THE INCORPORATION OF EVIDENCE-BASED SIMULATED ACTIVITIES IN AN EXISTING NURSE RESIDENCY PROGRAM

A Scholarly Project

Submitted to the

Faculty of Liberty University

In partial fulfillment of

The requirements for the degree

Of Doctor of Nursing Practice

By

Wendy Partin Thompson

Liberty University

Lynchburg, VA

October, 2018

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Scholarly Project Chair Approval:

ABSTRACT

As new graduate nurses are challenged with caring for patients with complex disease processes, nurse residency programs are designed to ease the transition into practice. A community based hospital, in the southern United States has recently implemented such a program. However, the organization continues to have problems with nursing turnover. This problem is especially evident in nurses with less than one year of clinical experience. Research has shown that nurse residency programs without simulative activities eliminate vital critical thinking activities which prepare novice nurses for clinical practice. The purpose of this project was to design evidencebased simulative activities to increase self-efficacy in new graduate Registered Nurses (RNs). A sample of 15 nurse residents received the education interventions and completed a pre and posttest designed to measure self-efficacy. The average pre-intervention test indicated that the new nurse graduates lacked confidence, critical thinking, and remaining calm in dealing with complex clinical situations. After the intervention, the average post-intervention test indicated that the new nurse graduates showed a statistically significant increase in in problem-solving skills, clinical confidence in decision-making, confidence in patient education, handling unexpected results, remaining calm in complex situations, and finding solutions to clinical problems. As a result, the organization plans to add simulative activities permanently to the residency program.

Keywords: Nurse residency program, new graduates, simulation, self-efficacy

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Dedication

I dedicate this scholarly project to my family, especially my husband Allen. It was your unwavering support, love, encouragement, and prayers that kept me persistent in achieving my goals. I cannot thank you enough for helping me to realize my potential and never giving up on me. To my children, Matthew and Hannah, thank you for your patience in allowing me to complete this project. To my mother, Phyllis, thank you for believing in me and praying for me during this journey. I love you all and could not have done it without you!

Acknowledgments

In the completion of this scholarly project, I want to first thank God for giving me necessary strength and persistence while completing the necessary requirements. Thank you to my scholarly project chair, Dr. Kopis, EdD, MS, RN, FNP-C, CNE for mentoring me through this process. I learned so much from you and am forever grateful for all of your support. A special thanks goes to the educational department within the organization who allowed me to complete this project.

Table of Contents

Abstract	3
Copyright Page	4
Dedication	5
Acknowledgments	6
List of Tables	9
List of Figures	
List of Abbreviations	11
Section One: Introduction	
Background	
Problem Statement	14
Purpose of the Project	14
Clinical Question	14
Section Two: Literature Review	
Search Strategy	
Critical Appraisal	16
Synthesis	17
Conceptual Framework	17
Theoretical Framework	
Summary	20
Section Three: Methodology	21
Design	21
Measurable Outcomes	21
Setting	22
Population	23
Ethical Considerations	23
Data Collection	24
Tools	24
Intervention	25
Timeline	26
Feasibility Analysis	26

Data Analysis	27
Section Four: Results	27
Descriptive Statistics	27
Measurable Outcomes	30
Section Five: Discussion	31
Implication for Practice	31
Sustainability	32
Dissemination Plan	32
References	34
Appendicies	38
Appendix A: Levels of Evidence Matrix	38
Appendix B: IRB Approval Letter	54
Appendix C: CITI Program Completion Report	55
Appendix D: Letter of Organizational Support	59
Appendix E: General Self-Efficacy Scale	60
Appendix F: Permission to Use the General Self-Efficacy Scale	62
Appendix G: Permission to Use the Iowa Model	63
Appendix H: Consent Form	64

List of Tables

- **Table 1:** Nursing Turnover within the Organization (page 13)
- **Table 2:** Simulative Activities and Associated Hospital Policies (page 19)
- **Table 3:** Pre-Test and Posttest Results (page 30)
- **Table 4:** Feedback From the Participants (page 32)

List of Figures

Figure 1: Age Range of Participants (page 28)

Figure 2: Prior Medical Experience of the Participants (page 28)

List of Abbreviations

Strengths, Weaknesses, Opportunities, Threats Analysis (SWOT)

Chief Nursing Officer (CNO)

Cumulative Index to Nursing and Allied Health Literature (CINAHL)

National League for Nursing (NLN)

Registered Nurses (RNs)

Institutional Review Board (IRB)

Section One: Introduction

In healthcare organizations, new graduates are faced with caring for patients with complex disease processes. A community based hospital, located in the Southern United States recently implemented a nurse residency program to ease the transition into practice. However, the program experienced negative feedback and as a result, many new graduates feel unprepared, thus leaving employment with the healthcare organization. Research studies have shown that new graduates report: lack of guidance and support, multiple preceptors, and lack of preparedness for complex clinical situations (Sledge, Potter, & Stapleton, 2016).

Inadequate nurse staffing is a safety concern for the patients and the healthcare organization because nurses are unable to adequately care for the number of patients assigned (Van Camp & Chappy, 2017). Quality and safety are important issues in healthcare, and implementing evidence-based projects can greatly increase patient safety by bringing the latest research into the clinical setting (Mateo & Foreman, 2014). Studies show that the first 12 to 24 months of nursing practice are critical to longevity and success (Van Camp & Chappy, 2017). In addition, a study regarding nurse residency programs has shown that programs of at least 12 weeks in length with dedicated preceptors and simulated activities can decrease turnover while increasing clinical confidence (Van Camp & Chappy, 2017).

An emphasis on interactive learning with simulated activities enables participants to critically think regarding complex situations (Cochran, 2017). Overall, new graduates RNs lack critical thinking skills which could be bridged with simulative activities (Cochran, 2017). In addition, enhancing critical thinking skills has proven to increase confidence in the clinical setting (Cochran, 2017). Furthermore, studies suggest that a rise in confidence can lead to increased job satisfaction and intent to stay within the organization (Cochran, 2017).

Background

This organization is facing an increase in the turnover of the nursing staff. Employee satisfaction surveys conducted in 2016, were particularly low. This healthcare facility implemented a nurse residency program in the summer of 2016. The feedback from participants in the program have been particularly negative while turnover is high in nurses with less than one year of experience.

The mission of this organization is to provide extraordinary healthcare for patients and their families, provide a center of excellence for physicians to practice medicine, and create a vibrant workplace for employees (], 2017). According the 2017 progress report, one of the major threats to the organization is the recruitment and retention of nurses (], 2017). Currently, nurse turnover in this organization is at approximately 21%.

Table 1: Nursing Turnover within the Organization

Year	All Nursing Turnover	Less Than One Year of Experience Turnover
2016	21.84%	24.62%
2017	20.72%	22.34%

In examination of the Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis, a major weakness of this organization is the lack of service (patient care, access to care, healthcare services offered) as compared to competitors (2017). In addition, a focus of concern is the job satisfaction rates of the nurse staff. These factors are directly linked to the high turnover in the nursing staff (2017). As a result, the organization has expressed an interest in revising the nurse residency program with the incorporation of evidence-based research.

Problem Statement

The organization currently has high nursing turnover, especially within the new graduates (less than one year of clinical experience). This continues to be a problem despite the implementation of a nurse residency program in 2016. According to the organization, it costs approximately \$80,000 to train a new graduate RN. Many of the new graduates are leaving the organization with less than one year of experience. A revision of the nurse residency program could increase new graduate self-efficacy while potentially help to decrease the turnover in the organization. Research has shown that new graduate residency programs which enhance clinical skills and clinical thinking promotes self-efficacy in the clinical setting (Cochran, 2017).

Purpose of the Project

The purposes of this project are to: identify key factors contributing to a lack of self-efficacy in new graduates in the clinical setting and implement an evidence-based project to support new graduate self-efficacy.

Key questions include:

- 1. What evidence exists relative to a lack of clinical preparedness between entry-level nurse residency programs and beginning nursing clinical practice?
- 2. Can the addition of simulation in the current nurse residency program better increase self-efficacy?

Clinical Question

In a group of newly hired graduate nurses, does participation in simulation during a nurse residency program, compared to current process, increase new graduate self-efficacy after 15 weeks? P: new nursing graduates, I: addition of simulated activities to an existing nurse

residency program, C: current nurse residency program, and O: increase in new nurse self-efficacy.

Section Two: Literature Review

Search Strategy

A literature search conducted of several search engines included: ESBCO HOST,

Cumulative Index to Nursing and Allied Health Literature (CINAHL), Cochrane, PubMed,

Proquest Nursing, and Medline. In this review, the project leader gathered pertinent evidencebased research data for the literature and full-text search along with peer-reviewed articles. The
following keywords proved to be useful in the search of empirical research on nurse residency
program and retention including: nurse residency, new graduates, novice nurse retention, intent
to stay, clinical preparedness, evidence-based nurse residency programs, and nurse satisfaction.

Parameters of the search included peer-reviewed research articles published in the English
language within the past five years. Approximately 100 articles were read with pertinent journal
articles synthesized for the background information of the project.

Search criteria terms such as: intent to stay, evidence-based nurse residency programs, simulation, self-efficacy, and novice nurse help to narrow the search from over 1,500 articles to 250 articles in the CINAHL and Proquest nursing databases. These added search terms ensured that the best articles were available for review by eliminating duplicative research studies. After narrowing the search criteria, 35 articles were deemed helpful as background information for the project. Criteria for inclusion included: evidence-based research articles published within the past 5 years, simulative activities in nurse residency programs, and best practices regarding nurse residency programs. The included research studies included evidence-based research on existing

nurse residency programs and systematic reviews of literature outlining the most valuable research. Upon completion of the critical appraisal, sixteen articles were selected for inclusion.

Critical Appraisal

Two common themes emerged from the literature review. The first theme focused on dedicated preceptors in a nurse residency program. The literature consisted of cohort studies and literature review of over 100 research studies. Research points to the fact that the preceptors should have at least five years of clinical experience to qualify (Adams & Gillman, 2016). Incentives for the preceptors, such as increased pay or a no-pull guarantee should be considered by the organization (Adams & Gillman, 2016).

Currently, within the organization, the nurse residency program allows the participants to have no more than two preceptors. The literature discusses that dedicated preceptors enable the nurse resident to have a strong clinician as a mentor during the orientation period (Ke, Luo, & Hung, 2017). In addition, these articles provided strong evidence regarding one preceptor serving as a mentor can improve skill level and confidence (Ke, Luo, & Hung, 2017). However within the organization job satisfaction and clinical confidence continues to be a concern.

The other common theme, simulation in nurse residency programs, was evident in the literature review. Research showed that simulated activities can improve the self-efficacy of the novice nurse (Cochran, 2017). Simulated activities, such as skills review, critical situations, crisis intervention, prioritization exercises, and interpersonal conflict are particularly helpful for the nurses (Garrison, Dearmon, & Graves, 2017). Simulation should be conducted toward the end of the program as a culmination of skills learned during the residency program (Cochran, 2017). In addition, the literature included background information including: how evidence-based nurse residency programs are fiscally responsible, increase confidence, and can help to

decrease turnover in nurses with less than one year of nursing experience. The matrix organizing the critical appraisal of the evidence is located in Appendix A.

Synthesis

The literature strongly suggests that nurse residency programs are beneficial for the novice practitioner. Multiple literature reviews and cohort studies show that simulated activities can enhance the learning of the participants (Cochran, 2017). In turn, this will lead to increased self-efficacy in the clinical setting (Cochran, 2017). Much evidence points to the use of evidence-based research in the development of nurse residency programs. The use of simulation at the end of nurse residency programs should include realistic features that do not duplicate what was taught in nursing school (Cochran, 2017).

Conceptual Framework

The Iowa Model of the Evidence-Based Practice to Promote Quality Care was used to guide this project. Permission to use The Iowa Model is located in Appendix D. In the revision of an existing new nurse residency program, knowledge-focused triggers include the research that is available in the support of such programs. Step one includes the triggers for topic selection (Brown, 2014). Current research supports the use of an evidence-based nurse residency program which can positively impact nursing staff turnover (Van Camp & Chappy, 2017).

Triggers. This topic is a priority for this organization, because the nursing staff turnover is high, especially in new graduate nurses. Recent satisfaction surveys regarding the nurse residency program reveal that graduates feel unprepared in the clinical setting. Research has shown that simulation is an integral part in preparing nurses for complex clinical situations (Franklin & Lee, 2014). In addition, the stakeholders, including the Chief Nursing Officer (CNO) and Educational Department determined that the project is feasible for the organization.

Purpose. This project was designed to improve self-efficacy for new nurse graduates after the completion of simulative activities in an existing nurse residency program. The simulative activities were designed using evidence-based research and existing organizational policy to ensure clinical preparedness. The project was designed to increase clinical confidence and self-efficacy which would prove to be beneficial for the healthcare organization.

The team. The formation of a team is essential to develop, implement, and evaluate the project (Brown, 2014). According to the Iowa Model, the relevant research should be critiqued and synthesized as a team (Brown, 2014). The team should be comprised of experts and stakeholders within the organization (Brown, 2014). The team for this evidence-based project included the educational department and the project leader.

Pilot program. This step involves brainstorming as a team to determine the best evidence for the project (Brown, 2014). This step ultimately worked to create the direction of the project. In addition, grading the evidence to determine to strength of the existing literature is essential (Brown, 2014). In grading the literature, it was determined that strong evidence exists related to the addition of simulation in a nurse residency program. Furthermore, the best nurse residency programs includes the use of simulated activities.

After much consideration, the team decided that an addition of a piloted simulated activity in the existing nurse residency program could prove to be beneficial for the nurse residents. The decision was based on promoting patient safety within the healthcare organization. The simulative activities centered on an unfolding scenario involving a patient admitted after a hemicolectomy and develops serious complications. The scenarios incorporating critical safety concerns in an unstable patients. In addition, all of the activities

were based on hospital policy to ensure the participants fully understood the desired outcomes of the organization.

 Table 2: Simulative Activities and Associated Hospital Policies

Critical Skills Identified by the Team	Associated Hospital Policy	
Pulmonary Embolism Care and Heparin Drip	Titrating a Heparin Drip/Safety in Heparin	
	Administration	
Gastrointestinal Bleed and Blood Transfusion	Blood Transfusion Administration	
Administration		
Fluid Overload/Calling the Rapid Response	Do not Resuscitate/Durable Do not	
Team	Resuscitate	

Evaluation process. This step involves the evaluation of the evidence-based practice change (Brown, 2014). The evaluation piece will help to determine if the change was valuable to the healthcare organization and the new graduates (Brown, 2014). The simulative activities have proven to be a beneficial addition in an existing nurse residency program. In addition, it could take months or years before the changes may be proven to be valuable for the organization (Brown, 2014).

Theoretical Framework

In this project, Bandura's Self-Efficacy Theory was used as the new nursing graduates are participating in the nurse residency program (Christian & Krumwiede, 2013). This theory is based on Bandura's Social Cognitive Theory which recognizing the relationship between persons, behaviors, and the environment (Christian & Krumwiede, 2013). Self-efficacy is defined as one's judgment of his or her capabilities to organize and implement certain courses of action (Smith & Liehr, 2014). Through critical thinking and reflection, the nurse will determine how to act in a situation (Smith & Liehr, 2014). Self-efficacy can lead to clinical confidence and an increase in job satisfaction (Christian & Krumwiede, 2013).

The underlying principle of this theory is the premise that what an individual thinks, believes, and feel will determine how he or she behaves in a situation (Christian & Krumwiede, 2013). Individuals develop and determine how they feel about themselves through four processes. These processes closely align with the NLN Jeffries' Simulation Framework (Jeffries, 2012). The first process refers to the experiences that affect how a nurse acts (Jeffries, 2012). Participating in a simulated activities can provide the novice nurse with a clinical experience (Jeffries, 2012).

The second process is the vicarious experiences, which refers to the clinical action being performed by someone else (observation) (Jeffries, 2012). The third process, reflecting on the scenario can be supported during the debriefing process (Jeffries, 2012). The final process, gaining further knowledge through experiences can be gained during the entire simulation process (Jeffries, 2012). In addition, gaining further knowledge also includes policies and procedures that are unique to the healthcare facility (Christian & Krumwiede, 2013).

Summary

The research is overwhelming regarding the benefits of a comprehensive nurse residency program for new nurses. Evidence-based research shows that simulated and interactive activities should be integral components of a nurse residency program. The research shows that novice nurses require simulative activities that promote critical thinking skills. In addition, the implementation of simulation within a nurse residency program, has shown to increase self-efficacy. This organization has a significant nurse turnover rate, and revising the existing nurse residency program with the addition of simulation could prove to be beneficial for the organization.

THE INCORPORATION OF SIMULATED ACTIVITIES

21

Section Three: Methodology

Design

This was an evidence-based scholarly project designed to implement the latest research findings in the revision of an existing nurse residency program within the organization. This project used the Iowa Model for Evidence-Based Practice. The study used a quasi-experimental approach with newly licensed RNs entering the nurse residency program. To determine the selfefficacy upon entering the program, a pre-test using the General Self-Efficacy Scale (Appendix E) was conducted. This approach helped to determine the experiences regarding self-efficacy of the participants in a nurse residency program (Mateo & Foreman, 2014). In addition, this design was best in determining what the participants were expecting in a nurse residency program.

First, participants who are entering the residency were given a pre-test to determine selfefficacy regarding clinical skills. Upon determination the levels of self-efficacy, a simulated program was developed based on the needs of the residents and the healthcare organization. After the change was implemented, a posttest using the same questions from the General Self-Efficacy Scale (Appendix E) was conducted. These answers helped to confirm the self-efficacy of the participants after completing the simulative activities.

Measurable Outcomes

The focus of the project was placed on nurse with less than one year of clinical experience. The knowledge gained from the nurse residency program, should lead to an increase in clinical confidence. In the future, this should lead to a decrease in the turnover rates of the nursing staff.

The measurable outcomes include:

- The level of clinical confidence before and after completion of the simulated activities in the nurse residency program.
- 2. The level of improvement in critical thinking skills and resourcefulness in complex situations.
- 3. The level of confidence in reacting quickly to complex clinical situations.

Setting

The organization is a small, community-based hospital (2017). Approximately 300 physicians practice within the organization (2017). This healthcare facility sees a variety of conditions with the highest population of patients being oncology, hepatic and renal in origin. In addition, the majority of the patients served have significant financial constraints.

This healthcare organization focuses on providing a positive workplace for all employees along with the providing the best healthcare possible for the patients served. The stakeholders (Administrative Team and Education Team) within the organization support the project. The administrative team is supportive of the project due to the potential impact in decreasing turnover in the nurses with less than one year of experience. The Educational Department has also supported the project as a potential to better prepare new nurses joining the organization. This project can potentially increase self-efficacy and clinical confidence, while working to ensure that new graduate nurses are adequately prepared for complex clinical situations. In the future, this could potentially decrease turnover in the organization. Ultimately, healthcare facilities are looking for changes that will ultimately improve the lives of the patients served (Brownson, Colditz, & Proctor, 2012)

Population

The project included a convenience sample of new graduates RNs who graduated from an accredited nursing school between January and May 2018. Inclusion criteria were RNs who are graduates of an accredited nursing program with an unencumbered nursing license. In addition, these nurses were beginning employment in an acute care facility (with less than one year of professional nursing experience). A convenience sampling method was used as no more than 20 nurses are enrolled in the residency program at one time. This sampling method is easy to use by obtaining basic data and trends without the complications of randomization (Mateo & Foreman, 2014). However, this method should be utilized with caution because there is a potential of sampling error and selection bias (Mateo & Foreman, 2014).

Ethical Considerations

Before project implementation, approval through the University's Institutional Review Board (IRB) was required. This organization currently does not have an IRB, so organizational approval was not required. However, the organization has provided a letter of support (Appendix D). The purpose of an IRB is to protect human subjects participating in a study (Connelly, 2014). The IRB works to protect human subjects by fully examining the harm and benefit of a planned research initiative (Connelly, 2014). All participants should remain anonymous, as numbers or pseudonyms should be used when reporting findings (Connelly, 2014). The IRB at Liberty University approved the project on July 18, 2018.

This was an exempt project and informed consent was not required. However, the 15 participants were given a copy of the consent form for the project outlining the requirements (Appendix H). All of the participants agreed to be a part of the study. This is a reflection of the principle of respect for persons (Mateo & Foreman, 2014). All participants were provided of the

opportunity decided whether or not to participate. This relates to the Christian Worldview in that all human subjects should be treated in a manner that honors and glorifies God. In addition, the project leader completed CITI training (Appendix C) to ensure the protection of human subjects.

Data Collection

First, a pre-test to determine self-efficacy was conducted in new graduates entering the nurse residency program. The General Self-Efficacy Scale, was used determine the confidence of the new graduates before implementation of the simulated activities. The pre-test was completed in August 2018. Upon completion of the pre-test, simulated activities were developed based on the needs of the new graduates and the healthcare organization. The project leader worked with the educational team to develop a curriculum for the simulative activities.

Upon completion of the simulated activity in the nurse residency program, the posttest was administered using the General Self-Efficacy Scale. The participants completed the posttest after completing the simulative activities in October 2018. The posttest helped to determine that the addition of new simulated activities improved the self-efficacy of the new graduates. In addition, revisions to the program will be based on the posttest results.

Tools

This evidence-based practice change project consisted of the revision of an existing nurse residency program for new graduates (less than one year of experience). This cohort of new graduates were evaluated using pre and posttests. The General Self-Efficacy Scale, determined the confidence of the nurses before and after the intervention. The responses to questions were based on a modified Likert scale 1=hardly true, 2=hardly true, 3=moderately true, 4=exactly true (Schwarzer & Jerusalem, 1995). The General Self-Efficacy Scale is a self-report measure of self-efficacy (Schwarzer, & Jerusalem, 1995). There are 10 items on the scale with an internal

reliability of Cronbach's alphas between .76 and .90 (Schwarzer & Jerusalem, 1995). The addition of simulation to the nurse residency program will be based upon the latest in evidence-based research which will work to decrease time and cost.

Intervention

The healthcare organization is in support of the project (Appendix D). However, before implementation, the University and Institutional Review Board (IRB) approved this project. After the project was approved, the project leader researched the best practices in a nurse residency program. According to the stakeholders, the organization is experiencing difficulties with the recruitment and retention of nurses (especially those with less than one year of nursing experience). The organization has expressed an interest in the implementation of evidence-based research findings in the existing nurse residency program. Upon determination of the best practice, the project leader met with the Education Department to determine the feasibility of change.

The project leader designed simulative activities based on evidence and hospital policies. The simulations focused critical clinical situations that a new graduate nurse may encounter in practice. The team ensured that the activities were not duplicative and required hiring level thinking. An emphasis on critical thinking within complex clinical situations were highlighted in the simulative activities.

Furthermore, upon completion of the evidence-based changes, the organization is particularly interested in the job satisfaction of the RNs while working on the particular units. This data can be completed in the several months after the revised residency program has been completed. In addition, further studies can potentially be conducted to determine the effect of

the residency program on recruitment of newly licensed RNs. This is another area of concern for the organization.

Timeline. The new residency cohort began in June 2018. All of the research regarding the best practice in nurse residency programs was completed before the new cohort began. In addition, the project leader met with the educational team and determined the needs of the new graduates and healthcare organization. The pre-test was administered in August 2018 which helped to identify gaps in knowledge and expectations of the new graduates. The necessary revisions to the simulated activity were completed in August 2018. After completion of the revised program (with simulated activities), a posttest was conducted to determine self-efficacy of the residents upon completion of the program. The participants completed the simulated activities in the beginning of October 2018.

Feasibility Analysis. The only associated costs was the manpower and the copying of the materials. The hospital has clinical educators in the nurse residency program, therefore the workload should not increase. Funding is already in place for the nurse residency program and no additional funds are expected to be necessary because the hospital has access to simulation laboratory. Team members (already employed by the organization) will include the project leader, Director of Nursing Education, and Lead Educator of the nurse residency program.

The project was conducted as team with the project leader leading the project. The team leader was responsible for all of the research and administration of surveys. The Director of Nursing Education and Lead Educator of the nurse residency program provided the team leader with the specifics including the curriculum of the nurse residency program. The team met on a monthly basis until the delivery of the program. Additional means of communication was via e-mail within the organization. Communication was essential, as potential problems were quickly

identified (Brownson et al., 2012). After the best practices and needs were identified, the team worked to incorporate the changes into the existing nurse residency program.

Data Analysis

In evaluating this project, the experiences of the participants were examined first. This is an evidence-based practice project using a quasi-experimental approach to understand the experiences of the participants in the nurse residency program. The results of the pre-test and posttests were compared to determine if the revisions to the nurse residency program were successful. Additional revisions may be made to the nurse residency program if necessary. Furthermore, the experiences of the new graduates of the program must be monitored over a period of time to determine confidence and job satisfaction. This could be conducted in further projects.

Section Four: Results

Descriptive Statistics

The subjects of this project were 15 recent graduates of an accredited nursing program with an unencumbered nursing license. The sample was a convenience sample as 18 participants were enrolled in the residency program. Demographic data collected included: when the participant graduated from nursing school, age range of the participant, and any prior medical experience. All of the sample graduated from nursing school in May 2018 and were females. The majority of the participants were between the ages of 20-35 (Figure 1). The average age for all participants was 28 years old. Of the 15 participants, 67 percent have no prior medical experience, 6 percent are LPNs, 6 percent are EMTs, and 20 percent are CNAs (Figure 2).

Figure 1: Age Range of Participants

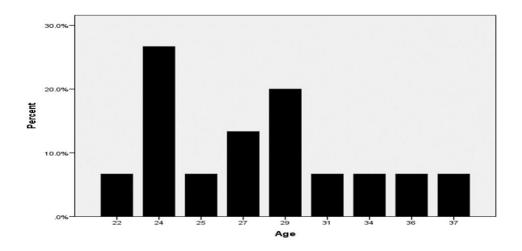
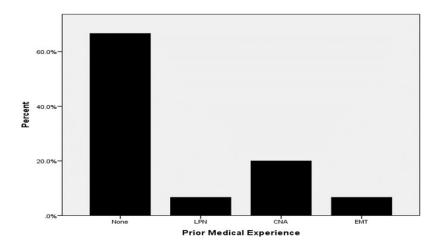


Figure 2: Prior Medical Experience of the Participants



All of the participants (n=15), completed both the pre-test and posttest. The pre-test was administered at the beginning of the nurse residency program (August 2018). The posttest was administered after the end of the simulative activities (October 2018). Upon completion of the tests, the participants were encouraged to leave comments and suggestions to improve the program.

The results were analyzed using the paired sample t-test to determine parameter of self-efficacy. Statistical Package for the Social Sciences (SPSS) software version 24 was used to analyze the results. The paired sample t-test was used to determine the mean difference between the two sets of data (pre-test and posttest results (Sullivan, 2012). Using the paired sample t-test will determine the effectiveness of the intervention, measuring parameters of self-efficacy before and after the simulative activities with p < 0.05 defined as statistically significant (Sullivan, 2012).

There was a significant difference in the scores for problem-solving skills, pre-test, question 1 (M=2.13, SD=.516) and posttest, question 1 (M=3.33, SD=.617) conditions; t(4)=-8.29, p=0.00. Secondly, there was a significant difference in the scores for clinical confidence, pre-test, question 2 (M=2.40, SD=.507) and posttest, question 2 (M=3.53, SD=.516) conditions; t(4)=-5.91, p=0.00. Next, there was a significant difference in the scores for patient education, pre-test, question 3 (M=2.53, SD=.743) and posttest, question 3 (M=3.27, SD=.458) conditions; t(4)=4.04, p=0.01. Next, there was a significant difference in the scores for dealing with unexpected events, pre-test, question 4 (M=1.87, SD=.640) and posttest, question 4 (M=3.27, SD=.458) conditions; t(4)=-8.50, p=0.01. Next, there was a significant difference in the scores for remaining calm in complex situations, pre-test, question 7 (M=2.20, SD=.561) and posttest, question 7 (M=3.33, SD=.488) conditions; t(4)=-5.90, p=0.00. Lastly, there was a significant difference in the scores for finding solutions to clinical problems, pre-test, question 8 (M=2.27, SD=.458) and posttest, question 8 (M=2.87, SD=.488) conditions; t(4)=-4.58, p=0.01.

There was an insignificant difference in the scores for resourcefulness, pre-test, question 5 (M=2.53, SD=.516) and posttest, question 5 (M=3.07, SD=.258) conditions; t(4)=-3.23, p=0.60. In addition, there was an insignificant difference in the scores for investing effort to

solve problems, pre-test, question 6 (M=2.80, SD=.676) and posttest, question 6 (M=2.80, SD=.676) conditions; t(4)=-1.00, p=3.34. Next, there was an insignificant difference in the scores for critical thinking, pre-test, question 9 (M=2.20, SD=.561) and posttest, question 9 (M=2.67, SD=.488) conditions; t(4)=-2.82, p=0.14. Lastly, there was an insignificant difference in the scores for handling difficult situations, pre-test, question 10 (M=2.60, SD=.507) and posttest, question 10 (M=3.00, SD=.535) conditions; t(4)=-3.05, p=0.90.

The participants answered the questions regarding clinical self-efficacy on a modified Likert Scale. The standard deviation for all of the questions answered was less than one (Table 3: Pre-Test and Posttest Results). This indicates that the results were close to the mean (Sullivan, 2012). Overall, clinical self-efficacy improved after completion of the simulative activities.

Table 3: Pre-Test and Posttest Results

Question Number	Pre-test Mean	Standard Deviation	Posttest Mean	Standard Deviation
1	2.13	.516	3.33	.617
2	2.40	.507	3.53	.516
3	2.53	.743	3.27	.458
4	1.87	.640	3.00	.535
5	2.53	.516	3.07	.258
6	2.67	.617	2.80	.676
7	2.20	.561	3.33	.488
8	2.27	.458	2.87	.352
9	2.20	.561	2.67	.488
10	2.60	.507	3.00	.535

Measurable Outcomes

All of the participants (100%) completed both the pre-test and posttest. The first measurable outcome was the level of confidence before and after completion of the simulated activities in the nurse residency program. This was measured by the pre-test and posttest

THE INCORPORATION OF SIMULATED ACTIVITIES

31

completed by the participants. Overall, the results proved that the simulative activities does

improve confidence levels in new graduate nurses. Confidence in clinical problem-solving skills

(pre-test mean 2.13, posttest mean 3.33), and confidence in decision-making (pre-test mean 2.40,

posttest mean 3.53) were noted to be markedly improved. This results were considered

statistically significant.

The second measurable outcome, the level of improvement in critical thinking skills and

resourcefulness in complex situations, was not found to be statistically significant after the

intervention. Critical thinking skills were slightly improved after the intervention, but not

statistically significant (pre-test mean 2.20, posttest mean 2.67). However, the overall outcomes

did show clinical significance. There are plans to revise the simulative activities to include more

critical thinking exercises such as prioritization.

The third measurable outcome, the level of improvement in critical thinking skills and

resourcefulness in complex situations, was proven to be statistically significant after the

intervention. This was an important component of promoting clinical self-efficacy for the new

graduate RNs. For example, finding solutions in clinical problem (pre-test mean 2.27, posttest

mean 2.87) were found to be improved. In addition, remaining calm in complex clinical

situations (pre-test mean 2.20, posttest mean 3.33) were found to be notably improved after the

intervention.

Section Five: Discussion

Implication for Practice

The findings from this project show that simulative activities increase self-efficacy of the

participants. The participants reported feeling more prepared to handle complex situations.

However, in the revision process, greater attention to increasing critical thinking skills is recommended. Overall, the results show that simulative activities should be a part of the nurse residency program. As a result, simulative activities will be permanently added into the existing nurse residency program.

Sustainability

The project to date has been successful in that the organization has accepted the pilot program as a permanent part of the residency program. In addition, the organization plans to increase the number of simulation hours in the nurse residency program. The organization is seeking accreditation for the nurse residency program. Feedback from the participants has been positive, especially appreciating the hands-on approach in a non-threatening environment.

Table 4: Feedback from the Participants

Feedback from the Participants After Completing the Simulative Activities

"I feel like I could handle complex clinical situations so much more effectively."

"I wish we could have more hands-on and less classroom instruction."

"I liked the non-threatening environment where it was OK to make mistakes and learn from them."

"I really like the hands-on approach."

"I would like to see more simulation in the program."

Dissemination Plan

In dissemination at the micro level (within the organization), the target audience includes the stakeholders in the healthcare organization and the students of the residency program. The administrative team, Director of Nursing Education, Lead Educator of the nurse residency

program, and nurse residency students are all considered stakeholders. Within one month after completion, the project leader will meet with the educational team to determine strengths and weaknesses of the change.

The educational team has decided to implement this change as a permanent part of the nurse residency program. The change will be presented to the team using a podium and poster presentation. In addition, revisions will be made as a team after reviewing the satisfaction surveys of the nurse residents upon completion of the program. The team decided in the planning stages that necessary revisions will be made on a continual basis.

Within a month after meeting with the educational team, the results will be presented to the executive board of the organization. The results will be analyzed through a discussion panel. A podium and poster presentation is planned along with an analysis and further discussion of the project findings. After meeting with the executive board, it will be determined by the organization if additional simulative activities will be added to the residency program.

Within the community (meso) level, the results are can be used to recruit new graduate nurses for employment within the organization. Ensuring that potential participants in the program receive the latest evidence-based research in simulation can help ensure clinical preparedness. In addition, publishing the results of the project in a nursing journal can enable other clinicians to consider adding simulation within a nurse residency program. The successes of the program can be articulated to help organizations understand why simulation can be an important part of an existing nurse residency program.

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Appendix A

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Adams, J. E., & Gillman, L. (Oct.). Developing an evidence-based transition program for graduate nurses. <i>Contemporary Nurse</i> , 52(5), 511-521. http://dx.doi.org.ezproxy. liberty.edu/10.1080/1037 6178.2016.1238287	To identify successful nurse residency programs.	Eighty-three articles were reviewed and 50 were retained. The articles retained best described the transition into nursing practice.	Systematic literature review	The first 6 months is crucial during the transition into nursing practice. Evidence- based nurse residency programs can greatly increase confidence in beginning practitioners.	Level 5: Systematic review of descriptive and qualitative studies	Few studies showed the evaluated components of nursing residency curricula.	Yes. The high number of research articles conclude that nurse residency programs can increase confidence even though the article is level 5 in strength.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Africa, L.M., (2017). Transition to practice programs: Effective solutions to achieve strategic staffing in today's healthcare systems. <i>Nursing Economics</i> , 35(4), 178-180. http://link.galegroup.com/apps/doc/A503465364/ITOF? u=vic_liberty&sid=ITOF &xid=990e278d.	Is a nurse residency program cost effective for a healthcare organization?	International search of articles focusing on nurse residency programs, financial implications, and retention rates.	Systematic literature review.	Nurse residency programs are initially expensive to start, but have proven to be effective in nurse retention.	Level 5: Systematic review of descriptive and qualitative studies.	More diverse research articles should be obtained.	Yes. The high number of research articles conclude that nurse residency programs are fiscally responsible and reduce turnover even though the article is level 5 in strength.

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Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Blegen, M.A., Spector,	To examine the	1464 newly	A	Healthcare	Level 2:	The nurses were	Yes. This study
N., Lynn, M.R.,	relationship	licensed	longitudinal	facilities with a	One or more	only followed	helps to show that
Barnsteiner, J., & Ulrich,	between	registered	study of	dedicated	randomized	for a one year	nurse residency
B.T. (2017). Newly	retention of	nurses with less	newly	nurse	control	period of time.	programs can
licensed RN retention:	newly licensed	than one year of	licensed	residency	trials.	Research has	positively impact
Hospital and nurse	registered	experience.	registered	program have a		shown that an	nurse retention
characteristics. JONA:	nurses	These nurses	nurses over	higher nurse		increase in	rates.
Journal of Nursing	employed in	were employed	a one year	retention rate		turnover can	
Administration, 47(10),	hospitals and	by 97 hospitals	period of	than those		occur in the	
508-514.	the	in 3 states.	time. The	without nurse		second year of	
http://dx.doi.org/10.1097/	characteristics		participants	residency		practice.	
NNA.000000000000052	of each		were	programs.			
3	hospital.		randomly				
			selected.				

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Cason, M., Atz, T., & Horton, L.F. (2017). New nursing graduates' self-efficacy ratings and urinary catheterization skills in a high-fidelity simulation scenario. Clinical Simulation in Nursing, 13(2), 71-77. http://dx.doi.org/10.1016/j.ecns.2016.12.006	To determine if the inclusion of simulated activities increased the self-efficacy of novice nurses in urinary catheterization skills.	Convenience sample of new nursing graduates in a nurse residency program in a large academic medical center. During the three months of the study, 30 new graduates were hired every 2 weeks.	Quantitative descriptive correlation design measuring the relationship between self-efficacy and basic skills.	Self-efficacy lacks in study participants who did not participate in simulated activities.	Level 3: Controlled trial.	The trial was not randomized which could skew the research results.	Yes. This research article helped to prove that the addition of evidence-based simulation in a nurse residency program will be beneficial for the participants.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Cochran, C. (2017). Effectiveness and best	To determine if nurse	22 peer- reviewed	Systematic literature	Nurses entering into a	Level 5: Systematic	More questions exist as to the	Yes. This article helps to show that
practice of nurse	residency	journal articles	review.	nurse	review of	best practices of	simulation should
residency programs: A	programs are	exploring		residency	descriptive	nurse residency	be a part of the
literature review.	effective in the	transition of the		program want	and	programs.	nurse residency
Medsurg Nursing, 26(1),	transition to	newly licensed		simulated	qualitative		program.
53-57. Retrieved from	practice and	nurse to		scenarios and	studies.		
http://ezproxy.liberty.edu	establish the	professional		strong mentors.			
/login?url=http://search-	best practices	practice. The		In addition,			
proquest-	of nurse	articles		best practices			
com.ezproxy.liberty.edu/	residency	included: three		show that			
docview/1870846302?ac	programs.	literature		simulation should be an			
countid=12085		reviews, 12 qualitative		integral part of			
		research		the residency			
		articles, six case		program.			
		studies, and one					
		expert opinion.					

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Franklin, A.E., & Lee, C.S. (2014).	The influence of simulated	The meta- analysis was	Meta- analysis.	The self- efficacy of	Level 1: A meta-	Methods of measure may	Yes. The inclusion of simulation would
Effectiveness of	activities have	conducted in	-	novice nurses	analysis of	not be accurate.	be beneficial in a
simulation for	not be	several		after	randomized	There is a lack	nurse residency
improvement in self-	extensively	databases to		simulation was	control	of uniform	program.
efficacy among novice	research. This	answer the		greatly	trials.	methods to	
nurses: A meta-analysis.	study	question, What		increased in		measure self-	
Journal of Nursing	determined	is the impact on		nurses working		efficacy	
Education, 53(11), 607-613,	that simulated activities are	simulation on self-efficacy?		in the medical- surgical			
http://dx.doi.org/10.3928/	effective at	sen-encacy?		setting.			
01484834-20141023-03	increasing self-			setting.			
0110105120111025 05	efficacy in						
	novice nurses						
	as compared						
	with traditional						
	methods of						
	instruction.						

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Garrison, F.W., Dearmon, V., & Graves,	To determine how to	One cohort of 20 nurse	The preceptors	After revising the current	Level 4: Case-	The group studied was	Yes. This cohort study shows that
R.J. (2017, March).	improve an	residency	and nurse	nurse	control or	small and	implementing
Working smarter:	existing nurse	participants	residency	residency	cohort	further studies	evidence-based
Building a better nurse	residency	along with 7	participants	program, job	study.	need to be	research is
residency program.	program (with	preceptors.	were studied	satisfaction		conducted to	beneficial in the
Nursing Management,	best practices)		using	greatly		establish	revision of an
48(3), 50-54,	in a healthcare		assessment	improved and		correlation.	existing nurse
http://dx.doi.org/10.1097/	system with		tools and	nurse			residency program.
01.NUMA.0000512898.7	high nursing		surveys.	vacancies			
6048.0b	turnover.			significantly			
				decreased in the healthcare			
				organization.			
				organization.			

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Hopkins, J. L., & Bromley, G. E. (2016). Preparing new graduates for interprofessional teamwork: Effectiveness of a nurse residency program. The <i>Journal of Continuing Education in Nursing</i> , 47(3), 140-148. http://dx.doi.org.ezproxy. liberty.edu/10.3928/0022 0124-20160218-10	To determine whether a nurse residency program was effective in improving satisfaction with new graduates' performance competence in collaboration.	1000 total nurses, 149 nurses who worked in inpatient units where new graduates practice. Thirty- five had 1 year or less of experience in nursing and 114 had at least 2 years of experience.	Cross- sectional survey design to compare the satisfaction rates of nurse managers and staff nurses at the academic medical center.	Nurse residency programs appear to be beneficial but do not support and increase in proficiency in collaboration.	Level 4: Case- control or cohort study.	Low survey response rate. New graduate nurses may be reluctant to provide an accurate self-assessment.	Yes. This study shows that alternative methods are necessary to improve collaboration in participants in a nurse residency program.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Hosking, J., Knox, K., Forman, J., Montgomery, L.A., Valde, J.G., & Cullen, L. (2016, June). Evidence into practice: Leading new graduates to evidence-based practice through a nurse residency program. <i>Journal of Perianesthesia Nursing</i> , 31(3), 260-265. http://dx.doi.org/10.1016./j.jopan.2013.02.006	To determine how evidence-based research should be implemented in nurse residency programs.	106 nurses with less than one year of experience participating in nurse residency programs in multiple hospitals.	A cohort study of nurses participating in nurse residency programs.	Implementing evidence-based research in nurse residency program can increase confidence and skill levels in nurses with less than one year of experience.	Level 4: Case- control or cohort study.	The nurses were only studied for the duration of the program. Additional follow-up research should be conducted.	Yes. This study helps to show that evidence-based research is essential in effective nurse residency programs.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Ke, Y.T-, Kuo, C.	To determine	Data was	Quantitative	New nurses	Level 1:	The review was	Yes. The data
C, Hung, C.H. (2017,	the effects of a	collected from 5	systematic	with a	Systematic	only conducted	collected shows
Oct.). The effects of nursing preceptorship on	dedicated nurse preceptor	databases. One control trial,	reviews of randomized	dedicated preceptor	review & meta-	within 5 databases and	that a dedicated preceptor has a
new nurses' competence,	on	one quasi-	control	significantly	analysis of	other relevant	positive impact on
professional	competence,	experimental	trials.	impacted job	randomized	studies could	new nurse
socialization, job	job,	study and four		satisfaction	controlled	have been	satisfaction and
satisfaction and retention:	satisfaction,	observational		and retention	trials;	missed.	retention rates.
A systematic	retention, and	studies were		rates.	clinical		
review. Journal of	socialization of	used.			guidelines		
Advanced Nursing,	nurses with				based on		
73(10), 2296-	less than one				systematic		
2305. http://dx.doi.org/ezproxy.liberty.edu/10.11	year of clinical experience.				reviews or meta-		
11/jan.13317	схрененее.				analyses.		
11/101110011					anary ses.		

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Lin, P.S., Viscardi, M. K., & McHugh, M.D. (2014). Factors influencing job satisfaction of new graduate nurses participating in nurse residency programs: A systematic review. The Journal of Continuing Education in Nursing, 45(10), 439-50. http://dx.doi.org.ezproxy. liberty.edu/10.3928/0022 0124-20140925-15	To identify how well-designed nurse residency programs can increase retention.	Titles and abstracts of 33 journal articles. After screening the articles, 11 articles remained. The articles were reviewed for methodological quality using Cummings and Estabrooks' quality rating tool.	Summary of quantitative and qualitative research articles.	Findings show that nurse residency programs can increase job satisfaction and retention.	Level 5: Systematic review of descriptive and qualitative studies.	Convenience samples were used in the research articles which could alter results.	Does provide some background information regarding job satisfaction after completing a nurse residency program even though the article is level 5 in strength.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
McRae, M.E., Chan, A., Lee, A.J., & Coleman, B. (2017). The effectiveness of and satisfaction with high-fidelity simulation to teach cardiac resuscitation skills to nurses. <i>Intensive and</i> <i>Critical Care Nursing</i> , 40, 64-69. http://dx.doi.org/10.1016/ j.iccn.2016.11.001	To determine if simulation increased self-efficacy in the performance of cardiac surgical resuscitation.		A convenience sample of 60 nurses who rated their self-efficacy in the performance of cardiac surgical resuscitation before and after simulated activities.	Self-efficacy in the performance of skills were significantly increased after the simulation.	Level 3: Controlled trial.	The study was conducted at a single center which could limit generalizability. In addition, the researcher being present in the room may influence the participants.	Yes. Self-efficacy in nurses after the implementation of simulated activities was significantly increased.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Ouellette, P. S., & Blount, K. (2015). Teambased learning in a graduate nurse residency program. <i>The Journal of Continuing Education in Nursing</i> , 46(12), 572-576. http://dx.doi.org.ezproxy. liberty.edu/10.3928/0022 0124-20151112-10	To determine if group activities and simulation help to foster critical thinking in the new graduate nurse in a nurse residency program.	50 participants in an existing nurse residency program with less than one year of clinical experience.	Qualitative cohort study in an urban healthcare organization	Incorporating simulation helps the participants to feel more confident while enhancing critical thinking skills.	Level 6: Single descriptive or qualitative study.	The lack of cohorts in the study may alter the findings.	Yes. This article supports the use of simulation in a nurse residency program. This article can provide background information even though it is level 6 in strength.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Rhodes, C. A., Grimm, D., Kerber, K., Bradas, C., Halliday, B., McClendon, S., & McNett, M. (2016). Evaluation of nurse-specific and multidisciplinary simulation for nurse residency programs. Clinical Simulation In Nursing, 12(7), 243-250. http://dx.doi.org/10.1016/j.ecns.2016.02.010	To determine the impact of simulation on a nurse residency program.	72 newly licensed nurses entering into a nurse residency program.	A prospective cohort study design.	Simulation significantly increases the confidence of new nurses in a residency program.	Level 4: Case- control or cohort study.	The study was 18 month in length and many participants dropped out of the study.	Yes. This study helped to show that the implementation of simulation in a nurse residency program is beneficial for the participants.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Rossler, K.L., & Bennett A. (2017, Feb). Restructuring a hospital nurse residency: Nursing and patient safety unite. Clinical Simulation in Nursing, 13(2), 90-93. http:// dx.doi.org/10.1016/j.ecns2017.001.001	To determine the types of simulated activities to include in a nurse residency program.	A convenience sample of 49 newly licensed RNs hired into a Medical-Surgical unit.	Qualitative Pilot study to explore the perceptions of novice nurses in the addition of simulation in a nurse residency program.	The novice nurses wanted communication team leader, and patient education techniques to be included in the simulated activities.	Level 6: Single descriptive or qualitative study.	Only 15 nurses remained in the study. This made it difficult to generalize the results.	Yes. This study helps to gain a better understanding of the types of simulations which should be included in a nurse residency program.

Article Title, Author, etc. (Current APA Format)	Study Purpose	Sample (Characteristics of the Sample: Demographics, etc.)	Methods	Study Results	Level of Evidence (Use Melnyk Framework)	Study Limitations	Would Use as Evidence to Support a Change? (Yes or No) Provide Rationale.
Theisen, Janelle L, M.A., & Sandau, Kristin E. (2013). Competency of new graduate nurses: A review of their weaknesses and strategies for success. <i>The Journal of Continuing Education in Nursing</i> , 44(9), 406-414. http://dx.doi.org.ezproxy. liberty.edu/10.3928/0022 0124-20130617-38	To determine strategies to ease the transition into nursing practice.	The articles included 14 (53%) qualitative studies, 5 (19%) expert opinions or case studies, 2 (7%) organizational studies, 2 (7%) quasiexperimental studies, 2 (7%) nonexperimental studies, and 1 (3%) metaanalysis.	Systematic literature review	Communicatio n is an area in which new graduate nurses' struggle. Nurse residency program with a focus on communication can help to ease this problem.	Level 5: Systematic review of descriptive and qualitative studies.	Studies in critical care or other specialty areas were excluded. The findings were limited by this exclusion.	Yes. The number of research articles can provide background information regarding teaching effective communication in nurse residency program.

Appendix B

LIBERTY UNIVERSITY. INSTITUTIONAL REVIEW BOARD

July 18, 2018

Wendy P. Thompson IRB Exemption 3347.071818: The Incorporation of Evidence-Based Simulated Activities in an Existing Nurse Residency Program

Dear Wendy P. Thompson,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
- (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at



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Appendix C

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 1 OF 2 COURSEWORK REQUIREMENTS*

* NOTE: Scores on this <u>Requirements Report</u> reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

Name: Wendy Thompson (ID: 5908322)
 Institution Affiliation: Liberty University (ID: 2446)
 Institution Email: wthompson15@liberty.edu

Institution Unit: NursingPhone: 804-712-2709

• Curriculum Group: Social & Behavioral Research - Basic/Refresher

• Course Learner Group: Social & Behavioral Researchers

• Stage: Stage 1 - Basic Course

• Description: Choose this group to satisfy CITI training requirements for Investigators and staff

involved primarily in Social/Behavioral Research with human subjects.

Record ID: 21181339
 Completion Date: 30-Jan-2018
 Expiration Date: 29-Jan-2021

Minimum Passing: 80Reported Score*: 90

REQUIRED AND ELECTIVE MODULES ONLY	DATE COMPLETED SCORE
History and Ethical Principles - SBE (ID: 490) 2016	16-Oct- 5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491) 2016	16-Oct- 5/5 (100%)
The Federal Regulations - SBE (ID: 502) 2016	07-Dec- 5/5 (100%)
Assessing Risk - SBE (ID: 503) 2016	07-Dec- 5/5 (100%)
Informed Consent - SBE (ID: 504) 2016	07-Dec- 5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505) 2016	07-Dec- 5/5 (100%)
Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680 2016	0) 07-Dec- 5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavio 14928)	ral Research (ID: 07-Dec-
2016	5/5 (100%)
Liberty University (ID: 15111)	30-Jan-
2018	No Quiz

Research with Prisoners - SBE (ID: 506) 2018

30-Jan-3/5 (60%)

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)

COMPLETION REPORT - PART 2 OF 2 COURSEWORK TRANSCRIPT**

** NOTE: Scores on this <u>Transcript Report</u> reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

Name: Wendy Thompson (ID: 5908322)
 Institution Affiliation: Liberty University (ID: 2446)

• Institution Email: wthompson15@liberty.edu

Institution Unit: NursingPhone: 804-712-2709

• Curriculum Group: Social & Behavioral Research - Basic/Refresher

· Course Learner Group: Social & Behavioral Researchers

Stage: Stage 1 - Basic Course

• Description: Choose this group to satisfy CITI training requirements for Investigators and staff

involved primarily in Social/Behavioral Research with human subjects.

Record ID: 21181339
 Report Date: 07-Apr-2018
 Current Score**: 100

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES MOST F	RECENT SCORE
Students in Research (ID: 1321)	14-Oct-
2016	5/5 (100%)
Liberty University (ID: 15111)	30-Jan-
2018	No Quiz
History and Ethical Principles - SBE (ID: 490)	16-Oct-
2016	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	16-Oct-
2016	5/5 (100%)
The Federal Regulations - SBE (ID: 502)	07-Dec-
2016	5/5 (100%)
Assessing Risk - SBE (ID: 503)	07-Dec-
2016	5/5 (100%)
Informed Consent - SBE (ID: 504)	07-Dec-
2016	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	07-Dec-
2016	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	30-Jan-
2018	5/5 (100%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928) 2016	07-Dec- 5/5

(100%) Populations in Research Requiring Additional Considerations and/or Protections (ID: 16680) 07-Dec-2016 5/5 (100%)



Completion Date 30-Jan-2018 Expiration Date 29-Jan-2021 Record ID 21181339

This is to certify that:

Wendy Thompson

Has completed the following CITI Program course:

Social & Behavioral Research - Basic/Refresher (Curriculum Group)

Social & Behavioral Researchers (Course Learner Group)

1 - Basic Course (Stage)

Under requirements set by:

Collaborative Institutional Training Initiative

Liberty University

Appendix D

Letter of Organizational Support

March 18, 2018

Reference: Wendy Thompson, DNP Project Support

To Whom It May Concern:

It is our pleasure to support Wendy Thompson's pursuit of a Doctorate of Nursing Practice, degree and project. Wendy has experience as the school of nursing simulation coordinator and as an instructor of nursing students. These attributes are an excellent resource for us in understanding the needs of new graduate nurses. Wendy is a talented and dedicated professional that we are fortunate to have assist us with our program.

We are in the process of applying for our accreditation by the ANCC for our new graduate / new nurse residency program. Our program seeks to help the new nurse further develop these skills thru use of the simulation lab. Practicing in a safe, yet realistic environment provides valuable critical thinking opportunities for our new nurses. An important aspect of transitioning these nurses is their ability to independently perform skills safely and efficiently prioritize care of patients. We look forward to the insight and knowledge that Wendy will bring to our program design in these areas. We will gladly complete any documentation needed to verify her time and contribution to the program.

Appendix E

General Self-Efficacy Scale

About this Tool: This scale is a self-report measure of self-efficacy.

Items: 10

Reliability:

Internal reliability for GSE = Cronbach's alphas between .76 and .90

Validity:

The General Self-Efficacy Scale is correlated to emotion, optimism, confidence, and work satisfaction (Schwarzer & Jerusalem, 1995). Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety.

Scoring:

	Not at all true	Hardly true	Moderately true	Exactly true
All questions	1	2	3	4

The total score is calculated by finding the sum of the all items. For the GSE, the total score ranges between 10 and 40, with a higher score indicating more self-efficacy.

Reference:

Schwarzer, R., & Jerusalem, M. (1995). General Self-Efficacy Scale. In

J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON. http://userpage.fu-berlin.de/~health/selfscal.htm

General Self-Efficacy Scale (Revised)

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough.				

Schwarzer, R., & Jerusalem, M. (1995). General Self-Efficacy Scale. In

J. Weinman, S. Wright, & M. Johnston, *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35-37). Windsor, UK: NFER-NELSON.

http://userpage.fu-berlin.de/~health/selfscal.htm

Appendix F

Permission to use General Self-Efficacy Scale



Freie Universität Berlin, Gesundheitspsychologie (PF 10), Habelschwerdter Allee 45, 14195 Berlin, Germany Fachbereich Erziehungswissenschaft und Psychologie - Gesundheitspsychologie -

Professor Dr. Ralf Schwerzer Habelschwerdter Allee 45 14195 Berlin, Germany

Fax +49 30 838 55634 health@zedat.fu-berlin.de www.fu-berlin.de/gesund

Permission granted

to use the General Self-Efficacy Scale for non-commercial reseach and development purposes. The scale may be shortened and/or modified to meet the particular requirements of the research context.

http://userpage.fu-berlin.de/~health/selfscal.htm

You may print an unlimited number of copies on paper for distribution to research participants. Or the scale may be used in online survey research if the user group is limited to certified users who enter the website with a password.

There is no permission to publish the scale in the Internet, or to print it in publications (except 1 sample item).

The source needs to be cited, the URL mentioned above as well as the book publication:

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp.35-37). Windsor, UK: NFER-NELSON.

Professor Dr. Ralf Schwarzer www.ralfschwarzer.de

Appendix G

Permission to use The Iowa Model

Permission to Use The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care

K

University of Iowa Hospitals and Clinics

Reply all

Thompson, Wendy Inbox

Action Items

You have permission, as requested today, to review and/or reproduce *The Iowa Model Revised:* Evidence-Based Practice to Promote Excellence in Health Care. Click the link below to open.

The Iowa Model Revised: Evidence-Based Practice to Promote Excellence in Health Care

Copyright is retained by University of Iowa Hospitals and Clinics. **Permission is not granted for placing on the internet.**

Citation: Iowa Model Collaborative. (2017). Iowa model of evidence-based practice: Revisions and validation. *Worldviews on Evidence-Based Nursing, 14(3), 175-182.* doi:10.1111/wvn.12223

In written material, please add the following statement:

Used/reprinted with permission from the University of Iowa Hospitals and Clinics, copyright 2015. For permission to use or reproduce, please contact the University of Iowa Hospitals and Clinics at 319-384-9098.

Please contact or 319-384-9098 with questions.

Appendix H

The Liberty University Institutional Review Board has approved this document for use from 7/18/2018 to --Protocol # 3347.071818

CONSENT FORM

The Incorporation of Evidence-Based Simulated Activities in an Existing Nurse Residency Program

Wendy Thompson Liberty University School of Nursing

You are invited to be in an evidence-based practice proj	ject regarding the incorporation of evidence-based simulated				
activities in	nurse residency program. The purpose of my project is to				
determine if the addition of simulated activities included	d in the current will increase self-efficacy				
and intent to stay at . You were selected as a poss	sible participant because you are a graduate of an accredited				
nursing program with an unencumbered nursing license	and are entering the nurse residency program. Please				
read this form and ask any questions you may have before agreeing to be in the study.					

Wendy Thompson, a doctoral candidate in the School of Nursing at Liberty University, is conducting this project.

Background Information: The purposes of this study are to identify key factors contributing to a lack of self-efficacy in new graduates in the clinical setting and implement an evidence-based research project to support new graduate self-efficacy. The simulated activities will be based on evidence-based research and the needs of

Procedures: If you agree to be in this study, I would ask you to do the following things:

- 1. Complete a 10-question pre-test regarding self-efficacy. This will take approximately 10 minutes.
- 2. Complete a simulated activity during the RNow nurse residency program. This will take 4 hours.
- 3. Complete a follow-up, 10-question posttest regarding self-efficacy. This will take approximately 10 minutes.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: There are no direct benefits associated with participation in this study.

Compensation: Participants will not be compensated for participating in this project.

Confidentiality: The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.

 This study uses anonymous data collection methods as no participants will be linked to pre and posttest responses.

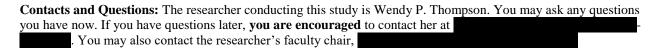
> The Liberty University Institutional Review Board has approved this document for use from 7/18/2018 to --Protocol # 3347.071818

- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted
- No recording will be conducted during this research study.

The researcher serves as a student at Liberty University and is an instructor at which could cause a potential conflict). However, all data collection will be anonymous in nature. This disclosure is made so that you can decide if this relationship will affect your willingness to participate in this study. No action will be taken against an individual based on his or her decision to participate in this study.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please inform the researcher that you wish to discontinue your participation prior to submitting your study materials. Your responses will not be recorded or included in the study.



If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.