidelity technology and SBLE's during the new graduate program found these experiences to be most advantageous in integrating the knowledge they had in an environment most similar to their actual clinical environment. Some graduates voiced their early response to simulation-based learning as being different from the "real thing," but articulated the benefit of debriefing superseded their initial feelings.

When asked if they believed participating in simulation impacted how they currently practice, 11 of the respondents reported their practice was enhanced by their level of participation in SBLE during preparatory training stating:

"I wouldn't have been so confident when performing my job."

"I often remember some scenarios I did in school, and it helped me when I first started."

"The scenarios were so real it helped to prepare me for what I would face as a nurse."

"I don't think my practice would be any different; I just know it helped me understand how to do things, and how things worked."

Findings Related to the Conceptual framework

I employed the theory of cognitive constructivism as proposed by Jean Piaget (1972) and Lev Vygotsky (1978) as the conceptual framework for this study. Analysis of the participants' responses indicated that though they learned as individuals, there was also benefit in learning from each other during the simulated experiences, and also during the discussions that ensued in the debriefing sessions. Cognitive constructivism implies a change in thought that follows the acquisition of knowledge and assimilation of new information that occurs through interacting with ones social and learning environments (Fosnot, 2013; Utley, 2011; Vygotsky, 1978). Graduates who took part in high-fidelity SBLE's expressed how their knowledge base increased, and their practice changed following the exercises, while graduates who participated in task-based training referenced a change in confidence and skill competency only.

Findings Related to Existing Literature

The findings resulting from the data analysis is consistent with existing literature that supports the theory-practice gap as a bona fide experience and challenge for graduate nurses regardless of academic preparation. Nurse educators must integrate active teaching strategies that merge knowledge and skills with real-world experiences (Flood & Robinia, 2014; Kalayi & Akintola, 2013). The data I collected during the interviews reflected the graduates' perceptions of simulation as a superior instructional tool in partnership with lectures and clinical practice, which facilitates a transfer of learning and integration of theory. A meta-analysis by Shin, Park, and Kim (2015) established

simulation as a practical approach to real-world patient-care situations that fostered learning and practice of psychomotor skills without risk.

The graduates opined that notwithstanding their varied learning styles and their learning needs (specific and combined) SBLE established opportunities to increase knowledge and improve skill. The perceptions of these 13 graduates echo the results of a study by Kaddoura (2010) of 10 graduate nurses who attested to simulation as being a valuable tool in advancing knowledge retention and promoting critical thinking and decision-making. According to the graduates, for the simulation to be meaningful, it must correspond to their educational needs and goals. Educators can tailor the learning experiences to meet the individual needs of the learner (Carson & Harder, 2016).

The input from the graduates added to the body of literature affirming that participating in well-designed simulation-based exercises using high-fidelity technology and incorporating scenarios to promote decision making, prioritization of care, and communication were optimal options to support theory integration and address the theory-practice gap prior to entry to practice. Dynamic simulated learning scenarios integrating unfolding case studies with changing patient status allows for the incorporation of critical thinking, challenges participant decision making, and bolsters clinical judgment providing a more realistic learning experience (Barber & Schuessler, 2017).

In addition, curricular changes that reflect an integration of SBLE early in the semester and with increased frequency through the curriculum are a superior standard of

practice for prelicensure programs to adopt to address the theory-practice gap during preparatory training and support the transition to clinical practice. Providing simulated learning experiences consistently throughout the curriculum actively engages students in opportunities to improve confidence, support knowledge retention, and development of competence in skill (Jarvill et al., 2017; Mariani & Doolen, 2016; Zapko et al., 2018).

As the use of high-fidelity simulation increases in prelicensure programs, there is a plethora of research supporting simulation as beneficial in improving student satisfaction and confidence. At the time of this research, there was still dialogue regarding the lack of a consistent evaluation tool that was valid and reliable to gauge the effect of HFS and student learning (Doolen, Atz, & O'Rouke, 2016; Fey & Kardong-Edgren, 2017; Watts, Ivankova, & Moss, 2017). The participants in this study add to this dialogue as they perceived learning was enhanced as a direct result of participation in well-designed SBLE's immediately followed by facilitated debriefing but suggest consistency in practice and adherence to best practices through the exercises and the curriculum. Suggestions from the graduates as to what constitutes best practices have been well researched and mirror the International Nursing Association for Clinical Simulation and Learning's (INACSL) 2013 revised standards, specifically relating to the educators professional integrity, the process of facilitation, and the debriefing process (Decker at al., 2015; Rutherford-Hemming, Lioce, & Durham, 2015).

Summary

In this section I provided a description of the methodology applied for this study, including participant recruitment and protection, data collection and data analysis procedures. I established the procedures for gaining access to the participants at the research site and methods to ensure their ethical protection. I interviewed the 13 participants using a semi-structured approach allowing for in-depth conversation and for deep exploration of participant responses. The interview was guided by a an interview protocol I developed based on the existing and validated CFGNES, a pilot test validated the amended questions. I completed data analysis was adhering to the Stevick-Colaizzi-Keen's method as presented by Creswell (2012). I described the steps to assure trustworthiness (*credibility, dependability, transferability,* and *confirmability*). My data analysis revealed four major themes; direct quotes were selected and presented to support the themes. Themes were developed based on Creswell's (2007, 2012) suggested principles; combining several codes based on likeness and elimination of redundancies; the resulting themes delivered the main concepts found during data analysis.

In section three I will address the project development. I will provide an outline of the proposed project genre, a white paper, based on the findings of the study. I will also describe plans for dissemination of the findings, and lastly I will describe the project implications and possibilities for social change.

Section 3: The Project

Introduction

My purpose for completing this study was to explore the theory-practice gap from the perspectives of graduate nurses working for 2 years or less based on their experiences and to determine their perceptions of simulation in prelicensure programs as a strategy to address and reduce the gap prior to entry to practice. An abundance of literature exists on the theory-practice gap, simulation technology, and the perspectives of faculty on simulation use and best practices; however, there is a paucity of literature regarding the perception and experiences of the graduate nurse referencing the theory-practice gap and the use of simulation in addressing this deficit. For this study, I examined the graduates' perspective because it is imperative for nurse educators to be aware of how their consumers, the students who transition to graduate nurses, perceive the educational strategies employed during preparatory training and the impact of this training on their current practice. In addition, these graduates are well positioned to relate their experiences and offer valuable recommendations based on these processes and their outcomes.

The data analysis revealed some of the challenges the graduate nurses experienced as they transitioned into clinical practice. The common variable experienced by the graduates was described in the literature as the theory-practice gap, where graduates were taught theoretical concepts and have concrete knowledge but experience a difficulty in integrating this knowledge into practice. Responses from the graduates

supported the use of high-fidelity simulation-based learning as a viable instructional strategy to enhance the application of learned theoretical concepts in the clinical environment. When introduced in pre-licensure programs, SBLEs, particularly those utilizing high-fidelity technologies, address factors that contribute to the challenges graduates face in the clinical environment, and thereby, prepares them to competently apply theory into practice even before entry as independent practitioners.

The graduate participants provided insight based on their retrospective experiences and made plausible recommendations that could prompt policy changes in prelicensure programs. The nature of the findings supported a change in educational practice; hence, the logical choice of presenting the findings of this research was to prepare an academic white paper with policy recommendations. I chose this genre to present the findings from this research and provoke a dialogue to induce change within this and similar academic institutions.

In this section, I will present the goals of the project, a review of the literature to support the rationale for the choice of genre and support for the recommendations included in the project, a description of the project, and a proposed project implementation timeline. I will introduce and elaborate on the project deliverable, which will provide a comprehensive report on the research findings and data analysis from Section 2 and include recommendations for curricular changes in the prelicensure nursing programs (see Appendix A). In the white paper I will outline suggestions for integrating simulation early and with increased frequency in prelicensure programs to help in

alleviating the theory-practice gap for graduates before their entry into practice. Finally, I will offer the implications for positive social change locally and nationally.

Goals of the Proposed Project

My primary goal with presenting my findings in a white paper is to inform on practices to address the theory-practice gap affecting graduate nurses during preparatory training. An additional goal is to communicate recommendations for curricular improvement to the major stakeholders within the school of nursing, and perhaps, similar institutions responsible for graduate nurse preparation. In the white paper I: (a) communicate the findings obtained from the data analysis, (b) convey the benefits and best practices in simulation education in prelicensure nursing programs and, (c) present recommendations to effect changes in curriculum to address the theory-practice gap prior to entry to practice.

I decided on the topic of this study based on the hiring of increasing numbers of inexperienced graduate nurses to work in high-acuity clinical areas and inconsistencies in prelicensure nursing programs regarding strategies to foster application and integration of theory in clinical practice, possibly contributing to a theory-practice gap experienced by graduate nurses globally. The recommendations I included in the white paper were based on the perceptions and lived experiences of the graduate nurses interviewed. I interviewed 13 graduate nurses who had experiences with simulation learning during prelicensure preparation to support academic instruction or in preparation for clinical experiences.

Rationale for Project Genre

Bogdan and Biklen (2007) stated that qualitative researchers have multiple options for presenting their research findings based on setting, audience, and the purpose of the research. The format and type of presentation should be determined by the objectives of the researcher and the intended audience (Creswell, 2012). Based on the findings from this study, I determined strategies to effect and reduce the theory-practice gap were already in place to varied degrees as reported by the 13 graduates. However, a more consistent and robust integration into the curriculum needs to be adopted to ensure students are equipped to transition to the role of graduate nurses before entry to practice. To determine the most favorable genre with which to present the findings of this study, I considered the audience, the stakeholders in schools of nursing including the administration, the simulation coordinators, and the faculty. I also considered the purpose of the study, which was to inform on the perceptions and experiences of the graduates and provide recommendations to convince stakeholders to consider a change in practice.

For my project, I elected to present my findings and propose recommendations for curricular development or revisions in prelicensure nursing programs in a white paper. A white paper is a document formatted as a report with a purpose to inform, educate, convince, or influence an audience (Mattern, 2013). The objective of a white paper is to promote an identified solution or a service applicable to an issue experienced by the intended audience (Bly, 2010).

I will be presenting the white paper in an academic setting to explain the perspectives of the graduate nurses regarding the theory-practice gap and the impact high-quality SBLE during prelicensure training had on their transition to clinical practice. Another goal of mine in developing this white paper was to provide recommendations on how to use simulation to promote the integration of theory into practice, thereby addressing the theory-practice gap during preparatory training, even before the students enter the clinical environment as graduates and practicing clinicians. White papers can state the author's position or stance on a particular topic; in addition, white papers serve as tools to guide in decision making (Bly, 2010).

Review of the Literature

I conducted a literature review centered on my choice of the white paper as the most suitable genre for the presentation of the research findings and its applicability in an academic setting. In my review of the literature, I searched multiple research databases that included Academic Search Complete, CINAHL, ERIC, EBSCOhost, and Google Scholar. My scholarly search yielded limited results on the purpose, content, and formatting of white papers; therefore, I decided to source supportive information from web searches, blogs, and other Internet-based information. Key terms searched included: *white papers, writing a white paper, how to write a white paper, position papers,* and *academic white papers.* Information on the formatting and development of a white paper were limited, and some of the sources found were published more than 5 years ago.

In this literature review, I also focused on identifying support for the research findings and recommendations in the content of the white paper. Additional research terms included*: the theory-practice gap, simulation, simulation-based learning, simulation-based learning experiences, high-fidelity simulation, simulation in nursing education, simulation best practices,* and *cognitive constructivism.* This literature search returned articles published within the last 5 years along with some seminal articles.

History of White Papers

In the white paper developed for this study, I made recommendations for the integration of high-fidelity SBLEs in prelicensure programs in an effort to address the theory-practice gap before entry to practice. Historically, the white paper originated as an authoritative government document but has subsequently broadened in purpose as a marketing and informational tool (Sakamuro, Stolley, & Hyde, 2015). The underlying notion of a white paper is one of persuasion and education (Bly, 2010). Mattern (2013) suggested the white paper presents data driven by research which is used to educate or persuade a specific audience. Based on these principles, the white paper is a multifunctional tool that can be beneficial in an academic setting and is specifically an excellent choice as a means to disseminate the findings of this study.

Developing the White Paper

Stelzner (2010) claimed that white papers are educational in nature and that they provide arguments in support of a situation or a solution to an identified problem. Graham (2013) added that a white paper is an adaptable instrument which can be used in

presenting evidence and logic to facilitate problem solving and decision making. Additionally, Stelzner stated that though each presentation should be individualized to the situation and audience, the author of a white paper must clearly identify the problems and needs of the audience at the onset of the presentation. Understanding the needs of the audience is useful in creating a document that is of interest (Sakamuro et al., 2015). Useful and instructive content will capture the interest of the audience (Mattern, 2013).

Several approaches can be used in presenting the white paper, and the presenter has the flexibility to create a document that best delivers the content. Mattern (2013) proposed five elements to include as a format for creating a white paper:

- The problem - A statement or introduction to develop an interest;
- Proof the problem exists - Validation of the existence of the problem;
- Additional problems - The sequela of the underlying problem;
- The basic solution - Identification of potential generic solutions; and
- Your solution - Your proposal or recommendation.

Regardless of the choice of outline, the white paper must be presented in a format appropriate and relevant to the audience. Hoffman (2006) stated that white papers should be written from an objective stance, include information to support the identified need in a persuasive or convincing manner, written eloquently without jargon, and be specific to the audience.

Appropriateness of White Paper in Addressing the Problem

In this white paper, I articulated the experiences of the graduates during prelicensure training and their transition into clinical practice, stressing their thoughts on the theory-practice gap and their perceptions of the value of simulated learning experiences. The recommendations I provided in the white paper were formed solely on the insight of the graduates and supported by existing literature. Communicating this information in the form of a white paper is a proficient and cost-effective method to disseminate the data to a broad audience and provide education to facilitate a transformation in practice. According to Hoffman (2006), white papers serve as persuasive educational sources to effect change.

The recommendations I made as a result of the data analysis will require a change in policy or an implementation of new standards of practice. A function of white papers is to guide or induce decision making (Stelzner, 2010). The white paper has been touted as an effective educational tool (Graham, 2013; Hoffman, 2006; Mattern, 2013); hence, it is an appropriate genre in which to present the data, educate the stakeholders, and influence policy revisions. Hoffman (2006) suggested that the purpose of the white paper as a marketing tool is to provide impartial content identifying a specific problem and projected solutions. This stance supported my intent with this white paper, which was to inform, educate, and disseminate potential solutions to the recognized problem.

Interconnection of Theory and Research

I selected the white paper to disseminate the research findings. In the white paper, I presented findings to answer the overarching research question: Is simulation an

effective instructional strategy in prelicensure nursing programs to address the theory-practice gap experienced by graduate nurses on entry to clinical practice? The recommendations presented were based on the findings from the phenomenological study and were supported primarily by data from an extensive literature review.

Significance of the Theory-Practice Gap

The theory-practice gap in nursing is described as a lack of proficiency demonstrated by graduate nurses who are theoretically but not practically equipped to apply theory and knowledge to practice in the clinical environment (Ajani & Moez, 2011; Scully, 2011). The deficit has immediate effects on the confidence and performance of the graduate but far-reaching effects on the quality of care provided including long-term costs for the employing agency (Hickerson, Taylor, & Terhaar, 2016). The research findings indicated all the graduate nurses experienced a difficulty integrating theoretical concepts during their transition to the patient care environment as independent clinicians. The extent of the deficit was not affected by prelicensure program or degree attained on completion of the program, with graduates averaging 14 months before they felt the gap was reduced through experience and exposure.

The graduates' opined insufficient clinical time, lack of consistent opportunity to care for acutely ill patients, inability to administer medications, and difficulty in fully acclimatizing to the roles of a nurse in its entirety as contributing factors to the hardships faced in being able to apply learned concepts in a practice environment. Sanford (2011) added that unpredictable patient care environments and patient care assignments result in

reduced exposure to patient care experiences. However, employers expect graduates prepared at the highest level of preparation to work in high acuity areas.

Simulation as an Instructional Strategy

Simulation as an instructional strategy has been used in other task-based professions including aviation and is not new in nursing education. Nursing education embraced simulation technology to teach, reinforce, and evaluate psychomotor skills. With technology advancement the ability of the mannequins to replicate realistic patient responses increased (Conrad, Guhde, Brown, Chronister, & Ross-Alaolmolki, 2011). This advanced potential enhanced the capabilities of simulation-based learning to include exercises to practice and promote communication skills, critical thinking, problem solving and decision making. Simulation-based learning offers a safe environment to re-create realistic patient care situations where students can develop task-mastery, and clinical reasoning (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014).

The IOM recommended simulation as a strategy to support nursing education in addressing patient safety (Aebersold & Tschannen, 2013; Sanford, 2010). Simulation-based learning is being used in prelicensure programs to augment the difficulties of assuring clinical placement by replacing traditional hours in the clinical area (Breymier et al., 2015). The NCSBN supported the use of high-quality simulated experiences to account for up to 50% traditional clinical time through the curriculum (Alexander et al., 2015).

Most graduates reported medium to high-fidelity simulation-based learning contributed to their integration of theory in clinical practice during prelicensure preparation. Two graduates, who received low to medium-fidelity simulated experiences, reported enhanced benefits of simulation in this regard only when exposed to high fidelity SBLEs during the new graduate orientation program. Most graduates reported a combination of high-fidelity simulation utilizing realistic patient care scenarios, quality of clinical experience, and traditional classroom lecture as key elements that promoted the integration of theory to practice, but added the timing of the simulation with lecture content was critical to ensure transfer of learning. Limitations voiced by graduates in simulated learning experiences were directed to a lack of realism and lack of appropriate responses (Sanford, 2010; Wotton, Davis, Button, & Kelton, 2010).

Alignment with Conceptual Framework

I grounded this study on the theories of cognitive and social constructivism as advanced by Jean Piaget, and Lev Vygotsky. Cognitive constructivism refers to expansion of knowledge based on personal experience, while social constructivism adds that the social interaction between learners enabled by a knowledgeable facilitator promotes learning (Powell & Kalina, 2009). I specifically chose this theory as it is closely aligned with the basic elements of teaching and learning in simulated experiences.

The interactive component achieved during SBLEs is a key element in promoting the transfer of learning. As stated by Vygotsky (1978), the social nature of simulated exercises lends itself to collaborative learning through the level of interaction and

engagement that fosters construction of knowledge. Simulation promotes collaborative learning where students learn with and from each other through sharing of information and participation in decision making during the exercise (Jefferies, 2005). When used appropriately, simulation-based learning is an active teaching strategy that allows the learner to immerse themselves in the experience, using existing knowledge to construct new meanings from the exercise.

White Paper Recommendations

Basis for Recommendations

The graduate participants determined simulated learning experiences as a viable instructional strategy to promote integration of theory to practice and address the theory practice deficit they experienced on transition to clinical practice. The graduates' shared that all simulated experiences were not beneficial, asserting the outcome is reliant on the quality of the experience. I developed recommendations based on the responses from the graduates which were supported by literature to serve as the basis for the white paper.

As simulation technology is costly and likely to incur a financial burden, the task to integrate simulated-learning experiences must be purposeful and directed. Simulated learning activities must be deliberate and structured to evoke a transfer of learning by providing realistic patient care scenarios or situations (Carsen & Harder, 2016). According to Jefferies (2005) factors crucial to the positive learning outcomes based on the integration of simulation-based learning include proficiency of the educator, adoption of a valid simulation design or framework, and adequate debriefing. For simulation-

based learning to be beneficial the exercises must align with clearly stated and well-developed objectives, be authentic and mimic reality as closely as possible (Jefferies, 2005).

My recommendations included in the white paper are as follows: The integration of SBLEs supported by the:

- Use of high-fidelity technology in the SBLE.
- Adoption of a guiding framework.
- Facilitated debriefing immediately following the SBLE.
- Use of a dedicated simulation team.
- Alignment of simulation with course objectives.

Use of high-fidelity technology. Graduates report simulation connects theory and clinical practice (Sanford, 2010). High-fidelity simulation offers the most realistic patient responses, allowing the learner to practice complex level proficiencies (Dowie & Phillips, 2011). The graduates voiced the realism of high-fidelity simulation heightened the similarity to the clinical setting.

Educators can incorporate high-fidelity technology to mimic acute care situations that may not be available to the student during training but will be eminent during practice (Wotton et al., 2010). The advanced capabilities of a high-fidelity mannequin support knowledge retention related to the high realism experienced (Wotton et al., 2010), as it closely represents the actual patient care environment and responses. In addition, simulation-based learning should prepare the student for real world

proficiencies, similar to what they would encounter in traditional clinical time, and not mere psychomotor or task training.

Adopt a guiding framework. Graduates reported inconsistencies with simulated experiences related to differences in instructor competence or the exercise. Two graduates shared they had the same SBLE but different instructors and voiced they gained different experiences. Adopting a framework may help to guide the development and delivery of the SBLE will help promote consistency and uniformity of the experiences. The nursing education simulation framework developed by Jeffries (2005) is based on a combination of faculty and student characteristics that support best practices and optimal learning outcomes.

The five core elements according to the Jefferies framework (the facilitator, the learner, academic instruction or practices, simulation design, and learning objectives) contribute to positive learning outcomes through simulation-based learning (Carson & Harder, 2016; Jeffries, 2005). The graduate nurses all reported the benefit of consistency through each simulated experience; therefore, adopting a framework would ensure similar experiences for the learners. Optimal learning outcomes are reliant on the careful integration of these constructs to ensure the simulated experience supports learning.

Facilitated debriefing. One of the most valuable aspects of simulation-based learning as reported by the graduates was debriefing. Debriefing prompts a reflective component which facilitates construction of knowledge through critical dissection of the experience and the participant's actions or performance (Sanford, 2010). Informed

feedback and the interaction between faculty, student and peers during debriefing constructs new knowledge, fortifies existing knowledge, and enhances learning through reflection on their performance (Jeffries, 2005). According to the International Nursing Association for Clinical Simulation and Learning guidelines, well facilitated debriefing immediately following simulated experiences by trained faculty allow the participant to retrospectively evaluate performance, consider actions, integrate previous knowledge and incorporate feedback (Decker et al., 2013; Sittner et al., 2015).

Alignment of SBLEs with course objectives. Simulation-based learning should be well incorporated into the existing curriculum, not seen as an additional component. Clearly defined goals and objectives should be the first step in developing SBLEs (Aebersold & Tschannen, 2013). The NCSBN recommends participants are made aware of the goals and expected outcomes for each experience prior to participating in the exercise (Alexander et al. 2015; Sittner, 2015). Objectives for simulated experiences must be supported by program outcomes and adhere to best practices (Sittner, 2015). To integrate simulation-based learning seamlessly and assure positive learning outcomes, faculty and simulation staff should collaborate to develop or use valid high-fidelity SBLEs that correspond with classroom content, create an accurate representation of the clinical area, reflect current practice, and that are aligned with the course objectives.

Dedicated simulation staff. Developing well-written scenarios is a skill, training must be provided to increase staff competency and proficiency in instruction with simulation technology to ensure effectiveness (Dowie & Phillips, 2011). The NCSBN

recommends faculty should receive training and engage in continuous professional development based on best practices in simulation technology (Alexander et al, 2015). Trained simulation staff can facilitate learning by using best practices to promote student engagement, provide constructive feedback, and enable reflection during the debriefing process.

Project Description

My academic white paper provided a synopsis of the research that was conducted, inclusive of the problem that prompted the study, which was the hiring of a high number of graduate nurses to work in high acuity clinical units without clinical experience. Literature supports a theory-practice gap experienced by graduate nurses upon entry to practice that translates into potentially unsafe care environments for the recipients of their care. The white paper will also identify the findings obtained through in-depth face-to-face individualized interviews of 13 graduate nurses who voiced their experiences with the theory-practice gap and added their perceptions of simulation during prelicensure preparation as an adjunct to addressing the deficit prior to entry to practice. Based on an exhaustive literature review and the research findings, recommendations will be provided in the white paper to integrate strategies to alleviate the problem.

Needed Resources, Existing Supports, and Potential Barriers

Needed Resources

I will present the white paper at a curriculum development meeting at the school of nursing at the research site. A minimal cost will be incurred to print and bind the

white paper in a format appropriate for presentation. As the goal is also to distribute the white paper to similar institutions, the additional costs would include distribution of the document. Modification to the curriculum as a result of the recommendations from this white paper will be the financial responsibility of the institution**.**

Existing Supports

A strong ally is the director of the school of nursing located within the research site. The director is a proponent for the use of technology to advance learning. I have sought counsel with the director regarding the presentation of the research findings, and she is receptive to including the white paper presentation during a curriculum committee meeting.

The research site houses a simulation institute accessible by the faculty and students of the school of nursing. Additionally, the school of nursing has an existing simulation laboratory which has three low-fidelity adult mannequins, two low-fidelity infant mannequins, and one medium-fidelity mannequin. The school administration has transitioned a faculty member to serve in the capacity of a simulation coordinator who oversees simulation learning in conjunction with the faculty of the school.

Potential Barriers and Potential Support to Barriers

As my ultimate goal is to extend this white paper with the recommendations to similar institutions, I have consideration for the infrastructure and supports existing in these institutions. For institutions without an existing simulation lab, this poses a potential significant financial barrier. To establish and maintain a simulation lab, employ

manpower to effectively staff the laboratory, and support simulation-based learning is costly. This expense may pose a deterrent to implementing simulation-based learning in an existing program, or hinder expansion of existing programs. The findings I presented in the white paper may be used to garner grants or donations to ease the financial burden.

My recommendations in the white paper entail a change in practice for faculty. A potential barrier might be a lack of faculty buy-in to the change in practice. The resistance to altering practice prompts a difficulty in instituting and integrating the suggested practice changes. Involving faculty members from the onset of the presentation and encouraging them to voice their views will allow them to feel part of the process and provide the opportunity to validate their concerns.

A third barrier is a lack of qualified personnel to staff and maintain the equipment and laboratory and oversee simulation-based learning. Best practices suggest identifying a designated simulation coordinator knowledgeable in simulation-based learning in addition to on-going faculty training could address this challenge. There may be a difficulty in modifying existing curriculums to integrate frequent and meaningful SBLEs. The recommendations I presented in the white paper are generic; each institution administrator will have to tailor them to meet their program outcomes. For best outcomes, the person or persons responsible for this task must be knowledgeable in the best practices for simulation-based learning.

Addressing this problem within the school of nursing is a lofty goal. However, the research site will continue to hire graduates from other programs. Hiring nurses from

alternate pre-licensure programs who may still experience the theory-practice gap perpetuates the identified research problem. A recommendation to address this issue would be to use the existing simulation lab within the research site to expose these graduates to SBLE during the new graduate program periodically during the designated orientation period. These SBLEs can be tailored to be unit specific and to increase the comfort and confidence of the graduate in their ability to integrate their knowledge when confronted with similar patient-care situations in the clinical area.

Further, a personal potential barrier exists related to the potential cost to disseminate the white paper and personally present the research findings to other institutions. To combat this barrier, I will electronically distribute the white paper project in a Portable Document Format to administrators of local nursing programs in an e-mail. I will include an introductory synopsis of the problem prompting the research, the findings, and the implications for practice in the e-mail.

Project Implementation

My goal for developing and disseminating the white paper is to inform and educate the stakeholders in schools of nursing on the impact of the theory-practice gap and the perceived relevance of simulation on addressing the theory-practice gap during the time of preparation for practice to reduce the deficit experienced on entry to practice. My goal is to open dialogue on effecting curricular changes to include high-fidelity SBLE early and with increased frequency utilizing best practices in simulation throughout the curriculum. Initially, I will present the white paper to the school of

nursing located within the local research site. However, it is my hope that the white paper would be of benefit to similar institutions involved in preparing graduate nurses for practice.

Proposal for Implementation and Timetable

Individual institutions will follow their own academic calendar. I suggest that the presentation is made at the end of the final semester, prior to the start of a new academic year to provide faculty with the time to evaluate the recommendations and initiate changes before the start of a new semester. I anticipate that a follow up meeting to present the white paper with recommendations to additional faculty and or support staff may be required to facilitate faculty buy-in.

After the faculty has implemented the recommendations on integrating high-fidelity SBLE, I propose to replicate this study to determine whether the changes affected the graduates' ability to integrate theoretical concepts with less difficulty in the clinical area when practicing as independent clinicians. The use of simulation technology by the pre-licensure programs represented at the time of this study varied; therefore, some programs may require more time to implement the recommendations. The proposed timetable from presentation to the completion of the project at the local site is projected to be approximately two years.

Roles and Responsibilities of Student and Others

As I was the sole researcher involved in this study, I was responsible for data collection, analysis, development of the project deliverable, and disseminating the

research findings. I will maintain responsibility for presentations and distribution of the white paper but allow the administration of the institution to determine the relevant personnel to attend the presentation. The administration should undertake the decision and approval to adopt the recommendations in the white paper with input from the faculty with input from the faculty. The simulation coordinator or a faculty designate will be tasked to work with faculty to determine how best to integrate validated commercially developed exercises, or create self-designed SBLEs and establish how and when it's optimal to integrate them into the existing curriculum and syllabi. It is the responsibility of the faculty to ensure their choice of SBLE aligns with the learning outcomes.

The onus to incorporate SBLE early and with increased frequency lies directly on the faculty. As some course sections may already include SBLE and varied levels of simulation-based learning, I anticipate that the task may be different for each course. As the researcher and presenter of the proposed curricular revisions, it is my responsibility to stress that it is the quality of the SBLE that requires consistency to ensure optimal outcomes for the learners. Revising a curriculum requires time, commitment, faculty effort, and due diligence; I suggested that the curricular modifications be implemented gradually one semester or one course at a time. Students are not involved in curriculum development or revisions and therefore will not have a role or responsibility.

Project Evaluation Plan

My project deliverable for this study was a white paper addressing the theory-practice gap and the use of simulation to reduce the deficit. To evaluate this project I will

employ a goal and an outcome evaluation. A goal-based evaluation seeks to identify if the predefined program objectives were met (Caffarella & Ratcliff Daffron, 2013). My goals of presenting the white paper were to (a) inform on the identified problem, (b) educate the faculty on the benefits of simulation-based learning, and (c) influence a change in academic practice. Obtaining feedback from the major stakeholders, the institution administration, the simulation coordinator, and the faculty at the end of the presentation will help me to determine if my goals were met during the presentation.

The measures to evaluate this outcome are derived from the questions and the level of involvement of the faulty in the discussion and implementation process. These measures will indicate the audiences' acceptance of the curricular revisions. Feedback indicates the recipients' perceptions of the usefulness and viability of the recommendations (Kasworm, Rose, & Ross-Gordon, 2010); which ultimately indicates the likelihood of the group adopting the recommendations. The feedback will also help to strengthen future presentation formats and improve on the deliverable from a faculty standpoint.

I will choose an outcome evaluation as the final method of evaluation for this project following implementation of the recommendations. The outcome to be measured is a difference in the graduate nurses' ability to integrate learned theoretical concepts independently in clinical practice based on the increased integration of high-fidelity SBLEs during prelicensure training. An outcome-based evaluation measures the results or achievement of an explicit outcome of a specific program (McNeil, 2011). A

summative outcome-based evaluation is an apt choice for me to determine if there was a benefit in the change of practice as suggested by the recommendations in the white paper.

I can measure the outcomes by repeating this study with future graduates following the transformation in practice by the school of nursing. I foresee the feedback from these graduates who would have benefitted from the early introduction and frequent participation in high-fidelity SBLEs to infer the level of difficulty in integrating theoretical concepts has reduced, and the simulated learning experiences were crucial in effecting this result. According to McNeil (2011), the outcomes evaluation attempts to identify if there is a measurable difference based on the program change.

Project Implications

My project, the white paper, highlighted the components of the study which was designed to explore the graduate nurses' perceptions of the theory-practice gap experienced on the transition to clinical practice, and examine their perceptions of simulation-based learning as an instructional strategy to address this deficit prior to entry to practice. In the white paper I provided the research findings and made recommendations to revise curricula in pre-licensure nursing programs to integrate high-fidelity SBLE early and frequently each semester for the duration of preparatory training as a means to promote the students' ability in integrating theory into practice; and in so doing reduce the theory-practice gap experienced on entry to the clinical environment. Success in addressing this deficit during preparatory training grooms the nurses at a

higher level of preparation for the challenges faced in clinical practice which ultimately promotes patient safety

Local Implications

The effects of the recommendations in the white paper will directly impact graduate nurses hired by the research facility, specifically from the school of nursing housed in the facility. The curricular changes I recommended in the white paper have the potential to augment existing instructional strategies by fostering enhanced instructional methods to integrate theoretical knowledge into practice. The findings has broader implications for the stakeholders of the pre-licensure program and the research site, as the parent organization, as the suggested revisions support and boost program effectiveness and optimize program outcomes. The results of this study can have a financial impact, by serving as evidentiary support for the basis to securing financial assistance, grants, and donations to initiate and develop existing simulation infrastructure and hiring of manpower support.

State and National Implications

The impact of this study far surpasses the benefits to this local research site and pre-licensure program, to stimulate dialogue and change at similar institutions nationally. The effects of the theory-practice gap are well established in the literature and are of national and global concern. Adopting the recommendations as outlined in the white paper on a broad national scale allows for more graduates with increased ability to seamlessly integrate theory into practice independently.

Social Change Implications

The project has broader impact potential than prelicensure programs and the benefits to the graduates themselves. The potential benefit to society, in general, is the impact on patient safety and the assurance of quality patient healthcare outcomes. The patients' safety and healthcare outcomes are directly linked to the nurse's ability to integrate theoretical knowledge appropriately and fluently, make clinical judgments, and practice in an evidence-based manner.

A reduction in the theory-practice gap and securing patient safety is a global concern. Providing instruction and opportunities that allow the student to strengthen their decision-making skills, enhance team collaboration and team work, and obtain hands-on clinical practice without risk of harm to human life has the scope to reduce the theory-practice gap. The implication for positive social change based on the results from this study would be delivery of safe nursing care by graduate nurses who are prepared to integrate and apply theoretical knowledge with less difficulty in the clinical area.

Summary

This project with my recommendations evolved from an identified problem and the analysis of data which ensued from the research; these findings addressed the theory-practice gap experienced by graduate nurses and formed the basis for my recommendations for curricular revisions to include high-fidelity SBLE in prelicensure nursing programs. Section 3 included the justification for the use of a white paper as the genre for the project deliverable, a literature review supporting the applicability of the

white paper and the development of the project, and the implications of the recommendations suggested in the paper (see Appendix A). In section four I will outline the project's strengths and limitations, and make recommendations for current practice and future research. Finally, I will discuss my personal growth as a scholar and researcher.

Section 4: Reflections and Conclusions

Introduction

The problem I addressed in this study was the hiring of graduate nurses in high acuity patient care areas who encounter a difficulty integrating and applying learned theoretical concepts on entry to clinical practice. I interviewed 13 graduate nurses, seeking to elicit their perceptions of the theory-practice gap when they transitioned from the role of students to graduate nurses in the clinical area. In addition, I sought to explore their views of simulation during prelicensure preparatory training to determine if simulation had an effect on their personal experience and the theory-practice deficit. The final section of this study will include the strengths and weaknesses of the project as well as my proposed suggestions for alternative approaches. I will also reflect on the importance of my work, and what I accomplished as a scholar throughout this process. Finally, I will present implications and recommendations for future research.

Project Strengths and Limitations

Creating a white paper with curriculum revisions was the genre I chose as my project deliverable. White papers serve as educational and informative documents, but they can also be lengthy. I will discuss the limitations and strengths I identified with this genre and suggest a possible alternative for the dissemination of findings and recommendations.

Limitations

One limitation of presenting the recommendations in the form of a white paper is soliciting buy-in from stakeholders. Lacking the understanding of the magnitude of the theory-practice gap might deter stakeholders in other institutions from viewing the resolution of the theory-practice gap as their responsibility. In these instances, it is likely the recommendations may be met with resistance and an unwillingness to adopt the curriculum revisions. Institutions may also have financial restrictions that deter the implementation of the recommendations.

The white paper is 19 pages in length. This may prevent faculty from dedicating time out of their schedule to read the paper. There are a lot of data presented in the document, and faculty who do not attend the presentation may lose interest in reading such a lengthy document. I am giving consideration to creating a condensed version of the recommendations in tri-fold format, which would exclude details of the research and data analysis.

Strengths

A major strength of this project presented in the form of a white paper is the potential to be disseminated to a large audience. The audience can obtain and benefit from reading the white paper even without attending a presentation. The option to create a PDF and circulate the white paper via e-mail widens the possible audience I could reach. The strength of presenting my research findings in a white paper is my ability to tailor the paper to meet the needs of the audience. Institutions may adopt all or a portion of the recommendations as stated in the white paper.

An additional strength of this white paper is the wealth of knowledge presented due to my choice to include the background information that prompted the study, the results from the data analysis, and the recommendations including supporting evidence from current literature. Providing this volume of detail facilitates the understanding of the magnitude of the problem that prompted the study. School administrators could utilize the document to secure funding and garner financial assistance to expand or develop their simulated learning environment. Though the white paper serves to educate and inform, I presented the information in an easy-to-read format to allow readers to identify with the challenges as stated and to initiate dialogue regarding the recommendations.

Recommendations for Alternative Approaches

There are multiple options for an individual to present their research findings. An alternate approach I could take with the results would be to conduct a professional development workshop. For this workshop, I could develop an outline that includes:

- Educating faculty on the theory-practice gap, experiences of the graduates, and the immediate and long-term effects of the theory-practice gap on the graduate, the employer, and the patient;
- Introducing simulation-based learning from a constructivist standpoint;
- Presenting the research findings and the themes obtained through data analysis; and
- The suggestion of recommendations to integrate high-fidelity SBLEs through the curriculum.

The challenge to conducting a seminar of this magnitude would be extended to planning the presentation, determining the location, and inviting nursing faculty. To address change on a local level, I would be tasked with replicating this faculty development session at similar institutions.

Scholarship, Project Development and Evaluation, and Leadership and Change

In this subsection, I will conduct my self-reflection and evaluation and share my thoughts on my growth as a result of this journey. The most learning occurred for me in my ability to accept criticism in a constructive manner that fostered growth. I was able to view feedback from my committee members and learn from their expertise. Through the process and in retrospect, I see where their guidance and my motivation to learn enhanced my scholarly writing, increased my attention to grammar, and facilitated the direction for this project immensely.

Self as Scholar

From completing this project, I have learned the art of writing for a wide audience. It was interesting to see how my writing could be misinterpreted due to ambiguous or incomplete sentences and poor sentence construction. I used the Writing Center provided by Walden University and gained confidence in my ability to write and articulate my intentions and thoughts.

I have also grown to appreciate the value of scholarship. I am currently entertaining opportunities to disseminate my study and research findings. While completing this study, I was able to identify other areas of interest that I can pursue to

build on this research. One such area is conducting research on evaluation of the graduate nurse program at the research site.

Though I am still a novice researcher, I now have a new level of admiration for researchers and their commitment to the process to contribute to their respective bodies of knowledge. A particular challenge for me was developing a level of comfort with face-to-face interviews and data transcription. Though in my daily academic functions I interview potential students as part of the admissions process, the focus of interviews for a research study is different. The interviewer has to ask the same questions in such a manner to elicit similar responses without leading the respondent. Verbatim transcription was a very time-consuming process; however, I found the task beneficial because during transcription I was able to start identifying recurrent themes and immerse myself in the data.

Practitioner

I have also noted a change in my practice in academia. As my knowledge expanded and I reflected on my own academic practices, I have been driven to ensure I incorporate more learner-centered and active teaching strategies in my classroom. I accomplish this by including case studies and discussions of real-world patient care examples to ensure the students leave with an increased ability to comprehend and apply the concepts taught when they have their clinical experiences.

In addition, I am more aware of my instructional style in the clinical environment and opt to include my recommendations as I practice. I am also more mindful of ensuring

the student has the opportunity to recall and integrate learned theoretical concepts when determining a plan of care for their assigned patients. By engaging the students in these practices, it encourages them to understand the basis for their actions.

Project Developer

As a project developer, I gained the understanding that though I am presenting my research findings and my suggested recommendations; I have to be cognizant of my audience and their needs. If the institution does not identify with the problem or the project does not align with their curriculum and mission, then the project will not achieve success. The attainment of success is contingent on my awareness of my own limitations as a researcher and a willingness to seek and accept help from my peers and experienced researchers.

Reflection on Importance of the Work

This study and the reported results are important because my recommendations address an identified deficit and have contributed to research regarding the use of high-fidelity SBLEs in nursing education. Because there is an abundance of research regarding simulation, the benefits of simulation, and faculty perception of simulation, this research is valuable as it explores the perceptions of graduate nurses' regarding this instructional strategy, a little-researched area. The findings are beneficial as the recommendations provided are based on feedback from graduates who have experienced teaching using simulation technology and supported by literature on best practices for optimal learning outcomes.

Future implications for this study would be the replication of this study 2-to-4 years following the adoption of the recommendations in the white paper to identify if there has been a change in graduate perception or to evaluate if adoption of the recommendations from the white paper reduced the theory-practice gap as experienced by graduate nurses. The time span of 2-to-4 years will provide the opportunity for adoptions of the recommendations and for the graduates to attain some clinical experience from which to reference. Also, the duration of preparation for nursing students is 2-to-4 years dependent on entry level degree.

The results of this study highlight the need for school administration and clinical and academic faculty to consistently review instructional strategies and seek out alternate instructional strategies that include current and advanced technology to promote learning. Being stagnant with teaching practices in a profession that is constantly evolving does not sustain best practice outcomes or facilitate growth in educational outcomes. The findings suggest a need for a change in practice and possibly curriculum changes.

Implications, Applications, and Directions for Future Research

I achieved data saturation in this study after interviewing 13 graduates. Because I centered on the individual experiences and perceptions of the graduates in this study, in addition to the small sample size, the findings cannot be generalizable to other graduates. However, the findings do add to the existing body of knowledge that support the existence of the theory-practice gap and attest to the superiority of simulation-based learning in supporting the transfer of learning. Opting to do a quantitative study and

expanding the sample size to include more graduates may make the findings more generalizable to a larger population. Future research should consider the use of alternate or multiple research sites to ensure all factors contributing to the theory-practice gap on entry to practice as they relate to the employment site are considered and taken into account. For this study, I interviewed the participants based on their retrospective experiences on entry to practice and their prelicensure education. Future researchers could interview the nurse managers of the graduates to provide the perspectives on the performance of the graduates with and without simulated learning experiences.

Simulation is a flexible and effective tool to assist educators in the classroom. For a practice profession, educators should look to enhancing their didactic methods with more active alternatives. Simulation-based learning is not enough where low and medium-fidelity technology limits the instruction to task-based or unrealistic patient care presentation. Advancing from low to high-fidelity technology as learning and knowledge increase in complexity is better supported by the integration of realistic SBLEs. In this study, I focused on a single instructional strategy, and there is a potential to explore alternate options to support the integration of theory to practice in prelicensure programs.

The chief implication of this project is the contribution to social change. The project will start the dialogue necessary to revise curriculums to introduce and integrate best practices and evidence-based strategies to augment instruction that will have a bearing on addressing and possibly reducing the theory-practice gap for graduates entering clinical practice. The far-reaching consequence is the amplified ability for

graduates to critically think, make sound clinical judgments, and easily integrate theoretical concepts into practice evidenced by enhanced patient safety and improved patient outcomes.

Conclusion

A change in academic practice, particularly the revision of a curriculum, is undoubtedly a daunting task. The potential impact that the changes I recommended could achieve far outweigh the stresses involved in the process. The value of this project lies in the ability of the white paper to identify the problem and the possible solutions through the eyes of the graduates who have lived these experiences and understand how practices in prelicensure programs either inhibited or promoted their ability to integrate theory into practice. In this section, I offered my self-reflections on the research process and conveyed the strengths and limitations of the project deliverable, a suggestion for a feasible alternative approach, project implications, recommendations for future research, and with an analysis of myself.

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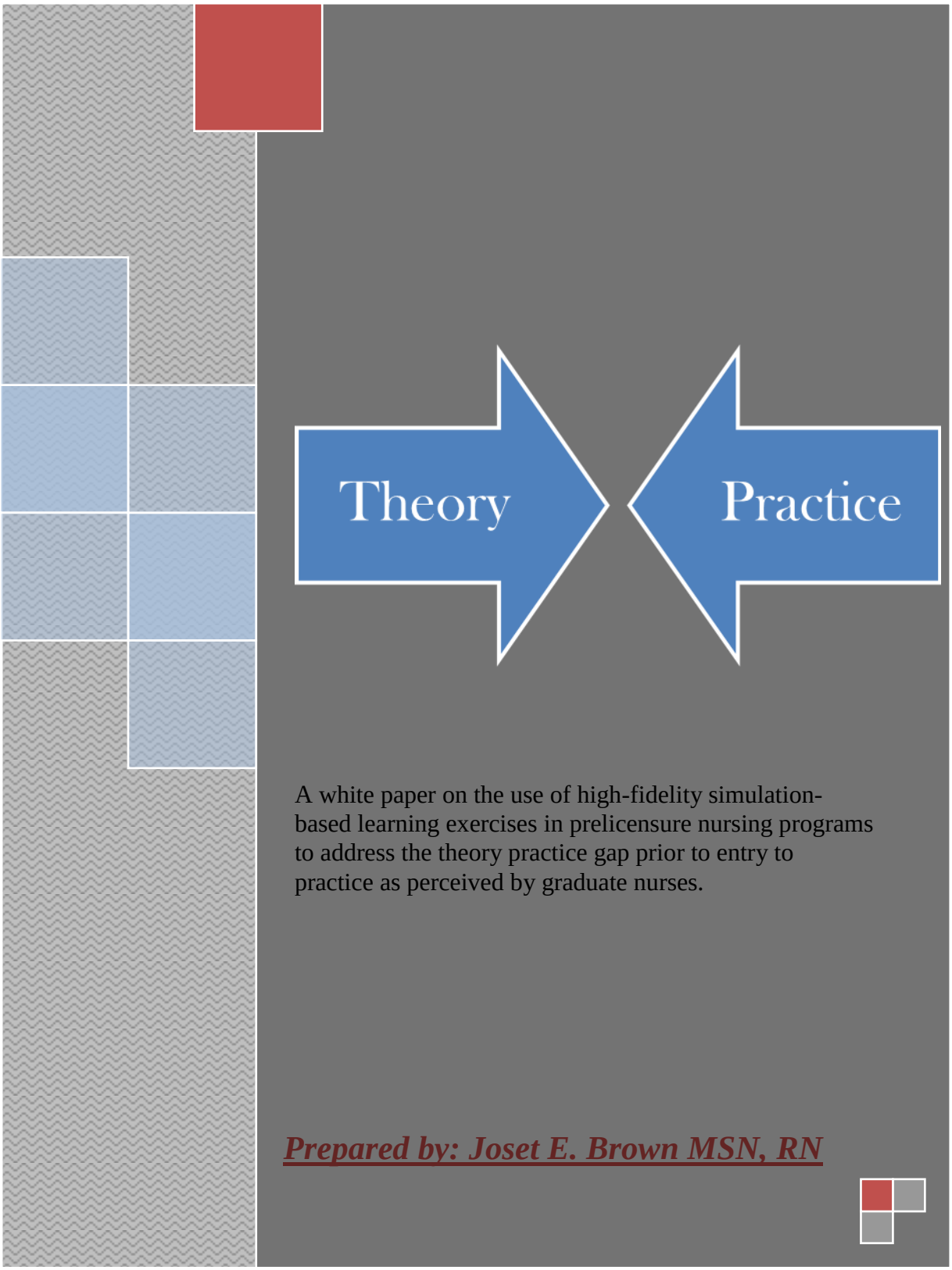
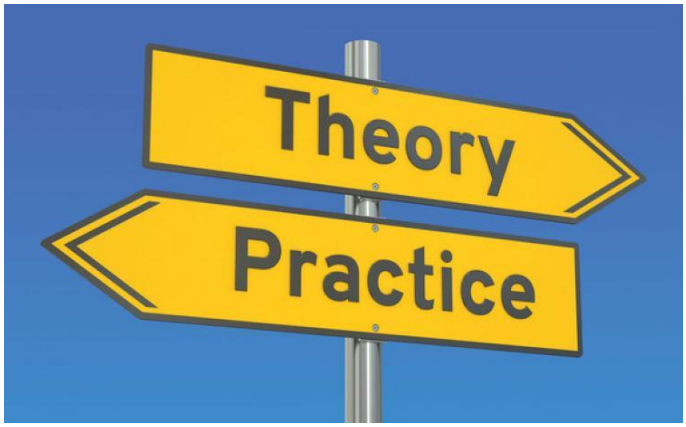
Appendix A: The Project



Introduction

The purpose of this study was to explore the theory-practice gap from the perspectives of graduate nurses based on their experiences, and to determine their perceptions of simulation in prelicensure programs as a strategy to address and reduce the gap prior to entry to practice. For this hermeneutic phenomenological study, I engaged in semi-structured interviews with 13 graduate nurses with two years or less clinical experience in a community hospital in Northern New Jersey. The graduates represented five prelicensure programs from two states within the United States. Data analysis revealed all the graduates experienced the theory-practice gap on their transition to clinical practice as independent practitioners with variations in the extent; in addition, the graduates voiced aspects of their programs which contributed to reducing the challenges experienced during the transition period. The overwhelming feedback was the effect of high-fidelity simulation-based experiences that supported and supplemented theoretical content during prelicensure preparation or the new graduate program. The recommendations put forth in this white paper is derived from the perspectives of the 13 graduate nurses and supported by the International Nursing Association for Clinical Simulation Learning (INACSL) Standards of Best Practice and the results of the landmark National Council State Boards of Nursing (NCSBN) National Simulation Study.



The problem

The problem that prompted this study was the hiring of increasing numbers of graduate nurses in a community hospital in northern New Jersey to work in high acuity patient care areas who experience a difficulty in integrating learned theoretical concepts in the clinical environment, defined in the literature as a theory-practice gap or deficit. At the new employee orientation held September 2016, there were 28 registered nurses, ten of whom were newly licensed graduate nurses with no clinical experience as practicing clinicians. The theory-practice gap is defined as a lack of proficiency demonstrated by graduate nurses who are theoretically but not practically equipped to apply theory and knowledge to practice in the clinical environment (Ajani & Moez, 2011; Scully, 2011). This white paper presents my findings from the qualitative phenomenological study, supporting data from an exhaustive literature review on the theory-practice gap and simulation as an instructional strategy, and my recommendations based on the analysis of the data from the study.

Research Findings

Data analysis revealed all the graduate nurses experienced a difficulty integrating theoretical concepts on the transition to the patient care environment as independent clinicians. The extent of the deficit was not affected by prelicensure program or degree attained on completion of the program, with graduates averaging 14 months before they felt the gap was reduced by experience and exposure.

The research identified inconsistencies in prelicensure nursing programs regarding strategies to foster application and integration of theory in clinical practice, possibly contributing to a theory-practice gap experienced by graduate nurses globally. The graduates' opined insufficient clinical time, lack of consistent opportunity to care for acutely ill patients, inability to administer medications, and difficulty in fully acclimatizing to the full roles of a nurse as contributing factors to the hardships faced in being able to apply learned concepts in a practice environment. Sanford (2011) added that unpredictable patient care environments and patient care assignments result in reduced exposure to patient care experiences. However, employers expect graduates prepared at the highest level of preparation to work in high acuity areas.

To ascertain the perceptions of the graduate nurses on their experiences with the theory- practice gap and simulation as a means to addressing the deficit, I conducted a qualitative phenomenological research study to answer the following questions:

Overarching research question. Is simulation an effective instructional strategy in pre-licensure nursing programs to address the theory-practice gap experienced by graduate nurses on entry to clinical practice?

Sub-questions

- What are the graduate nurses' perceptions of their ability to apply learned theoretical concepts in their clinical practice?
- What strategies do graduates believe could be implemented in pre-licensure programs to facilitate the application of theory to clinical practice?
- What is the graduates' perception of the impact of simulation on their application of theory to practice in the clinical area?

White Paper Goals

The goals of this white paper are to:

- Communicate the findings obtained from the data analysis.
- Convey the benefits and best practices in simulation education in pre-licensure nursing programs.
- Identify recommendations to effect changes in curriculum to address the theory-practice gap prior to entry to practice.

The Theory-Practice Gap

Upon entering clinical practice, graduates face challenges with role transition, unfamiliar and complex work environments and expectations (Bull, Shearer, Phillips, & Fallon, 2015, Fink et al., 2008). In addition to these challenges, the literature suggested a deficit exist in the ability of the graduate nurse to appropriately integrate learned theoretical concepts and knowledge in the delivery of care, termed the theory-practice gap (Ajani & Moez, 2011; Scully, 2011). There is a concern that traditional classroom theory delivery compounded by reduced clinical time due to lack of available clinical placement sites is insufficient to meet the needs of a patient population presenting with more acute and complex medical conditions requiring corresponding acute nursing care.

Significance of the Theory-Practice Gap

The theory-practice gap is not only problematic for the graduates as they try to adjust to their new roles, but also to the patients they care for as this deficit interferes with their ability to assure positive clinical outcomes related to clinical judgment and clinical decision making. The effect of the theory-practice gap lies in the quality of care

the patients will receive and ultimately patient safety. Increased errors associated with medication administration, patient falls, and sentinel events accounted for negative clinical outcomes associated with novice nurses not adequately prepared to function in the clinical area (Hickerson, Taylor, & Terhaar, 2016).

In addition, nurses experiencing the inadequacy related to the theory-practice gap have low job satisfaction which results in high turnover rates at the employing agencies (Hickerson, Taylor, & Terhaar, 2016), proving to be a costly concern for the employing agency. The deficit has immediate effects on the confidence and performance of the graduate but far-reaching effects on the quality of care provided and long-term costs for the employing agency (Hickerson, Taylor, & Terhaar, 2016).

Research Findings

The graduate nurses' perceptions of factors contributing to their theory-practice deficit were voiced as: Insufficient clinical time, lack of opportunity to care for acutely ill patients, inability to administer medications at affiliating clinical site, and difficulty in fully acclimatizing to the full roles of a nurse. These findings mirror the problems that have plagued prelicensure programs as related by Robinson & Dearmon (2013). In response to the factors that contribute to the theory-practice gap, prelicensure programs nationally have integrated simulated learning to varying degrees in the curriculum.

All participants reported benefit in learning with simulation-based learning either during their prelicensure programs or from the simulated learning scenarios presented during the new graduate orientation program. Participants reported most benefit from

simulations that included: High-fidelity technology, simulation-based learning exercises (SBLE), incorporation of standardized patients, a high level of realism in simulated exercises, opportunities to build communication, simulations facilitated by knowledgeable educators, and comprehensive debriefing immediately following the SBLEs.

High fidelity technology

A challenge voiced by the graduates was the unrealistic and low fidelity technology employed in some simulation exercises. Efforts should be made to integrate high fidelity technology when the simulation exceeds task-oriented exercises. The ability of a mannequin to adopt more life-like responses such as verbally responding and simulating cardiac rhythm changes in response to student interventions adds to the realism of the exercise and increases integration of knowledge. One graduate verbalized dissatisfaction with the low fidelity task trainers used in her pre-licensure program. The problem stemmed from unrealistic expectations and a lack of responses from the mannequin.

Incorporation of standardized patients

Engaging with the standardized patients allowed for practice with communication, and immediate responses to interventions and real assessment findings. Only one graduate experienced incorporation of a standardized patient during the SBLE. The ability to interact with a person enhanced the experience which was considered more

valuable as the opportunity enabled communication in real time, real and relatable human responses and genuine assessment findings.

Increased level of realism

As students progress through the curriculum and their clinical objectives, roles, and expectations increase, so should the realism of the SBLE. Students should be exposed to scenarios that realistically mimic the experiences they will experience in the clinical area. A shortcoming identified by two graduates who were exposed to low and medium fidelity simulated exercises was the inability to adjust to the unrealistic environment and being told to "imagine this was real" or "having the instructor responding at all times for the mannequin."

Opportunities to engage in communication with members of the healthcare team

One major challenge experienced by all graduates interviewed was the difficulties they faced communicating with members of the healthcare team specifically healthcare providers. As students, the opportunity does not present itself for them to participate in communication such as taking orders or calling providers for changes in patients' status. Integrating this element during a SBLE provides an opportunity for the student to identify when to call and how to communicate effectively with a healthcare provider to accurately reflect the status and needs of the patient. Practicing therapeutic communication can also be facilitated for communicating with patients, and opportunities to collect a health history and practice health education and health promotion should be included.

Knowledgeable faculty

The graduates' voiced that learning occurred in the simulation laboratory; however, the competence of the instructor leading the simulation contributed significantly to the transfer of learning. The educator's knowledge of the scenario, competence with the technology, and the comfort and ability to stimulate discussion in debriefing following the simulation enhanced the benefit of the exercise. The graduates added that the instructors knowledge of the SBLE, skill in knowing when to provide assistance, and competence with debriefing were key elements that supported their learning from the exercise.

Comprehensive debriefing occurring immediately following SBLE

The majority of the graduates agreed that the most beneficial aspect of simulation was the debriefing that occurred following the SBLE. With a goal of dissecting and reflecting on the experience leading to the advancement of knowledge for future encounters (Maestre & Rudolph, 2015). Graduates' related that the sharing of information that occurred during debriefing prompted the recall of concepts and clarifications of areas previously misunderstood. Debriefing reconstructs the event to allow participants to apply and expand on previous knowledge based on performance, decision making and consequences of action during the SBLE (D'Souza, Arjunan, Venkatesaperumal, 2017; Wotton, Davis, Button, & Kelton, 2010)

Potential solutions

The landscape of nursing education has and continues to change. As technology advances, and students present with increased technological awareness it is essential for

nurse educators to continually improve their curriculum and educational approaches at a pace that integrates technology to meet the needs of the students and to prepare graduates to function in environments driven by technology. In addition, millennials entering the classroom environments enter with advanced technological knowledge. As educators striving for learner-centered environments, where active teaching strategies are typical, the need to adjust pedagogical practices to meet the needs of the learner is imperative.

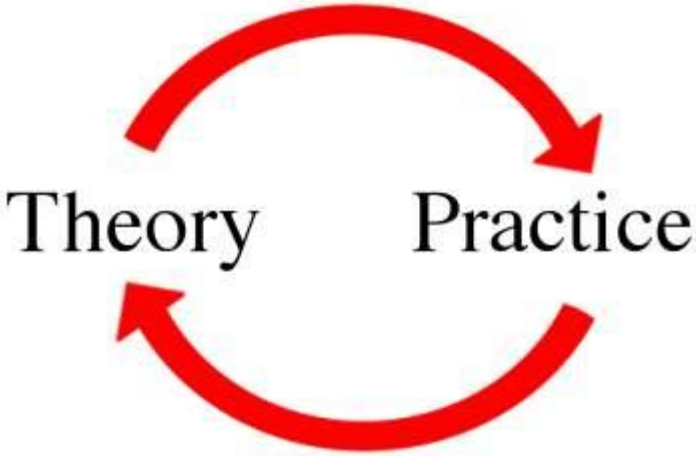
There is an innumerable amount of research on the viability of simulation technology and its benefits to nursing education; however, a scarcity exists in investigating simulations effect on addressing the theory-practice gap prior to entry to practice and from the graduate nurses' perspective.

Demonstration of competence in task performance does not translate to the ability to think critically and exercise shrewd clinical judgment. The essence of producing optimal clinical outcomes lies in the practitioners' ability to integrate knowledge appropriately, prioritize care, identify and respond to critical changes in patient status, make reasonable clinical judgments, communicate their findings to the provider fluidly, and perform these actions within a limited span of time with a high level of accuracy.

To ensure clinical competence nurse educators are tasked with the dilemma of exposing students to environments that they are not prepared for with a potential for increased risk to life (Lateef, 2010). Nurse educators must, therefore, deliberately incorporate strategies to provide experiences that promote this competence without incurring unnecessary and unintentional harm; environments in which increased exposure

and practice increases comprehension, skill mastery, competence, confidence, and enhances integration of knowledge in clinical practice. Preparing these nurses with these strategies equips them to function in these environments.

Identified Solution



A lecture is the traditional method and remains an effective form of content delivery. Lecture alone, however, does not appear to be enough to meet the demands of a practice-based profession that requires integration of theory into clinical practice. There is concern that traditional classroom theory delivery compounded by reduced clinical time due to lack of available clinical placement sites is insufficient to meet the needs of a patient population presenting with more acute and complex medical conditions requiring corresponding acute nursing care. Nurse educators must integrate additional and more engaging strategies that can assist students in incorporating conceptual knowledge into clinical practice (Crookes, Crookes, & Walsh, 2013).

Nurse educators must, therefore, adopt teaching practices to include strategies that address such complex and comprehensive learning needs to prepare their student's as competent independent clinicians' for their future roles regardless of where they will be

employed. Theory, task-based teaching, and limited clinical exposure are no longer enough to prepare graduates to be placed in acute care and highly specialized areas.

Technology provides engaging controlled learning environments that when combined with traditional content delivery strategies cultivate enhanced readiness for the practice environment (Crookes, Crookes, & Walsh, 2013). Simulation technology offers an adjunct as an instructional strategy that promotes the incorporation of theoretical knowledge and provides an opportunity for task development; in addition, SBLE engages the student in clinical decision making, prioritization, communication, and critical thinking.

Simulation technology meeting the needs of the learner: Simulation technology is well suited to transition the novice learner to an advanced level of skill proficiency with the application of content into practice as experiences can be tailored or designed to meet the specific needs of the learner. Simulated learning environments assist the learner to progress from a beginner to an expert level (D'Souza, Arjunan, & Venkatesaperual, 2017), through frequent exposure, repetition, and reflection.

The potential to incur harm in the clinical environment is ever present, to reduce this risk students' are not generally assigned acutely ill patients. This practice however, minimizes the students' exposure and experience with the realities of caring for the critically ill and caring for patients with rapidly deteriorating conditions. Simulation-based learning is an engaging instructional method that immerses the learner in active teaching-learning environments that mimic real clinical environments to promote skill

mastery and integration of knowledge without personal risk (Lateef, 2010). Simulation-based learning provides hands-on patient care experiences in a realistic care environment without the possibility of incurring human harm (Maestre & Rudolph, 2015).

Conceptual Framework

Incorporating active teaching strategies that promote cooperative and experiential learning techniques facilitates learning from a constructivism standpoint. In response to the factors that contribute to the theory-practice gap, prelicensure programs nationally have integrated simulated learning to varying degrees in the curriculum. The experiential learning that results from participating in SBLE is supported by the theory of cognitive constructivism proposed by Jean Piaget and Lev Vygotsky. The concept of constructivism is based on the learner's ability to construct meaning based on their experience which translates to individualized learning (Merriam, Cafarella, & Baumgartner, 2007). Simulation fosters collaborative learning where students learn with and from each other through sharing of information and participation in decision making during the exercise (Jefferies, 2005).

Vygotsky (1978) added that the interaction and engagement that occurs in these environments supports collaborative learning serving as the premise for his theory of social constructivism. Simulation encourages participants to learn with and from each other as they engage in problem-solving, and team communication. Creating an environment where learning is both individual and a social process facilitated by the

nature of the activity, the interaction during the activity, and the discussions following the activity.

Cognitive constructivism refers to the expansion of knowledge based on a personal experience, while social constructivism adds that the social interaction between learners enabled by a knowledgeable facilitator promotes learning (Powell & Kalina, 2009). The interactive component achieved during a SBLE is a key element in promoting transfer of learning. When used appropriately, simulation-based learning is an active teaching strategy that allows the learner to immerse themselves in the experience, using existing knowledge to construct new meanings from the exercise.

Recommendations

The graduates' shared all simulated experiences were not beneficial, asserting the outcome was reliant on the quality of the experience. The following recommendations were derived from the participants' responses during the interview, grounded in literature, and supported by the International INACSL Standards of Best Practice and the results of the landmark NCSBN National Simulation Study.

The primary recommendation is to integrate simulation-based learning based on the theory of cognitive constructivism early in preparatory training, with increased frequency to support the needs of the learner as they advance through the program.

The integration of simulation-based learning exercises (SBLE's) supported by the

Use of high fidelity technology in the SBLE

Adoption of a guiding framework

Facilitated debriefing immediately following the SBLE

Use of a dedicated simulation team

Alignment of simulation with course objectives

Use of High Fidelity in SBLE

Graduates report simulation connects theory and clinical practice (Sanford, 2010). Simulated learning activities must be deliberate and structured to evoke transfer of learning by providing realistic patient care scenarios or situations (Carsen & Harder, 2016; Nelson, 2017). According to Benner et al. (2010), educators must present environments for students that promote clinical reasoning and judgment (Meyer et al., 2014).

Simulation technology varies from low fidelity task trainers to more realistic high fidelity technology. As the student's level of knowledge and clinical expectations increases, high fidelity technology eliminates limitations voiced by the graduates; a lack of realism and a reliance on imagination to complete the exercise when low fidelity simulators were used in SBLE. The higher level of fidelity increases the likelihood of mimicking more acute care experiences requiring students to incorporate previous knowledge in identifying critical changes and in making clinical decisions (Nelson, 2017). High fidelity simulation offers the most realistic patient responses, allowing the learner to practice complex level proficiencies (Dowie & Phillips, 2011).

The strategies employed in the teaching-learning environment must allow for the development of new knowledge, strengthening of cognitive skills, and practice of

decision-making skills contributing to clinical competence (Nelson, 2017). Educators can utilize high fidelity technology to mimic acute care situations that may not be available to the student during training but will be eminent during practice (Wotton, Davis, Button, & Kelton, 2010). The advanced capabilities of a high fidelity mannequin support knowledge retention related to the high realism experienced (Wotton et al., 2010), as it closely represents the actual patient care environment and responses. Further, simulation-based learning should prepare the student for real-world proficiencies, similar to what they would encounter in traditional clinical time, and not mere psychomotor or task competence.

Adoption of a Guiding Framework

The NLN Jeffries Framework to design, implement and evaluate simulations in nursing education as presented by Jefferies (2005) is based on a combination of faculty and student characteristics that support best practices and optimal learning outcomes. The framework suggests five elements (the facilitator, the learner, academic instruction or practices, simulation design and learning objectives) which contribute to positive learning outcomes through simulation-based learning (Carson & Harder, 2016; Jeffries, 2005). Optimal outcomes are reliant on the careful integration of these constructs to ensure the simulated experience supports learning.

Facilitated Debriefing Immediately Following SBLE

The act of participating in SBLEs is not enough to support learning. One of the most valuable aspects of simulation-based learning, as reported by the graduates', was the

debriefing. Simulation learning advances the process of learning through the opportunity to reflect on the experience. Debriefing is a learner-centered activity where participants reflect on their actions but also receive noncritical constructive feedback from the instructor to facilitate knowledge development and creates a context for constructive learning to occur (Maestre & Rudolph, 2015). Debriefing prompts a reflective component which facilitates construction of knowledge through critical dissection of the experience and the participant's actions or performance (Decker et al., 2013; Sanford, 2010). Informed feedback and the interaction between faculty, student and peers during debriefing constructs new knowledge, fortifies existing knowledge, and enhances learning through reflection on their performance (Decker et al., 2013; Jeffries, 2005).

The INACSL standard VI best practice posit that all simulated experiences be followed by a debriefing session led by an individual proficient in the art of debriefing to facilitate the participants' reflection on their actions during the exercise e (Sittner, 2015). The most effective results from debriefing will occur with an individual trained in the act of facilitating discussions in a manner to encourage reflection (Rutherford-Hemming, Lioce, & Durham, 2015). According to INACSL guidelines, as the reflection during debriefing is based on the performance the facilitator should also have witnessed the experience to be able to direct the reflection and provide constructive feedback (Decker et al., 2013). Discussions during debriefing should elicit descriptions of the event, reflection on action and decision making, include a critical analysis of the outcome, and suggestions to improve future outcomes (Brisbois & Asselin, 2016).

Use of a Dedicated Simulation Team

Teaching with simulation requires proficiency with the technology and skill in the development of realistic SBLE. Trained faculty members whose responsibility is solely dedicated to simulation learning is optimal, equipped with knowledge in utilizing the technology to its maximal potential to meet the needs of the learner at their level. An expert facilitator or simulation team competent in simulation as an instructional method is crucial to the success of simulation-based learning (Boese et al., 2013).

Following a two-year study by the NCSBN comparing outcomes for students with varied simulation and clinical experiences, it was determined that up to 50 % of the traditional clinical time may be substituted with simulation-based learning (Aldridge, 2016). It must be noted, however, that during the study the simulations were led by a dedicated team of educators who were trained in simulation best practices. Successive to the NCSBN study, the National League for Nursing (NLN) recommended educators involved in simulation-based learning are afforded adequate training and preparation to assure positive learning outcomes (NLN, 2015).

Developing well-written scenarios is a skill, training must be provided to increase staff competency and proficiency in instruction with simulation technology to ensure effectiveness (Dowie & Phillips, 2011). The NCSBN recommends faculty should receive training and engage in continuous professional development based on best practices in simulation technology (Alexander et al., 2015). Well trained simulation staff can

facilitate learning by using best practices to promote student engagement, provide constructive feedback, and enable reflection during the debriefing process.

Each student will present at their level of knowledge and comprehension. The goal of the team is one of facilitation than instructional to promote a learner-centered environment (Rutherford-Hemming, Lioce, & Durham, 2015). Standard IV of the INACSL guidelines addressing facilitation recommends facilitators skilled in utilizing the simulated exercises, feedback, and possesses knowledge of simulation technology to assure optimal learning outcomes (Franklin et al., 2013). Skill is required to provide adequate support and guidance for the learner to achieve the objectives of the exercise and promote transfer of learning (Boese et al., 2013).

Alignment with Course Objectives

Simulation-based learning should be well incorporated into the existing curriculum, not seen as an additional component. Clearly defined goals and objectives should be the first step in developing SBLEs (Aebersold & Tschannen, 2013). The NCSBN recommends participants are made aware of the goals and expected outcomes for each experience prior to participating in the exercise (Alexander et al. 2015; Sittner, 2015). In addition, INACSL standard recommends the participants be aware of the goals and objectives of the SBLE prior to the experience (Moulton, Lucas, Monaghan, & Swoboda, 2017). When students know their expectations, they can prepare adequately, and the objectives can serve as a guide to retrospectively gauge their performance on completing the exercise.

Objectives for simulated experiences must be supported by program outcomes and adhere to best practices (Sittner, 2015). To integrate simulation-based learning seamlessly and assure positive learning outcomes, faculty and simulation staff should collaborate to develop or utilize valid SBLEs that correspond to classroom content, create an accurate representation of the clinical area, reflect current practice, and that are aligned with the course objectives.

Aligning simulation objectives and scenarios to course objectives ensure maximum benefit for the learner (Wedig, 2010). This alignment ensures continuity of learning and transfer of knowledge. Failure to align the objectives and SBLE results in exercises that appear disconnected from prior learning and falls short in reinforcing and strengthening learning (Wedig). In accordance with INACSL standard IX: Simulation design, a well designed SBLE has clearly articulated measurable goals that serve as a guide for developing the exercise and measuring outcomes (Lioce, Fey, Mariani, & Alinier, 2015).

Conclusion

There is no one method to develop the cognitive ability of students to critically think and function in a real-world acute care setting. Nurse educators must therefore incorporate other strategies to support classroom lectures, and augment reduced clinical hours that promote the integration of theory to clinical practice. Findings from this study support existing research that touts simulation as a bolster for confidence and competence. This white paper recommends the adoption of high fidelity simulation-

based learning exercises utilizing best practice standards and introduced early and offered frequently through the curriculum in prelicensure programs.

All simulation training is not created equal. There is a call and a need for more SBLE utilizing high fidelity mannequins to more accurately mimic the real clinical environments and clinical decisions the graduates will face on entry to practice. The impact of simulation is reliant on the quality and frequency of the simulated experiences. The SBLE should be designed to ensure maximum efficacy and geared to prepare the graduates for comparable real-world encounters. Simulated learning activities must be deliberate and structured to evoke transfer of learning by providing realistic patient care scenarios or situations (Carsen & Harder, 2016).

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Appendix B: Invitation to Participate in Research Study

Dear graduate nurse,

You are invited to participate in a research study about graduate nurses' perceptions of simulation as an instructional strategy in prelicensure programs in addressing the theory-practice gap experienced on entry to clinical practice. The researcher is inviting nurses who have graduated from an accredited school of nursing within the past five years, who have been practicing for a maximum of two years since completing their pre-licensure preparation, who have had experience with simulation, and who are fluent in the English language to participate in the study. This study is being conducted by a researcher named Joset Brown, who is a doctoral student at Walden University. You might already know the researcher as a nursing instructor in the School of Nursing, but this study is separate from that role.

Participation in this study is voluntary. You are free to accept or decline this invitation. If you decide to volunteer to participate, you may withdraw from the study at any time without penalty. The researcher will follow up with all volunteers to let them know whether or not they were selected for the study. If you feel you understand the study well enough to make a decision about it, please indicate your interest and willingness to participate by emailing the researcher at xxxxxxxxxxx, the researcher will then follow up with a research consent prior to the start of the study.

Appendix C: Interview Protocol

The interview questions for the graduate nurses will be guided by the following questions:

1. What were your experiences during your transition from a student to a graduate nurse?
2. Did you encounter difficulty integrating learned theoretical concepts in the clinical environment as a graduate nurse?
3. What factors during pre-licensure programs do you think would have reduced the level of difficulty experienced?
4. What were your experiences with simulated exercises during pre-licensure preparation?
5. What effect did the simulated exercises have on your ability to integrate theory in the practice environment?
6. Do you perceive simulation as an effective instructional strategy to reinforce theoretical concepts in the practice environment?

Appendix D: Permission to use Tool

Casey-Fink Graduate Nurse Experience Survey

Home
Health care professionals
Professional development
Casey-Fink surveys
Casey-Fink Graduate Nurse Experience Survey

Thank you for completing the information form. The survey tool and related documents are available for download via the links below.

You have permission to use the survey tool to assess the graduate nurse experience in your setting. Please note that this tool is copyrighted and should not be changed in any way.

We hope that our tool will be useful in your efforts to enhance the retention, professional development, and support of graduate nurses in your practice setting.

Kathy Casey RN, MSN
Regina Fink RN, PhD, AOCN, FAAN

Graduate Nurse Experience Survey

Appendix E: Permission to amend tool

From: Fink, Regina XXXXXXXXXX
Sent: Friday, November 4, 2016 3:34 PM
To: Joset Brown; XXXXXXXXXX
Subject: Re: Permission to use survey tool

Joset,

You are welcome to use our instrument - please credit our work whenever you use it even if you adapt our tool.

Please know if you decide to change or alter our survey, reliability and validity may be affected.

Also please share your final tool with us when it is developed so that we may review it.

Thanks for your interest.

Regina

Regina M. Fink, RN, PhD, AOCN, CHPN, FAAN
XXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXX