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Newly Graduated Baccalaureate Nurses Critical-Thinking Development

Norberto Rosado
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Walden University

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Norberto Rosado-Canales

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Walden University
2022

Abstract

Newly Graduated Baccalaureate Nurses Critical-Thinking Development

by

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MSN, University of Puerto Rico, Medical Science Campus, 2010

BSN, Antillean Adventist University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Education

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Abstract

For the nursing profession, critical thinking is essential to provide safe and effective patient care. While the development of critical thinking skills is a desired outcome for newly graduated baccalaureate nurses, many lack the ability to make critical decisions. The absence of critical thinking among newly graduated nurses may be related to a lack of exposure to the clinical environment during their academic experience. This study explored how critical thinking processes can be affected by different approaches to baccalaureate clinical nursing education in Puerto Rico. A descriptive qualitative approach was used to understand the perceptions of newly graduated baccalaureate nurses regarding their critical thinking development when their academic clinical experiences were set in different clinical environments. Benner's novice-to-expert theory guided this study. To obtain data, individual, face-to-face interviews were conducted. Six newly graduated nurses were interviewed. Thematic analysis identified five major themes including: perception about critical thinking development, critical thinking development, learning strategy used in the classroom, experience in clinical practice and the relationship of novice nurses with experienced nurses. The key recommendation from the study is for the creation of a residency program in nursing thereby providing an opportunity for the newly graduated nurses to spend more time in clinical practice. This study can promote positive social change by improving the understanding of newly graduated nurses' perceptions of the development of critical thinking and by providing insights for nursing academics and leaders of healthcare organizations in the development of new graduate training and orientation programs.

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Dedication

I want to dedicate this dissertation, first, to God who gave me the forces and capacity to complete this dissertation. Second, I want to dedicate this dissertation to my lovely wife, Karina Velazquez and my daughter, Alondra Rosado, for all the patience that they had with me during all this process. Thank you for being here with me all the time.

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Chapter 1: Introduction to the Study

Introduction

Nurses have the critical job of caring for the lives of other human beings every day. Nurses must make decisions that can be beneficial or fatal to the patient. Critical thinking is the necessary element to make the right decisions (Krishnan, 2018). This study, through a literature review, individual nurse interviews, data collection, and data analysis, explored how critical thinking is developed, where it is learned, and its social implications.

Academic healthcare institutions use two learning strategies, the theoretical/didactic components and clinical practice (Ghasemi et al., 2020). Today, educational institutions are struggling to find healthcare settings for clinical practice. Consequently, these institutions have been forced to reduce the time of clinical practice. To provide a clinical environment, many academic institutions resort to the use of simulation. But it is not certain whether simulation can effectively replace a clinical setting or whether it is the best tool for the development of critical thinking. In this study I sought to find how nurses perceive critical thinking is developed and what they perceive has contributed to the development of critical thinking in nurses.

This chapter presents the background of the study, the literature reviewed, the problem statement, the purpose of this study, the research question, the theoretical framework, the nature of the study, and the importance the study for social change.

Background

For the nursing profession, critical thinking is a practice skill essential to effectively working in acute care areas. The development of critical thinking skills needs to be an outcome of baccalaureate nursing education (Raymond, et al., 2017). Salizar (2018) stated that nurses need to have the ability to make critical decisions. In the hospital settings, newly graduated nurses are exposed to situations that require critical thinking; therefore, it is recommended that academic institutions use teaching strategies to focus on the development of critical thinking in nursing (Ennis, 2018).

An imbalance between theoretical and clinical education can lead to a gap in knowledge described in the literature as a theory-practice gap. This theory-practice gap is related to an absence of interconnection between theoretical learning and actual nursing work (Martinez et al., 2019). Safazadeh et al. (2018) identified two factors related to the theory-practice gap, instructors with insufficient clinical knowledge and the use of learning techniques such as memorization instead of strategies aimed at critical thinking development.

This study may contribute to nursing knowledge by describing different learning strategies that could be used during theoretical teaching to promote critical thinking development. This study describes how to integrate theory, simulation, and clinical practice to resolve this theory-practice gap.

Problem Statement

Without well-developed critical thinking skills, nurses may struggle making critical decisions for patient care (Salazar et al., 2020). Matthee and Turpin (2019) found

it was necessary to create curricula focused on critical thinking skills and complex problem-solving skills. For nursing schools to meet industry and social needs, curricula must be designed that allow nurses to graduate with critical thinking skills.

Critical thinking is one of the most valuable components of quality nursing care because nurses with critical thinking skills are capable of confidence, creativity, intellectual integrity, open-mindedness, reflection, and contextual perspective (Raymond et al., 2017). Critical thinking is a skill that requires active learning to acquire. Student-centered instruction encourages the student to consider and apply what they are learning (Kusumoto, 2018). Due to their deficiency in critical thinking, some newly graduated nurses change jobs or leave the profession (Kuokkanen et al., 2016). Therefore, it is important to ensure that newly graduated nurses have received training and guidance designed to support their critical thinking development (Zuriguel et al., 2019).

In Puerto Rico, there is a lack of clinical settings for undergraduate nursing students. To solve this situation, some nursing schools in Puerto Rico are using simulation laboratories instead of clinical settings. Järvinen et al. (2018) found an absence of critical thinking among newly graduated nurses related to a lack of exposure to the clinical environment. As a nurse educator in a hospital setting, I have seen the results of a lack of critical thinking in recent graduates and have personal experience working with nurses to develop an education program to fill the gap in clinical education. However, little is known about how new graduates in Puerto Rico perceive their clinical education and whether their experiences could inform the development of effective clinical education programs that promote critical thinking.

Purpose of the Study

The purpose of this study is to explore how the critical thinking process can be affected by different approaches to clinical nursing undergraduate education in Puerto Rico. To fully understand the impact of the different clinical teaching strategies of the nursing degree program, it is important to understand the critical thinking skills process as perceived by newly graduated registered nurses. To date, I have found little research that assessed recent graduates' perceptions of the development of their own critical thinking skills and the type of clinical preparation received in undergraduate nursing programs that impacted their learning. The results of this study should help nurse educators, nursing program administrators, and clinical staff educators develop programs that enhance critical thinking for newly graduated nurses.

Research Question

RQ: What are the perceptions of newly graduated baccalaureate nurses regarding their critical thinking development when their academic experiences were in different environments?

Theoretical Framework

Benner's (1984) novice-to-expert theory guided this study. The novice-to-expert theory describes five levels of skill development in nursing: novice, advanced beginner, competent, proficient, and expert (Marriner & Raile, 2006). Marriner and Raile (2006) defined a novice as a nursing student, an advanced beginner as the recently graduated registered nurse, competent as an advanced beginner who acquired clinical experience, the proficient nurse as one who is capable of identifying a situation and implementing a

plan, and the expert who demonstrates clinical mastery and the integration of evidence-based practice in problem solving. McEwen and Wills (2014) divided Benner's theory into seven domains: (a) helping role, (b) teaching or coaching function, (c) diagnostic client-monitoring function, (d) effective management of rapidly changing situations, (e) administering and monitoring therapeutic interventions and regimens, (f) monitoring and ensuring quality of health care practices, and (g) organizational and work-role competencies. Effective management of rapidly changing situations is a key in critical thinking development. The following definition of critical thinking relates this domain with the phenomenon being studied by this research:

Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action. (Scriven & Paul, 1987, para. 1).

Benner's theory asserts that nursing knowledge, skills, and clinical competencies are developed through classroom teaching and clinical practices (Ozdemir, 2019). To produce novice nurses with the mental and physical skills to work as a nurse, academic curricula must include content that promotes the development of critical thinking (McEwen & Wills, 2014). Theory and practice should work together in the development from a nursing student (novice) to becoming a professional nurse (proficient to expert). Nursing experience is acquired through exposure to clinical settings (Murray et al., 2019). Benner's theory emphasizes the need for clinical practice as a component of the nurse's development and the union between the theoretical class and clinical practice.

Clinical practice is essential in the acquisition of nursing skills (Dinmohammadi et al., 2017). Benner's novice to expert theory guided this research to identify the abilities required for each stage from novice nurse to expert nurse, taking special interest in the novice stage.

Nature of the Study

This was a descriptive qualitative study (Graneheim & Lundman, 2004; Liang, 2012) with a focus on understanding how English-speaking newly graduated registered nurses (RNs) perceive the development of their own critical thinking process and how their academic clinical experiences only in simulation laboratories, only in patient care settings, or in a combination of the two approaches affected their critical thinking development. RNs recently graduated from undergraduate nursing programs in Puerto Rico were invited to participate with an expected sample size of between 15 and 20 or until saturation was reached. This qualitative approach involved a convenience sampling of available participants who volunteer to participate in interviews for this study. It included semistructured interviews with Puerto Rican nurses who have entered the workforce as registered nurses within one year of graduating from a nursing degree program.

This study examined nurse's perceptions of their critical thinking skills and the impact of their type of clinical practice education on development of those skills. I chose a descriptive qualitative approach for this study because it seeks to describe the phenomenon of interest, in this case critical thinking. The descriptive qualitative approach provides the opportunity to understand the participants experiences in a

systematic way and affords the flexibility to reflect their subjectivity (Houser, 2015; Ravitch & Carl, 2016). Understanding novice nurses' perceptions about critical thinking development may provide insight into how their education and experiences translate into clinical nursing performance.

Definitions

Definitions of words and terms used in this study are as follows.

Clinical settings: Clinical scenarios in which the nursing students are exposed to real clinical situations (DeGrande et al., 2018).

Critical thinking: Rational reflective thinking used by nurses to make the best decisions for optimal patient care (Ennis, 2018).

Newly graduated nurses: Nurses with a bachelor's degree in nursing with 1 year or less of nursing clinical experience (Menard & Maas, 2019).

Experienced nurse: A person who has obtained a bachelor's degree in nursing and has more than 1 year of experience as a nurse (Ozdemir, 2019).

Simulation: A learning activity where a student or a class group has the opportunity to practice nursing care with a manikin (Menard & Maas, 2019).

Assumptions

I assume that the development of critical thinking takes place in an academic institution. I also assume that nursing educators need to know teaching strategies that promote the development of critical thinking. Another assumption is that academic institutions should review their teaching modalities to apply those that are useful in the development of critical thinking. I also assumed that newly graduated nurses require

critical thinking skills to successfully begin working in a clinical setting. The primary assumptions for this study are that the participants shared their experiences as nursing students and professional nurses honestly. I assume participants respected the privacy of their academic instructors keeping their names and personal information confidential. I assume that in an interview, the newly graduated nurses thoughtfully expressed their perceptions regarding to critical thinking development.

Scope and Delimitations

With this research I studied the phenomenon of critical thinking and how it is developed. It was necessary to first identify what critical thinking is and its relationship to education and the nursing profession. Delimitations were established to narrow the study in terms of participants, time, and location. In this study, participants were newly graduated nurses with less than one year of experience. Nurses also needed a bachelor's degree in nursing obtained from an academic institution in Puerto Rico. The sample size was six registered nurses. I conducted three face-to-face interviews a day. This face-to-face meeting allows me to observe and note nonverbal language.

I chose not to use a focus group interview methodology. In a focus group, individual responses may be influenced by the group speech. In other words, the response of one individual might influence the response of another individual. To identify individual perceptions, it is necessary to pay attention to individual details (Burkholder et al., 2016).

Nurses with more than one year of clinical experience were not included in the study because their clinical experiences as nurses may help them with their development of critical thinking.

Limitations

The methodology used in this study could produce some limitations with transferability. This qualitative approach involved a convenience sampling of available participants who met the study's eligibility criteria. The study sample included six newly graduated nurses who graduated from different academic institutions. It is possible to find differences in the academic curricula and teaching styles. For example, some academic institutions use simulation instead of clinical practice in clinical settings, while other academic institutions use simulation to replace the 50% of the clinical practice in clinical settings. This variability in teaching styles and curriculum may limit the transferability of the study findings.

The use of face-to-face interviews includes the potential improper use of “why” questions, which may place the interviewee in a defensive position (Burkholder et al., 2016). Poor rapport with the interviewee can limit the range and depth of the answers. Additionally, content analysis was used for analysis and is based on the researcher's interpretation of the context of the words expressed and therefore potential limitations in interpretations are recognized.

Significance

Nursing school accreditation agencies, including the American Association of Nursing Colleges and the National League for Nursing, have recognized critical thinking

as a vital element of undergraduate nursing education programs (Arli et al., 2017). A nurse who thinks critically reflects habits of mind, such as confidence, contextual perspective, creativity, flexibility, curiosity, intellectual integrity, intuition, open-mindedness, perseverance, and reflection (Raymond et al., 2017). Using critical thinking, professional nurses can ask themselves questions that will help them analyze the information to finally identify the patient's problem and select an effective solution. Patient safety is directly affected by the critical thinking skills of nurses (Peaks, 2018).

This study can promote positive social change by improving the understanding of newly graduated nurses' perceptions of the development of critical thinking and how the type of experience in the clinical setting affected their development of critical thinking. The results can provide insights for nursing academics and leaders of healthcare organizations in the development of new graduate training and orientation programs.

Summary

The main purpose of this study was to identify the key clinical practice setting for development of critical thinking in nursing education. If the best practice in clinical nursing education can be identified, it will be possible to improve the development of critical thinking. The study focuses its attention on newly graduated nurses, assuming that they begin to work as nurses with limited critical thinking skills. The plan is to analyze the phenomenon of critical thinking and the concept of development of critical thinking. The study sought to understand the teaching strategies, the classroom environment, and the use of simulation, hybrid models or clinical scenarios for clinical practice.

Chapter 2: Literature Review

Introduction

Nursing practice is constantly changing. In the same way, new learning strategies are created over time (Aurangzeb, 2018). We live in a conceptual age where creativity, flexibility and adaptability are the predominant concepts (Cooke, 2018). Changes require nurses with skills, practice, and knowledge to meet patient's needs. This is where nursing education comes in. The purpose of nursing education is to create nurses with the skills and knowledge necessary to develop critical thinking (Oldland et al., 2017). It is the academic institution, responsibility to produce nurses at a beginning level of competency. This level of competence depends on the successful transfer of knowledge from the nursing educator to the nursing student (Yilmaz et al., 2019). Knowledge transfer requires successful learning strategies. Learning strategies are successful when they integrate problem solving using techniques that incorporate student-centered learning and effective use of technology, including simulation, games, narratives, art, and reflection (Busebaia & John, 2020). In nursing education three different environments are used for learning. These are the classroom, the skills lab, and clinical practice. The classroom is used to provide theoretical knowledge. In the skills lab, nursing students put theoretical knowledge into practice. In clinical practice, nursing students use theoretical knowledge and skills in real clinical settings.

The purpose of this study was to explore how the critical thinking process can be affected by different approaches to clinical nursing undergraduate education in Puerto Rico. To fully understand the impact of the different clinical teaching strategies of the

nursing degree program, it is important to understand the critical thinking skills process as perceived by newly graduated registered nurses. Critical thinking, the classroom, the skills lab, and clinical practice were analyzed through a literature review. Chapter 2 covers the literature search strategies used, the theoretical framework that guides my study, the key concepts included in the literature review results, and finally a summary of the chapter.

Literature Search Strategy

To identify prospective peer-reviewed articles (as well as books and gray literature), the electronic databases, ProQuest, PubMed and EBSCO, were searched for the years 2017-2020 using the following keywords: Critical Thinking, Classroom, Skill Laboratory, Clinical Practice and Novice Nurses. I used the Boolean operators and /or to optimize the results. Abstracts were used to judge the relevance of an article to the research question. Additional articles were searched in the reference lists of the selected articles.

Theoretical Foundations

The theoretical basis of this study is the Benner's theory from novice to expert (Benner, 1984). Benner (1984) described the professional development of nurses in five stages of clinical competence as they progress from novice to expert nurses. Benner's theoretical model helps nurse educators understand the interaction between teaching theoretical and clinical knowledge in the development of the professional nurse (Guvenc-Ozdemir, 2019). These stages of progression are described as novice, advanced beginner, competent, proficient, and expert (Smith, 2019). Novice represents nurses with no

professional clinical experience. The novice nurse is a graduate nurse who has theoretical knowledge and does not have professional experience in nursing. The advanced beginner is a registered nurse with at least 6 months of clinical experience as a nurse (Güven-Ozdemir, 2019). A competent nurse is a professional nurse, with 1 or 2 years of clinical experience, who can use critical thinking to develop a patient care plan. A competent nurse is defined as a nurse with more than 3 years' experience demonstrating the effective application of knowledge, skills, and judgment. (Liu & Aunguroch, 2018). Competent nurses have the ability to develop individual nursing care plans according to the needs of their patient and can function without guidance and can provide the highest quality of patient care (Gaietto and Brooks, 2019; Güven-Ozdemir, 2019; Tyler, 2019).

Benner's novice to expert theory can be used to examine the relationship between theoretical learning and clinical practice (Bennett et al., 2017). Benner's theory aligns with the development of critical thinking. (Peaks, 2018). It is known that experience supports the development of critical thinking (Krishnan, 2018). What is not known is how the type of clinical learning supports development of critical thinking .

Literature Review of Key Concepts

Critical Thinking

Critical thinking is a concept developed in ancient Greece. The word "critical" has its origin in the ancient Greek term "Kritikos" meaning assess, discriminate, or select (Padmanabha, 2018). Socrates introduces critical thinking in his classes stimulating the thinking process of his students using a series of questions and group discussions (Yildirim & Özkahraman-Koç, 2018). Critical thinking is defined as thinking with the

purpose of analyzing or make a judgment. Cooke et al. (2019) presented the following definition for critical thinking: “as demonstrating self-directed, self-disciplined, self-monitored, and self-corrective thinking” (p. 215). For Wang (2017) critical thinking is the use of reflective thinking in problem-solving. Another definition states critical thinking as a mode of skillfully analyzing, assessing, and reconstructing content or problem looking for quality improvement (Castellano et al., 2017). The philosopher, psychologist, and educator, known as the father of contemporary critical thinking tradition, Dewey in 1934 defined the term critical thinking as “active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of grounds which support it and the consequences to which it leads” (Commission on the Relation of School and College of the Progressive Education Association 1943: 745–746).

At the 8th Annual International Conference on Critical Thinking and Education Reform Scriven and Paul (1987) defined critical thinking as the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (para.1). All of these definitions include the concepts of judgement and analysis. Critical thinking requires judgment and analysis of a situation or problem and requires time and practice (Gaietto & Brooks, 2019).

In the nursing profession, critical thinking is a term used to represent the fundamental role of nurses in their daily work in clinical settings (Krishnan, 2018). Krishnan (2018) added that critical thinking is an essential part of nursing care, because

it is with critical thinking ability that nurses can make the best clinical decisions. Nurses need to recognize what is normal or abnormal in a patient. Through experience in clinical settings, nursing students learn how to recognize what is abnormal and when to take a clinical action (Widarsson et al., 2020). Critical thinking guides the nurse to anticipate what will happen and design a nursing intervention plan (Carroll, 2019). The quality of patient care and patient safety depend on nurses' clinical competency. The development of critical thinking is an important component of clinical competence (Willman et al., 2019). Empowering nursing students helps to develop their active role in critical thinking (Eyuboglu & Duygulu, 2019).

Critical thinking skills are composed of comprising observation, interpretation, analysis, inference, evaluation, explanation, and metacognition (Bunt & Gouws, 2020). Bunt and Gouws (2020) further defined each of these components of critical thinking as follows: Inference is the ability to get a conclusion through opinions and judgment. Evaluation requires the use of logic to infer the relation between a set of information. Analysis is used to identify similarities and differences in information. Interpretation requires the ability to understand and transmit the meaning of the information obtained. Explanation is expression of the obtained results. Metacognitive skills are the self-reflection and organization of the ideas and thoughts into an idea.

Relationship to Education

School of Nursing Accreditation Organizations, the American Association of College of Nursing, National League of Nursing, and National League for Nursing Accrediting Commission, expect the development of critical thinking as an outcome of

nursing education programs (Arli et al., 2017). Critical thinking involves identifying the problem, establishing the best solution, selecting the interventions required, applying the interventions, and debriefing at the end of the situation to evaluate the effectiveness of the interventions (Peaks, 2018).

The nurses, once in the workforce, are exposed to make decisions to resolve critical problems (Salizar, 2018). It is important that schools of nursing evaluate their nursing education programs to seek new learning strategies that may help in the development of critical thinking. Pursuing critical thinking development is an essential element to make sure that nurses, at the end of the nursing education program, have learning attitudes and the professional knowledge to become an expert clinical nurse (Hsu et al., 2017).

The school of nursing is the institution designed to prepare professional nurses with the ability to participate in clinical situations using critical thinking. The final outcome of nursing education is the acquisition of clinical knowledge and competencies (Johanns et al., 2017). Teaching critical thinking is a requirement for all nursing educators, making it necessary for the nurse educator to learn about theory and development of critical thinking (Urcola-Pardo et al., 2018). In addition, nurse educators need to learn about critical thinking teaching strategies.

Relation to Nursing

Achievement of critical thinking is the indicator of successful nursing education. In nursing, theoretical knowledge about human anatomy and physiology, disease processes, and interpretation of normal and abnormal laboratory results is one point of

departure to develop critical thinking (Ward, 2020). In the process of learning theoretical knowledge, the nurse educator becomes a facilitator. The nursing students must be enabled to find timely answers to significant clinical problems (Ozcan & Elkoca, 2019; Urcola-Pardo et al., 2018). Critical thinking is a valuable skill desired in the nursing field because it improves diagnostic skills and reduces errors in patient care (Raymond et al., 2017). A nurse with a lack of critical thinking skills could place patients at risk by making wrong decisions in critical situations (van Graan & Williams, 2017).

Competent and expert nurses often expect novice nurses to have the ability to resolve complex clinical situations involving patient deterioration (Mirza et al., 2019). This is a challenge for novice nurses without critical thinking ability. If we review the previous definition of critical thinking, it is possible to say that judgment and analysis are vital skills for a nurse. Like the nursing accreditation agencies, The Institute of Medicine recommended that nursing education programs prepare nursing students with critical thinking skills (Institute of Medicine [IOM], 2003). These organizations support the importance of incorporating critical thinking development as part of nursing education curriculums (Blum, 2018). If nursing schools want to ensure success with nursing students performance outcomes, it may be necessary to use innovative teaching styles that stimulate nursing students to participate in the learning process (Bocianu & Radler, 2018).

How to Develop Critical Thinking

Critical thinking has been called a 21st-century skill (Sellars et al., 2018). The question now is, how to develop it? Kusumoto (2018) established that in the development

of critical thinking the student needs to be an active participant and not merely a spectator. Novice nurses' critical thinking capacity is related to the time exposed, as nursing students, to clinical practice, practicing technical skills, and practicing clinical situations through simulation (Mirza et al., 2019). The development of critical thinking requires students to use skills of problem solving, knowledge, comprehension, application, analysis, synthesis, and evaluation (Zapalska et al., 2018). Critical thinking skill development begins in the classroom, during the education process, through teaching strategies that promote students' participation (Carbogim et al., 2018; Lee et al., 2020). The nurse educator needs to establish five steps in the classroom: determine learning objectives, use questioning as a teaching method, practice and then assessing, review, clarify, and enhance, and provide feedback (Boso et al., 2019). As critical thinking is developed in the classroom, there are factors that can inhibit it: educator's lack of knowledge about critical thinking, educator's negative attitudes, and absence of interaction (Boso et al., 2019). The development of critical thinking is a lifelong process requiring dedication (Sellars et al., 2018). For a nurse educator that means that use teaching strategies that promotes the development of critical thinking is just the beginning. The teaching environment needs to be free of tension to promote student discussion (Ozcan & Elkoca, 2019). Critical thinking is evidence of the practice readiness of novice nurses (Mirza et al., 2019)

Critical thinking is a process, an orientation, and habit of mind (Jacobs, 2018). The acquisition of critical thinking requires training of the mind. Is through the put in practice critical thinking that nursing students reinforces and matured their critical

thinking skills (Zuriguél et al. 2019). The nursing school's faculty need to expose the nursing students to complex clinical situations to help the nursing students in critical thinking skills (Garwood et al., 2018). Nursing students need to take an active part in the learning process, for example providing lectures in the classroom (Boso et al., 2019).

Learning Environments

There are a number of learning environments where critical thinking development is fostered. Each of the regular learning environments found in baccalaureate nursing education are discussed.

Classroom Environment

It is in the classroom where learning begins. Here the nursing students receive theoretical teaching and critical thinking development starts. In the first year of nursing studies, nursing students learn to create nursing care plans that require nursing diagnosis, goal expectations, nursing interventions, and evaluation. These elements all integrate problem-solving and critical thinking skills (Hipfner et al., 2017).

The classroom environment is related to the classroom climate as a learning environment (Abd & Hershkovitz, 2019). The learning environment refers to learning strategies that promote critical thinking (Carvalho et al., 2017). The classroom environment is classified in two areas, physical and psychosocial environment, with the psychosocial environment the one with more significant impact (Wang et al. 2017). The psychosocial environment is related to the educator's leadership and how the student is asked to participate and interact (Ugwumaduka, 2018). Other properties of the

psychosocial environment include involvement, satisfaction, cooperation, democracy, task orientation, innovation, and educator competencies (Ozudogru & Aksu, 2019).

A demanding educator will create a stressful classroom environment and will reduce the students' confidence (Ali, et al., 2020). What students need to support critical thinking is an environment where creativity is encouraged, and students' input is valued. Questioning, exploration, critical inquiry, curiosity, and self-directed learning (more individualized effort) are additional strategies that enhance critical thinking (Cooke, 2018). The nurse educator needs to promote an environment of mutual respect and confidence, which will allow nursing students to express their feelings without fear or stress (Ali et al., 2020). Nursing students also need to be interested in their own development of critical thinking (Sang et al. 2018). The type of classroom environment can play a vital role in stimulating or limiting critical thinking development in nursing students.

Traditional Classroom

A traditional classroom is a place where the educator bases their teaching on a textbook, and a blackboard with a piece of chalk, and teaches following an established educational plan (Ziling & Yeli, 2018). The traditional classroom is where the domain learning strategy is lecture-based learning and students' interaction is limited (Cagande & Jugar, 2018). Deng (2019) described a traditional classroom in the learning process (Table 1)

Table 1*Characteristics of a Traditional Classroom*

Roles and Methods	Actions and Activities
Role of Educator	The only individual teaching the class
Role of Students	Passive Learners
Main Teaching Method	Lecture-Based Learning
Distribution of Time	All time is used to teach
Class Content	Theoretical knowledge
How Teaching Method is Used	Educators present the learning content
Students' Improvement Evaluation	Test, Homework, Individual Projects

Note. Adapted from Deng, F. (2019). Literature Review of the Flipped Classroom. *Theory and Practice in Language Studies*, 9(10), 1350-1356. Copyright 2019 by Academy Publication.

Interactive Classroom

An interactive classroom was defined as any instructional method that engages students in the learning process (Fridolin et al., 2019). Vygotsky's sociocultural theory provided the basis for interactive classroom creation (Chen, 2019). Teaching and learning are appraised as an interactive activity (Cardellino et al., 2017). An interactive classroom improves the communication skills of the learners, changing them from passive to active learners (Ali et al., 2020). An interactive environment is required to learn (Vanichvasin, 2018). Active learning is effective in the development of critical thinking, with more interaction, more learning occurs (Keyser, 2018; Yafeng et al., 2018). To achieve an interactive classroom instruction, the educator lets the students ask questions during lectures and allows them to disagree with the educator, demonstrating an open-mindedness to opinions and suggestions (Boso et al., 2019). Students' success and

achievement in problem-solving, are interrelated with students' emotions (Hassan et al., 2018). As in other classroom types, positive feedback is essential in the interactive classroom to stimulate a student's desire for knowledge acquisition (Cagande & Jugar, 2018). A classroom environment where the students are actively discovering pieces of knowledge by themselves produces a positive impact on students' achievement (Vanichvasin, 2018).

Flipped Classroom

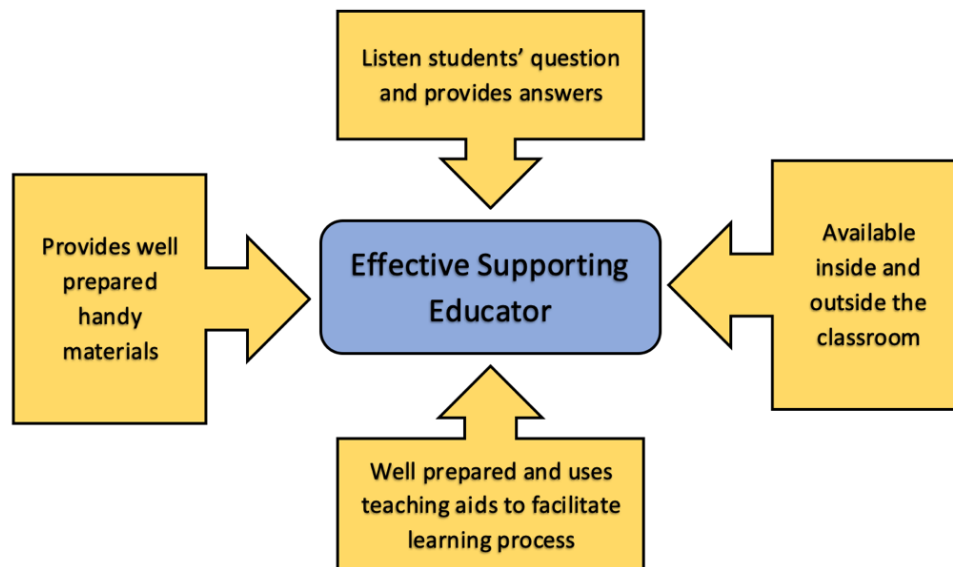
Lage et al., (2000) defined flipped classrooms as inverting the events that are traditionally taken inside the classroom to be taken outside the classroom, and vice versa (Deng, 2019). The flipped classroom is a model developed in the era known as big data, a great revolution in teaching model and the first used in education by West Point, at the beginning of the 19th century (Yuefang, 2019). This classroom model is defined as a classroom environment where the students will spend time in collaborative learning interacting with their peers, while the educator serves as the facilitator (Ziling & Yeli, 2018). In the flipped classrooms students and educator invert their roles; assignments and problems that usually were done in the house are resolved in the classroom with continued cooperation between all the students (Amstelveen, 2019). Students are now the educators acquiring knowledge by their own effort and through discussion with educators and peers (Deng, 2019). A flipped classroom environment generates a cooperative classroom and motivates students to accept new learning strategies (Ozudogru & Aksu, 2019). These cooperative classroom environments may also be helpful in reducing cost and faculty resource utilization (Menard & Maas, 2019).

Supportive Classroom

Supportive classrooms provide an environment of continuous support between professors and students, and students bring support to other students (Hassan et al., 2018). This support permits open and sincere communication between educator and students that as a consequence promote learning (Abd & HersHKovitz, 2019). The supportive classroom has an environment where students feel complete support from educators and peers (Ali et al., 2020). An educator in a supportive classroom needs to be one with the ability to listen and communicate with the students inside the classroom and outside the classroom (Egeberg & McConney, 2018). Figure 1 describes the characteristics of an effective supportive educator.

Figure 1

Characteristics of an Effective Supportive Educator.



Healthcare Simulation

In the development of critical thinking, problem-based learning is a teaching strategy adopted by some schools of nursing. Problem-based learning is an interactive learning process that includes interaction between educator and learner, student-centered education and exploration of realistic and specific clinical situations through the use of simulation (Busebaia & John, 2020). Problem-based learning is a learning strategy wherein the nursing students are confronted with clinical situations and need to identify a clinical solution (Carbogim et al. 2018).

Simulation is a learning tool that provides teaching and practice of skills without harm to the third party. McAllister et al., (2013) defined simulation as learning that replaces real-life situations providing the nursing students with the opportunity to make a decision without risk to a real patient. Simulation helps an adult learner to acquire knowledge while they see the value of the learning and how to apply it in the real-life (Tyler, 2019). In a simulation, there are three kinds of manikin categories, low fidelity, medium-fidelity, and high fidelity. A low fidelity manikin is a dummy like a manikin torso used to learn Cardio-Pulmonary Resuscitation. With this kind of manikin, the educator needs to play the role of the patient. Medium fidelity manikins use some technology, for example replicating pulse or respiration. Other medium-fidelity manikins are those used to practice intravenous catheter insertion. High fidelity manikins are a more complex manikin equipped with advanced technology. This technology includes elements like talking, bleeding, and replicating vital signs, and respiratory and heart sounds for auscultation (Ann-Kirkham, 2018). In this time of technological advances, as

nursing educators, we need to take advantage of these technologies to advance student nurses' acquisition of skills and competencies (Gaietto & Brooks, 2019).

Simulation in Nursing

We are living in a world where technology is continuously advancing. As nurse educators, we need to take advantage of these advancements in the teaching process. Simulation is a learning strategy that incorporates cognitive, ethical, functional, personal, and meta competence domains (Weeks et al., 2019). Lee et al. (2019a) defined a simulation in nursing education as activities that mimic the reality of a clinical environment and are designed to demonstrate procedures, decision making, and critical thinking through techniques such as role-playing and the use of devices such as interactive videos or mannequins. During the first year of nursing studies, nursing students need to perform procedures that are fundamental to the care of the patient, such as procedures for obtaining vital signs, feeding, hygiene, and dressing, mobility, communication, and patient education (Lillekroken, 2019). Patient safety is an essential element of an effective and efficient healthcare system. The nursing educator, bringing students to clinical practice in real clinical settings, needs to consider patient safety when our nursing students are working with patients. Simulation is a good way to create a safe environment for the student to learn and practice before being taken practice in real clinical settings with real patients (McAllister et al. 2013). Garwood et al., (2018) state that nursing students are demonstrating a preference for learning through simulation-based instead of lecture-based learning. But simulation-based learning needs to be combined with a scenario that represents the reality they will see in a clinical setting

(Garwood et al., 2018). Simulation-based learning without a script may not be effective.

The mannequin used to create simulation-based learning is only 15% of the learning strategy. The combination of problem-based learning with simulation-based learning is what really creates the acquisition of knowledge.

Simulation in nursing education facilitates small groups learning, increases critical thinking, and helps the nursing students integrate theoretical learning with clinical practice (Busebaia & John, 2020). The use of small groups learning enhances abilities, like teamwork, problem-solving, decision making, and critical thinking (Campos et al., 2020). During their years as nursing students, they need to develop critical thinking skills (Ward et al., 2018). To be effective, the simulation needs to be interrelated with communication and actions that equate clinical experiences, promote decision making and support development of critical thinking skills (Carvalho et al., (2017).

Simulation Advantages

Simulation, as a learning strategy, is helpful in the development of clinical skills and clinical competencies (Martinez, 2019). The current generation of nursing students (millennial generation) has the advantage of being familiar with technology, making technology easier to use as a learning tool (Sang et al., 2018). The principal advantage of simulation in nursing is that it provides the nursing students with the opportunity to practice skills without harming a real patient (Boostel et al., 2018). As clinical nurses, our inpatient care priority is not to harm any individual. Simulation allows the nursing student to practice any nursing skill without harm to a human being. The idea is to expose the nursing students to simulated real scenarios thereby enhancing the confidence level in

nursing students (Germain et al., 2018). In Puerto Rico, many schools of nursing are adopting simulation as a learning strategy and an opportunity to replace nursing clinical practice in real clinical scenarios. Simulation brings the opportunity to teach in a group or one to one (Bishop & Wackler, 2017). Teaching end of life care is a complex but essential component of the first year of nursing education, simulation has been shown to be helpful in the development of this competency (Barry et al. 2017).

Simulation in undergraduate nursing education has demonstrated, in nursing students, an increase in confidence level, critical thinking, assessment, and psychomotor skills (Lee et al., 2019a). That previous statement is validated by Innes and Calleja (2018) when they state that simulation-based learning simplifies development of critical thinking skills such as assessment, prioritization, planning, decision making, problem-solving, and evaluating. The use of simulation has also demonstrated an improvement in communication skills. In addition, the use of simulation brings the opportunity for self-reflection (Lee et al., 2019a). A nursing student using simulation-based learning, will see a successful transition from novice to advance beginner (Lee et al., 2019b). After each simulated scenario, a critical reflection follows. Critical reflection is a brief discussion about the performance of the nursing students during the simulation. This kind of post-simulation debriefing enhances the learning experience (Bunt & Gouws, 2020). Reflection post-simulation is fundamental to nursing students learning and motivation (Deschenes et al., 2019). Reflection is not just passive introspective thoughts or occasional thinking, it is an intellectual activity that produces learning from practice (Padmanabha, 2018). Simulation is a student-centered education where the nurse

educator has more contact with the nursing students. The simulation uses high-level intellectual strategies such as concept integration, communication, critical thinking, and practical application of theoretical knowledge empowering all domains of learning, that include cognitive, psychomotor, and affective (Busebaia & John, 2020). Campos et al., (2020) through their study demonstrated that the use of simulation makes nursing students feel more motivated with their academic curricula.

Simulation in relation to critical thinking, helps the nurse educator in the guidance of nursing students to learn how to apply the nursing process (Carroll, 2019). The simulation teaching strategy uses the three main types of learning styles, visual, auditory, and tactile. Peaks (2018) stated visual learners, learn by live demonstration. Auditory learners need to hear to identify lung's sounds. Tactile learners, learn through hands-on practice, return demonstration, and simulation.

Simulation Disadvantages

The integration of simulation in nursing schools had a strong effect on changing the culture of teaching and learning. Despite the benefits from the use of simulation, some nursing students do not feel simulation represents the environment seen in a real clinical setting (Gharaibeh et al., 2017). These authors add that poor organization, no planning before beginning the simulation, and poor execution of the simulation makes the nursing students feel frustrated and reduce their desire to learn. The organization, planning, and simulation execution provide a structure to the process of learning through the use of simulation. The nurse educator needs to adapt the simulation to the actual scenario that nursing students will see in a real clinical setting. Some simulation manikins

come with pre-programmed cases. These pre-programmed cases were created in the United States and inspired in actual scenarios of clinical settings in hospitals in the United States. In Puerto Rico's hospitals clinical settings are not the same as in the United States. It is necessary that the instructor, in Puerto Rico, designs cases and scenarios that represent the clinical scenarios for Puerto Rico's hospitals.

Creating a simulation scenario is something that requires time by the faculty in designing the clinical scenario and problem-solution using an evidenced-based learning process. (Busebaia & John, 2020). The result of a lack of preparation time is the creation of poor case scenarios, that are not relevant to the nursing students' needs. Simulation requires time to provide special training to educators and learners before they start with the use of simulation (Campos et al., 2020). Roshangar et al., (2020) add some additional factors affecting simulation: ineffective case studies, vague evidence-based learning, and arrogant attitudes from the educator.

Clinical Practice

Clinical practice is the heart of nursing education (Ozcan & Eliokoka, 2019). Lillekroken (2019) stated that clinical practice constitutes 50% of the nursing education curriculum. In clinical practice, nursing students will apply theoretical knowledge acquired in the classroom and clinical skills practiced during simulation practices (Naber & Markley, 2017). Clinical skills and competencies are interconnected with clinical practice. Clinical practice provides an environment for interaction that is more relaxed, individualized, and gentle between nurse educator and nursing students creating a positive relationship where the nursing students feel comfortable to learn (Cooke, 2018).

A positive interaction guarantees learners success (Ali et al., 2020) and develop competencies and skills essential to work in a clinical setting with patients with acute medical conditions (Willman et al., 2019). In clinical practice settings the nursing students can use the skills and competencies developed through the simulated learning process.

The rationale to use clinical settings in hospitals is useful for the different clinical experiences that it provides, including the opportunity to interact with a population with different cultures, and to see positive nursing role models (Schultz et al., 2019). Knowledge acquisition, in nursing education, is more effective when nursing students are actively involved in the clinical application of theoretical knowledge (Busebaia & John, 2020). In higher education students are better engaged in clinical settings because clinical settings allow them to learn through experience, mutual feedback, and observing expert nurses demonstrating their skills (Bakuwa et al., 2020). For the acquisition of clinical knowledge, the nursing students need to interact with other persons to develop the capacity to make choices and use clinical judgments in special clinical situations (Campbell et al., 2018). The time spent in the clinical settings determines how much knowledge and how many skills nursing students will be able to acquire. The clinical practice needs to be long enough to support the completion of learning objectives (Järvinen et al., 2018). In clinical practice, nursing students gain more knowledge, because there they apply the skills and competencies acquired in the classroom and during simulations (Zuriguél et al., 2019). During the first 3 years of nursing education, nursing students need to take theoretical classes, practice in a skills laboratory through

the use of moderated fidelity mannequin, and in clinical practice in healthcare settings.

During the fourth year of nursing education, the nursing student needs to spend more than 90% of the time in clinical practice with 10% devoted to theory (Yilmaz et al., 2019).

Completion of nursing students' practice in clinical settings will help the nursing students to increase confidence, clinical skills, competencies, and work readiness (Hungerford et al., 2019).

Nursing schools now are experiencing problems obtaining clinical settings for nursing students' clinical practices. In Puerto Rico, during the last 5 years, we have seen an increase in nursing schools providing bachelor's degree in Nursing Science. An increase in nursing school attendance means more nursing students requiring sites for their clinical practices. In Puerto Rico, another problem that affects programs of nursing and contributes to the lack of clinical settings for practice is a problem with the economy. The struggling economy has impacted nursing recruitment in Puerto Rico's hospitals especially those programs that belong to the government. The economic impact on nursing education is not only a problem confronted in Puerto Rico, in the United States, nursing students spend more time in theoretical classes than in clinical settings due to a reduction in hospital support (Mirza et al., 2019).

Another factor contributing to clinical practice and the impact on nursing education is observed in novice nurses who experience high levels of anxiety and stress in their first months as nurses. Novice nurses state that a difference exists in what they learned as nursing students and the real clinical environment (Bennet et al., 2017). Due to these newly graduated nurse's feelings, an increasing number of novice nurses are

resigning from their nursing positions. Nursing staffing reduction leaves schools of nursing with fewer clinical settings for clinical practice. Consequently, hospital administrators should encourage the nursing educators, in the nursing schools, to more quickly prepare the nursing students to challenge the real-life scenarios that they will confront as nurses (Soccio, 2017).

Clinical Practice's Advantage

Practice in clinical settings helps nursing students in the development of their critical thinking ability (Zhang et al., 2017). In the classroom, the nurse educator provides theoretical knowledge. In the simulation laboratory, they practice without fear of making an error. But, in the clinical setting is where the nursing students will acquire practical knowledge, gain an appreciation for teamwork, and build self-confidence (Innes & Calleja, 2018; Lillekroken, 2019; Sang et al., 2018). When well-prepared nursing students become nurses, they will have the capacity to take action that benefits the patient (Krishnan, 2018).

When the schools of nursing were in the hospitals, the nursing students spent hours each week, in clinical practice. This idea is being reborn again but as a 1-year internship program. Nursing internship programs may increase the experience of clinical practice especially in those nursing students that did not have the opportunity to experience clinical practice during their nursing student years (Zhang et al., 2017). The time in clinical practice provides team-based learning because nursing students need to work with another nurse as a mentor. A team-based learning strategy produces deeper learning and increases critical thinking capacity (Oldland et al., 2017). Clinical practice

in clinical settings contributes to the development of interpersonal and communication skills increasing confidence in nursing students (Abiodun et al., 2019). Spending more time practicing in clinical settings will increase nursing students' confidence level (Järvinen et al., 2018). It is in clinical practice where the students will see the benefit of theoretical knowledge and learn how to apply it in inpatient care (Bunt & Gouws, 2020). Formal theoretical education alone does not provide the professional competence required to recognize a patient's clinical complications and develop critical thinking capacity (Willman et al., 2019). Before, during, and after clinical practice, the nurse educator could use reflection as a learning tool; reflection necessitates nursing students to review their experiences writing it in a clinical journal and while reviewing it, enhances their current and future decisions they take (Naber & Markley, 2017).

Novice Nurse

It is often expected that novice nurses have knowledge and skills to provide safe care and resolve complex situations (Georg et al., 2018). The big issue affecting novice nurses is the inability to make decisions at the level required for a nurse (Caputi & Kavanagh, 2018). Novice nurses are in a transition from nursing students to competent professional nurses. Järvinen et al. (2018) state that novice nurses have feelings of insecurity and lack of confidence related to their duties as nurses. Mansour and Mattukoyya (2018) stated that novice nurses feel the transition from nursing students to nurses as a very stressful experience. It is possible to have a gap between theory and practice making the novice nurses feel stressed and insecure. This gap occurs when nursing students spend more time with theoretical classes than in clinical practice. Lopez

et al. (2019) found that many novice nurses state that knowledge and skills obtained during their nursing education do not prepare them to work effectively as nurses (Camp & Chappy, 2017). It is vital that experienced nurses provide support to novice nurses to create a partnership that supports increasing confidence and clinical competence in patient care (Innes & Calleja, 2018). To reduce the actual novice nurse turnover, many states in the United States are implementing a nurse residency program to create a bridge between theory and practice (Camp & Chappy, 2017; Williams et al., 2018). La and Yun (2019) found that novice nurses often experience an ungrateful relationship between them and their preceptors. Due to the lack of clinical experience, preceptors make negative comments about novice nurse's performance, resulting in job dissatisfaction and burnout among novice nurses. Job dissatisfaction has been found as the first cause of nurses' turnover in hospitals (Yilmaz et al., 2019).

A helpful strategy for the reduction or elimination of that stressful feeling in novice nurses is exposing the nursing students to practice in clinical settings if it is possible from the first year of nursing studies (Widarsson et al., 2020). Following Benner's Theory, novice to expert, novice nurses are newly graduated nurses. Being a novice nurse produces, as we have seen before, much stress in novice nurses. Novice nurses require support from more experienced nurses to acquire expertise in the nursing profession (Järvinen et al., 2018). Abiodun et al. (2019) agreed that novice nurses need to spend a period of structured clinical practice following their graduation. This structured clinical practice could be defined as an internship program that includes peer support, preceptorship, and simulation-based training. Postgraduate training exposes the novice

nurses to real-life situations that will aid them to improve clinical competencies (Bakuwa et al., 2020). The utilization of an internship program is the key element in the process of transition from novice nurses to nurses (Bishop & Wackler, 2017).

Summary and Conclusions

Critical thinking is an essential element in nursing. Its development is a process that begins in nursing school. The literature review shows us a real gap in educational strategies to integrate the classroom, simulation laboratory, and clinical practice in development of critical thinking skills in nursing students. It is in the classroom where critical thinking development begins. The teaching strategy helps to determine critical thinking development. Simulation laboratory is where the nursing students are able to practice the use of critical thinking. In the simulation laboratory the nursing students, in collaboration with the nurse educator, will perfect their critical thinking ability. The clinical setting is the place to put in practice all the knowledge acquired in the classroom and in the simulation laboratory.

There are many studies about learning strategies to develop critical thinking in nursing students. There is a gap in critical thinking development studies in Puerto Rico. Investigating the problem in the development of critical thinking, is necessary to evaluate the perception of novice nurses about critical thinking development during their years in the academic institutions. These findings may be helpful to support revisions in the nursing curricula through integration of new learning strategies. Because this study was analyzing novice nurse's perceptions, descriptive qualitative research is the most appropriate method to be used.

Chapter 3: Research Methods

Introduction

The purpose of this study was to understand how the critical thinking process can be affected by different approaches to clinical undergraduate nursing education in Puerto Rico. To fully understand the impact of the different clinical teaching strategies for the nursing baccalaureate degree program, it is important to understand the strategies implemented for the development of critical thinking skills in newly graduated registered nurses. To date, little research has been identified that has assessed recent graduates' perceptions of the development of their own critical thinking skills and the type of clinical preparation received in undergraduate nursing programs. The results of this study may help nurse educators, nursing program administrators, and clinical staff educators develop programs that enhance critical thinking for newly graduated nurses.

Research Design and Rationale

The concept that was investigated was critical thinking and the phenomenon was the development of critical thinking. Critical thinking is defined as a way of skillfully analyzing, evaluating, and reconstructing the content or problem in search of an improvement in quality (Castellano et al., 2017). The development of critical thinking is an essential skill required in nursing (Raymond et al., 2017). The development of critical thinking in nursing is a process that begins in the academic field of nursing. Critical thinking requires theoretical knowledge and nursing skills.

This was a qualitative study, with a focus on understanding how new nurses perceive the development of their own critical thinking process and how their academic

clinical experiences only in simulation laboratories, only in patient care settings, or a combination of the two approaches helped them develop critical thinking. The purpose of this study was to analyze the perception of novice nurses on their development of critical thinking during their baccalaureate nursing education. Beginning nurses were asked to describe their experience in the academic setting. Descriptive qualitative was the research tradition that is used to understand the phenomena from the participant's perspective (Gray et al., 2017).

Role of the Researcher

The role of the researcher was a participating observer. As the researcher, I was responsible for managing and collecting data. I maintained control and consistency during the data collection process to safeguard the validity of the study (Creswell & Creswell, 2018). The researcher needs to consider their own biases during the interviews to avoid comments that may influence the responses of the participants. To protect the safety and privacy of the participants, the names of the participants were not recorded on the interview form. To avoid conflicts, none of the participants were former students of the researcher.

Methodology

To obtain data, an individual, face-to-face interview were conducted by the researcher. The interviews were digitally recorded, with the participant's consent. The interviews were composed of six semi-structured questions. The interviews were conducted in English. Additionally, the researcher used a journal to take field notes of non-verbal language. The appointment for the interview was on a day where the

participant has the day off of work and the time was coordinated between the researcher and participant.

Participant Selection Logic

The participants in this research were novice nurses (English-speaking newly graduated nurses with less than one year of experience), any gender, and age between 18 to 99 years old. To qualify, nurses must have completed a bachelor's degree in nursing, obtained from a nursing school in Puerto Rico. The academic program needed to be completed in a period of four years. Registered nurses who graduated from hybrid or online nursing programs were not selected. English-speaking registered nurses newly graduated from undergraduate nursing programs in Puerto Rico were invited to participate.

The researcher requested from the Puerto Rico Board of Nursing a list of the recently graduated registered nurses prepared with the baccalaureate degree (see Appendix A). Nurses who met the criteria for inclusion in this study were invited to the study through a letter sent by e-mail (Appendix B). The data for the qualitative study included face-to-face semi-structured interviews. Participants were also asked to provide biographical data that included gender, age, time since graduation, and the type of clinical experience they had in their baccalaureate program.

Instrumentation

An interview form, designed by the researcher, (Appendix C) consisting of six semi-structured questions was used. The questions were asked in in a specific order and

did not exceed the interview time frame of 30 to 60 minutes. Responses, including non-verbal language, were recorded as field notes.

Data Collection

The primary data collection tool for this qualitative study was in-depth individual interviews. These interviews were face-to-face semi-structured interviews with a time frame of 30 minutes to 60 minutes. For the interviews, appointments were arranged with the participants. Interviews were performed in a frequency of three interviews per day. The data were collected from six novice nurses who obtained their nursing degree from academic institutions in Puerto Rico. The data were recorded with a digital recorder and then all the data were transcribed and analyzed.

Data Analysis Plan

After the data was transcribed in Microsoft Word, it was coded to analyze phrases or sentences that are consistent with the research question. The data analysis plan was divided into four steps (Saldana, 2016).

First Step

All interviews were heard from the audio recording to be transcribed in Microsoft Word. If the researcher needed to clarify phrases of the collected data, the audio recording was played again until the researcher was familiar with the collected data (Saldana, 2016).

Second Step

The researcher read the transcripts to identify words and phrases that serve to indicate segments of data. Codified data were identified, labeled, examined, compared,

and classified into conceptual categories utilizing an open coding strategy (Saldana, 2016).

Third Step

Categories created in open coding were analyzed to find interconnections between categories using axial coding. Interconnections between categories were subdivided into one category or a new category to refine the categories (Saldana, 2016).

Fourth Step

The researcher conducted a code-recode procedure after coding and analyzing collected data, the researcher re-coded the same data and evaluated for different results. Differences between clinical settings could have also produced different results (Abiodun et al., 2019; Järvinen et al., 2018; Warsson et al., 2020 & Zhang et al., 2017)

Issues of Trustworthiness

Qualitative research requires adherence to standards of trustworthiness to ensure accuracy and validity of findings (Creswell & Creswell, 2018). To safeguard trustworthiness, I used Lincoln and Guba's (1986) constructs of credibility, transferability, dependability, and confirmability when performing this research.

Dependability

Dependability measures the grade of researcher non-bias. Dependability guarantees that participants responses have not been guided by the researcher's desires (Soroush et al., 2018). There was evidence in the study of consistency in data collection, analysis, and reporting. Any adjustment or change in methodology was documented. An audit trail is a detailed account of the steps from beginning to end of the research study

(Lincoln & Guba, 1986). Throughout this research study, I kept a research log that served as an audit trail. In the research log, I provided a detailed account of the steps taken throughout the research study.

Credibility

The credibility of a study is reflected in measures to establish a level of accuracy and to validate that the study findings are true and consistent with the meaning of the data collected (Soroush et al., 2018). The data collected from the participants, is representative, as best it can be, of participants experiences (Houser, 2015).

To provide credibility, the researcher used method triangulation. Triangulation is defined as the use of more than one source of data collection (Burkholder et al., 2016). The data were collected through interviews, observation of non-verbal language, having sufficient participants to reach saturation and documenting review using field notes taken by the researcher (Lincoln & Guba, 1986; Ravitch & Carl, 2016).

Transferability

Transferability is the measure of applicability of the qualitative findings, to other studies (Gray et al., 2017). The researcher needs to provide a detailed description of the inclusion criteria (Burkholder et al., 2016).

The participants were six novice nurses (newly graduated nurses with less than a year of experience), of any gender, and age between 18 to 99 years old. Inclusion criteria included a bachelor's degree in nursing, obtained from a nursing school in Puerto Rico. The academic program needs to be completed in a period of 4 years. Exclusion criteria is obtaining a bachelor's degree in nursing from hybrid or online nursing programs.

Confirmability

In qualitative research, the researcher needs to be objective. Confirmability involves the integration of other researchers to analyze the data and if they arrive at the same conclusion, the study has confirmability (Grove et al., 2013). Researcher's assumptions are clearly described to avoid personal biases. I made notes regarding my thoughts and feelings as a way to set aside researcher bias and any assumptions I might have had.

Ethical Procedures

The proposal was sent to the Institutional Review Board (IRB) of Walden University for review and authorization of the study. Participation in the study is completely voluntary. The informed consent is written in simple jargon that makes it easy to understand (see Appendix D). This informed consent explains the purpose of the study, the participant's expected length of time in the study, the description of the interview process, confirmation of their voluntary participation and the right to discontinue the study, and the rights to protect the privacy of the participant. Digitally recorded interviews were transferred to a code-protected USB drive. Each participant was identified in the registered data with a number. The researcher followed all codes of ethics and regulations established by the Puerto Rico Board of Nursing. The IRB approval number is # 04-12-22-0656072

Summary

This study is designed to investigate the concept of critical thinking and the phenomenon of critical thinking development. Volunteer participants were recently

graduated nurses who completed a bachelor's degree in nursing, obtained at an academic institution in Puerto Rico. The researcher designed an interview, composed of five specific open-ended questions, used as the data collection instrument. As a qualitative study, all responses were coded first and then categorized using thematic coding.

Chapter 4: Data Analysis and Findings

Introduction

The purpose of this study was to explore how the critical thinking process can be affected by different approaches to clinical nursing undergraduate education in Puerto Rico. The research question was: What are the perceptions of newly graduated baccalaureate nurses regarding their critical thinking development when their academic experiences were in different environments?

This chapter states the research findings obtained from the data collected. The data were collected utilizing an individual face-to-face interview composed of six semi-structured questions conducted by the researcher. The interview was designed by the researcher and approved by the dissertation committee. Participants were contacted through e-mails. The data obtained in the interview process was digitally recorded, after the participant's consent. The interviews were conducted in the English language. Journal field notes of non-verbal language were taken through the interview process. The researcher coordinated interviews with the participant.

Setting

As the researcher, I met with six participants in a one-to-one private setting. Prior to the interview I explained the interview process and obtained a signed consent from the participant. The interview was arranged on a day and time that was flexible for the participant. The interview was in a private room in the general library of the University of Puerto Rico, Rio Piedras campus. The researcher made sure that the room's environment (temperature, noises) was comfortable.

Demographics of the Participants

Six newly graduated nurses were interviewed. The participant's ages were between 21 to 35 years old. Table 4.1 presents the age, gender, and years of a registered nurse, of the participants. All participants obtained their baccalaureate in nursing in academic institutions in Puerto Rico. All the participants were newly graduated nurses with less than a year of experience as registered nurses.

Table 2

Participant Demographic Information

Gender	Age	Years as Nurse
2 Male	25-31 Years old	3 months to 1 year
4 Female	23-33 Years old	6 months to 1 year

Data Collection

For the data collection I interviewed six newly graduated nurses. The interviews took place in a private room in the general library of the University of Puerto Rico, Rio Piedras Campus. The interviews were on different dates, between 9:00 am to 5:00 pm, according to the researcher and participant's availability. All the interviews were completed in a period of two weeks. Responses, including non-verbal language, were recorded as a field note. The data were recorded with a digital recorder and then transcribed and encoded by the researcher. No unusual circumstances were encountered during data collection.

Data Analysis

The data were transcribed by the researcher using repetition of data recorded and careful listening. Notes captured during the interviews were added to the transcription to support emerging codes. Microsoft Word was used for transcription and thematic analysis. Once transcription was completed the data were coded to find phrases or sentences that were consistent with the research question. There were no discrepant cases were noted during data collection.

Evidence of Trustworthiness

Credibility

The data were collected through interviews digitally recorded, observation of non-verbal language, and documenting review using field notes taken by the researcher. The observations of nonverbal language were according to their responses. When I asked them about their experience working with expert nurses, you could see the stress and frustration on their faces. The participants only expressed their experience as nursing students and now as novice nurses. These data collection approaches supported methods triangulation, which is an important component of credibility (Lincoln & Guba, 1986; Ravitch & Carl, 2016). Soroush et al. (2018) also noted that credibility of a study is reflected in measures to establish a level of accuracy and to validate that the study findings are true and consistent with the meaning of the data collected. The data collection procedures supported that data was collected in a manner that was authentic and allowed for accurate responses.

Transferability

The interviews were performed in a private room, one to one, with only the researcher and the participant. To participate in the study, the participants need to be novice nurses (English-speaking newly graduated nurses with less than 1 year of experience), of any gender and aged between 18 to 99 years old. To qualify, nurses must have completed a bachelor's degree in nursing, obtained from a nursing school in Puerto Rico. The academic program needs to be completed in a period of 4 years. The exclusion criteria are obtaining a bachelor's degree in nursing from hybrid or online nursing programs. The inclusion criteria were clear to the participants, an important component of transferability (Burkholder et al., 2016). Transferability is also the measure of applicability of the qualitative findings, to other studies, in this study the participants were limited to one geographic region, limiting the extent that the findings can be applied to other nursing programs (Gray et al., 2017).

Dependability

To not affect the real feelings of the participants, the interviewer only was dedicated to asking questions and observing the nonverbal language. To create a nonstressful environment the participants could have time to think about their responses. A paper with a copy of the questions was provided to each participant to be sure that they understood the question.

An audit trail is a detailed account of the steps from beginning to end of the research study (Lincoln & Guba, 1986). Throughout this research study, I kept a research log that served as an audit trail. In the research log, I provided a detailed account of the

steps taken throughout the research study. The data collection, analysis, and reporting were according to the research plan. There was consistency in data collection, analysis, and reporting. No changes were made with the selected methodology.

Confirmability

Confirmability involves the procedures that help to ensure that the data is collected and analyzed accurately and is free from bias (Grove et al., 2013). The interview procedures were compatible with the research methods described in Chapters 3. To avoid bias, I asked questions and observed non-verbal language. During the interviews, I did not interfere with the participants. All the participant's quotes were obtained from the data digitally recorded. Field notes were kept to identify any bias felt during the interview process. I was able to set aside any bias or assumptions. Data were also checked and rechecked to ensure accuracy of the findings.

Results

During this study my goal was to understand how the critical thinking process can be affected by different approaches to baccalaureate clinical nursing education in Puerto Rico. I obtained interviews with six newly graduated nurses who shared their perceptions regarding their own critical thinking development when their academic clinical experiences were set in different clinical environments. Interestingly the participants all had hospital-based clinical experiences and only one participant was able to participate in hand-on care of patients due to the Covid pandemic. The remaining 5 participants were only able to observe nurses in the hospital-based clinical practice setting.

Categories, Patterns and Themes

During data analysis I noted data saturation after six interviews and identified several themes taken from the codes and categories that are described in Table 3.

Participant quotes to support the themes are described in Table 4.

Table 3

Codes, Categories, and Themes

Codes	Categories	Themes
Solving Problems Required Utility	Perception	Perception about critical thinking development
Academic Institutions Hospital	Development	Critical thinking development
Power Point Demonstrations Simulation Case Study	Learning Strategies	Learning strategy used in the classroom
Time Spent Good Poor	Clinical Setting Time Spent Good Practice Poor Practice	Experience in clinical practice
Teaching Mentoring Collegiality	Novice Nurses Expert Nurses	Relationship of novice nurses with experienced nurses

Table 4*Participant's Quotes*

Participants' Quote	Themes
<p>“Critical thinking is a way that you can find the best solution to the problem.”</p> <p>“I think we need some help in the development of critical thinking.”</p> <p>“Critical thinking in my nursing profession is like brainstorming.”</p>	Perception about critical thinking development
<p>“Critical thinking is developed in both, school and hospital.”</p> <p>“I acquire critical thinking working in the hospital.”</p> <p>“The school of nursing is where I acquired knowledge about critical thinking.”</p>	Critical thinking development
<p>“During my time as student the professor uses power point presentations.”</p> <p>“The techniques used in the classroom mainly reading and textbooks.”</p> <p>“Power point, case study, flipped classroom, and simulation.”</p> <p>“Strategy used were power point and verbal demonstration.”</p>	Learning strategy used in the classroom
<p>“I made practice in fundamental of nursing and medical surgical.”</p> <p>“Only 6 months with a limited experience.”</p> <p>“Two theoretical classes and two practices per semester”</p> <p>“Experience was something beautiful, it can be said outside of holistic thinking, it is a whole shower of questions and learning over time.”</p>	Experience in clinical practice
<p>“Not all of them have capacity to teach.”</p> <p>“I felt lost with stress”</p>	Relationship of novice nurses with experienced nurses

Themes and Data Evidence

The results of the interviews are divided into themes. The themes are products of the coding process. The themes are presented as perception of critical thinking development, critical thinking development, learning strategy used in the classroom, experience in clinical practice, and relationship of novice nurses with experienced nurses.

Theme 1: Perception About Critical Thinking Development

The participants have the perception that critical thinking is necessary to work as registered nurse in a clinical setting for example one participants stated: “Critical thinking is a way that you can find the best solution to the problem.” Another participant stated: “I think we need some help in the development of critical thinking.”

Ozcan and Elkoca (2019) stated that nursing students must be enabled to find timely answers to significant clinical problems. The perception of the participants is compatible with the finding of other researchers. Critical thinking is necessary, but they feel that need help with critical thinking development. The Institute of Medicine recommends that nursing education programs prepare nursing students with critical thinking skills (IOM, 2003).

Theme 2: Critical Thinking Development

Critical thinking is a skill necessary for continuous professional development, decision-making, and problem-solving (Dwyer & Walsh, 2020). Since critical thinking is necessary for continuing professional development, nurses should acquire it before

becoming registered nurses or early in their nursing career. The novice nurses that were interviewed stated that they acquired critical thinking working in the hospital as registered nurses:

“Critical thinking is developed in both, school and hospital.”

“I acquire critical thinking working in the hospital.”

“The school of nursing I acquired knowledge about critical thinking.”

Academic institutions have the responsibility to develop critical thinking in nursing students (Willman et al., 2019). Novice nurses who do not possess critical thinking skill could jeopardize patient safety.

Theme 3: Learning Strategy Used in the Classroom

From lecture-based learning, problem-based learning, case study, and flipped classroom, the participants reported that the most common learning strategy used was lecture-based learning.

“During my time as student the professor uses power point presentations.”

Lecture-based learning produces a traditional classroom a place where the educator bases their teaching on a textbook, and a blackboard with a piece of chalk, and teaches following an established educational plan (Ziling & Yeli, 2018). Dang (2019) stated that the traditional classroom does not promote an environment of participation and interaction between the professor and the students. An environment of interaction permits open and sincere communication between educator and students that consequently promotes learning (Abd & Hershkovitz, 2019).

Theme 4: Experience in Clinical Practice

Ozcan and Eliokoka (2019) articulated that clinical practice is the heart of nursing education. Clinical practice helps to transform knowledge into skills. The research findings support the identified research problem, that there are limited resources to support clinical practice that would lead to development of critical thinking skills. In Puerto Rico, there is a lack of clinical settings for undergraduate nursing students. To solve this situation, some nursing schools in Puerto Rico are using simulation laboratories instead of clinical settings. However, in the participant's interviewed, simulation had only been used for classroom teaching demonstration and not for clinical practice.

“On my time as student I went to hospital for clinical practice on fundamental of nursing, after that the university didn't take us to another clinical practice”

Nursing schools now are experiencing problems obtaining clinical settings for nursing students' clinical practices. In Puerto Rico, during the last 5 years, we have seen an increase in nursing schools providing bachelor's degrees in Nursing Science. An increase in nursing school attendance means more nursing students requiring sites for their clinical practices. In Puerto Rico, another problem that affects programs of nursing and contributes to the lack of clinical settings for practice is a problem with the economy. Other academic institutions, such as government academic institutions, use university hospitals for clinical practice.

“I took two theoretical classes and two practice per semester.”

These university hospitals, in Puerto Rico are only 3, only accept group of 8 students per clinical practice. For private academic institutions is difficult to find clinical setting for clinical practice.

Theme 5: Relationship of Novice Nurses with Experienced Nurses

When novice nurses arrive in a clinical setting, a preceptor is assigned to the novice nurse. These preceptors are selected by the manager of the assigned area. Preceptors are expert nurses, trained to provide preceptorship. Not all preceptors have the ability to teach.

“No all of them have capacity to teach.”

Some expert nurses think that novice nurses are experts like them, increasing stress in novice nurses (Mirza et al., 2019). Mansour and Mattukoyya (2018) stated that novice nurses feel the transition from nursing students to nurses is a very stressful experience. It is possible to have a gap between theory and practice making the novice nurses feel stressed and insecure.

“The first day I was little lost”

Novice nurses are in the transition from school to practice as a registered nurse. It is possible to have a gap between school and this new reality making the novice nurses feel stressed and lost. This gap is a reflection of the difficulty to find clinical settings for practice.

Summary

Nurses need to have critical thinking capacity before starting to work as nurses in the clinical setting. Registered nurses are developing critical thinking while working as

professionals in clinical settings. There are two problems identified in this research, one is the type of learning strategy, and the other is time in clinical practice settings as a student. Many nurse educators continue using only lecture-based learning as their learning strategy. To produce learning gains the nurses in this study expressed a need to interact with educators to be more engaged with the learning. Also, for the participants in this study, the time spent in clinical practice was not enough. Clinical practice is essential for critical thinking development. The implications of these findings are to support increased exposure of nursing students to the clinical settings and increased engagement in the classroom. Clinical institutions are receiving newly graduated nurses without critical thinking capacity. This situation produces stress in newly graduated nurses and as result, we are seeing an increment in turnovers in clinical institutions.

Chapter 5: Discussion, Conclusions and Recommendations

Introduction

The purpose of this study was to understand how the critical thinking process can be affected by different approaches to clinical undergraduate nursing education in Puerto Rico. This chapter is designed to interpret the findings. The findings were interpreted to identify the situations related to the achievement or failure in the development of critical thinking. In this chapter, the researcher wants to find a way to help in the development of critical thinking. Additionally, the limitations throughout the development of the study are presented. Finally, the recommendations and the implications are described.

Interpretation of the Findings

Nurses are the people responsible for the care of a patient. Nurses are exposed continually to situations in which they need to make rapid decisions. The life of the patient may depend on these decisions. Research findings show us that nurses need to have the ability to think critically (Mirza et al., 2019; Zapalska et al., 2018). Nursing education is one way that nurses acquire the skills and knowledge necessary to develop critical thinking (Oldland et al., 2017). Academic institutions divide the learning process into two areas, knowledge, and practice. Nursing students take courses for knowledge development and clinical practice, in clinical settings, to develop skills and practice. The research findings, in this study, demonstrate that nursing students spend more time in the classroom than in clinical settings for clinical practice. The nurses who participated in this study, felt that they were acquiring more knowledge and less skills as nursing students.

It is expected that novice nurses (newly graduated) have the knowledge and skills to provide safe care and resolve complex situations (Georg et al., 2018). The big issue affecting novice nurses is the incapacity to make decisions at the level required for a competent professional nurse (Caputi & Kavanagh, 2018). The participants confirmed that they arrived to the hospital, to work as nurses, and found that it was initially very stressful.

Novice nurses are in a transition from nursing students to nurses. Järvinen et al. (2018) stated that novice nurses have feelings of insecurity and lack of confidence related to their duties as nurses. Mansour and Mattukoyya (2018) stated that novice nurses feel the transition from nursing students to nurses as a very stressful experience. This stress was increased, as stated by the participants, when the nurses with more experience did not want to teach them.

Benner's novice to expert theory asserts that nursing knowledge, skills, and clinical competencies are developed through classroom teaching and clinical practices (Ozdemir, 2019). From the participants in this study, the findings suggest that critical thinking development may not be occurring in the classroom. The findings show that the participants feel they are developing critical thinking as nurses working in a hospital. To produce novice nurses with the mental and physical skills to work as a nurse, academic curricula must include content that promotes the development of critical thinking (McEwen & Wills, 2014). Novice nurses may not be acquiring critical thinking as students. As was presented in the results, one of the situations is the problem to find clinical settings for practice.

Limitation of the Study

My study was limited by the lack of responses to my invitations to participate. Many of the newly graduated nurses did not respond to the invitation to participate in the study. Other newly graduated nurses after accepting the invitation, did not arrive at the interview. Having a larger sample size might provide greater understanding of the perceptions of novice nurses in Puerto Rico. The other limitation was the lack of different clinical settings experienced, due to the Covid pandemic the participants were all hospital based and only one was able to participate in direct patient care, the rest were only able to observe.

Recommendations

A helpful strategy for the reduction or elimination of that stressful feeling in novice nurses is exposing the nursing students to practice in clinical settings if it is possible from the first year of nursing studies (Widarsson et al., 2020). Following Benner's novice to expert theory, novice nurses are often newly graduated nurses. That means they do not yet have the expertise as an advanced beginner. Being a novice nurse can produce stress for them in the workplace. Novice nurses require support from more experienced nurses to acquire expertise in the nursing profession (Jarvinen et al., 2018). Abiodun et al. (2019) agree that novice nurses need to spend a period of structured clinical practice following their graduation. This structured clinical practice could be defined as an internship program that includes peer support, preceptorship, and simulation-based training. A post-graduate training program could expose the novice nurses to real-life situations that will aid them to improve their critical thinking and

clinical competencies (Bakuwa et al., 2020). The utilization of an internship program is the key element in the process of transition from novice nurses to competent advanced beginner nurses (Bipshop & Wackler, 2017).

One outcome of this dissertation is to propose the development of a residency program the goal of this program is to increase newly graduated nurses' competence and organizational skills, use of evidence-based practice, improve communication, decreased turnover, enhanced leadership skills, positive professional relation with other registered nurses and health professionals, and critical thinking development. This program will be a 12-month residency program centered in practice and skill development based on Commission on Collegiate Nursing Education (CCNE) Accreditation Standards as amended in 2015.

Implications for Social Changes

The novice nurses interviewed expressed feelings of insecurity and a lack of confidence related to their duties as nurses. The lack of clinical experience and preceptors that make negative comments about their performance have resulted in job dissatisfaction and burnout among these novice nurses. Job dissatisfaction has been found as the first cause of nurse turnover in hospitals. Providing novice nurses with improved critical thinking skill could support their job satisfaction and result in improved patient care.

Implications and Recommendations for Practice

Job dissatisfaction and burnout are reducing the nurses available to work per shift. This situation is exposing the nurses to work more hours with more duties. As results there is an increase in patient morbidity and mortality. As was recommended earlier in

this study, a residency program for newly graduated nurses could be helpful. If newly graduated nurses were better prepared there may be less dissatisfaction, less burnout, and fewer turnovers.

Conclusions

Critical thinking is an essential skill required to work as a nurse in a clinical setting. Nurses are exposed continually to situations where they are required to make critical decisions. The participants of this study agree that academic institutions are responsible for supporting critical thinking development. This study suggests that the lack of clinical practice is a principal problem of failure in the acquisition of critical thinking. The participants also noted a lack of workplace support for their roles from senior nurses once they were working as novice registered nurses. These issues may be contributing to the turnover seen today in different clinical settings. This study suggests as a solution the creation of a residency program in nursing. This will be an opportunity for the newly graduated nurses to spend additional time in a clinical practice environment that should support increasing confidence in their new role and improved critical thinking.

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Appendix A: Request to Puerto Rican Board of Nursing

Norberto Rosado

Date:

Department of Health
Puerto Rico's Nursing Board

Greetings,

I'm a Doctor in Philosophy of Nursing student, at Walden University, and at this time I'm working on my dissertation. The title of my dissertation is "*Newly Graduated Baccalaureate Nurses Critical-Thinking Development*". I want to analyze the critical thinking development of novice nurses. To make this analysis, I need to interview novices nurses. To make these interviews I need to obtain information that facilitates communication with these novice nurses. It is for that reason that I kindly request you authorization to obtain the e-mail address of these novice nurses. These novice nurses will be invited, through e-mail, to participate in this study. I will appreciate all your help with this matter. If you have any questions or need additional information, do not hesitate to contact me.

Sincerely,

Norberto Rosado RN CCRN

Appendix B: Participation Invitation

Norberto Rosado

Greetings,

I'm a Doctor in Philosophy of Nursing student, at Walden University, and at this time I'm working on my dissertation. The title of my dissertation is "*Newly Graduated Baccalaureate Nurses Critical-Thinking Development*". I want to analyze newly graduated nurses' perception of critical thinking development during their baccalaureate study in the academic institution. It is for that reason that I'm inviting you to voluntarily participate in my study. Your participation will consist of an interview. The interview consists of five open questions and a time frame of 30 to 60 minutes. Your answers will be digitally recorded. It will be a pleasure for me to count on you in my study. If you accept to participate in my study, return an e-mail message with the word ACCEPTING or REJECTING. If you need additional information, feel free to contact me.

Sincerely,

Norberto Rosado RN CCRN

Appendix C: Semistructured Interview

Date and Hour of the interview

Date: _____ Beginning Hour: _____ Ending

Hour: _____

Demographic Information

Gender: _____ Age: _____

Time working as nurse: _____

Interview Questions

Critical Thinking Development

1. What is your perception about critical thinking development?
2. Was critical thinking acquired in the nursing school or working as a nurse?
3. What learning technique (lecture-based, problem-based, simulation, case study, or flipped classroom) was primarily used in the classroom?
4. Describe your experience during your academic clinical practice.

Working Experience

1. How is your relationship as a novice nurse with the experienced nurses?
2. Describe your experience using critical thinking in patient care.