12-2020

Preceptor Training: A Quantitative Study to Determine the Effectiveness of a Formal Preceptor Training Program for Medical-Surgical Nurse Preceptors

Jessica L. Strickland

PRECEPTOR TRAINING: A QUANTITATIVE STUDY TO DETERMINE THE EFFECTIVENESS OF A FORMAL PRECEPTOR TRAINING PROGRAM FOR MEDICAL-SURGICAL NURSE PRECEPTORS

By

JESSICA L. STRICKLAND

Submitted to the Faculty of the Graduate College of
Arkansas Tech University
in partial fulfillment of the requirements
for the degree of
MASTER OF SCIENCE IN NURSING
December 2020

Thesis Approval

This thesis, "Preceptor Training: A Quantitative Study to Determine the Effectiveness of a Formal Preceptor Training Program for Medical-Surgical Nurse Preceptors," by Jessica Leigh Strickland, is approved by:

Thesis Advisor:

_____
Dr. Shelly Randall
Assistant Professor of Nursing

Thesis Committee:

_____
Dr. Jennifer Helms
Professor of Nursing

_____
Dr. Terri McKown
Professor of Nursing

Program Director:

_____
Dr. Jennifer Helms
Professor of Nursing

Graduate College Dean:

_____
Dr. Richard Schoephoerster
Dean Graduate College and Research

Abstract

Nurse preceptors are essential to the success of new graduate registered nurses entering the workforce. Nurse preceptors serve to improve the competence and confidence of new graduate registered nurses during their transition to practice. To be an effective nurse preceptor, the nurse preceptor needs to be properly trained. A trained nurse preceptor understands the roles and responsibilities of a nurse preceptor. As they utilize their formal training, they increase their skills and capabilities. A positive experience during the transition to practice process may improve nurse retention and patient outcomes. The focus of this quantitative, descriptive research study was to determine the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care hospital. QuestionPro, an online survey website, was used to collect data from a convenience sample of nurse preceptors. The nurse preceptor's participation was voluntary and informed consent was obtained prior to enrollment in the research study. A total of 22 nurse preceptors completed the Capabilities of Nurse Educators (CONE) pre-questionnaire while a total of 17 nurse preceptors completed the CONE post-questionnaire after participating in formal preceptor training. The nurse preceptors reported improvement in the perception of their capabilities from the CONE pre-questionnaire to the CONE post-questionnaire. The findings support the importance of developing and implementing a formal preceptor training program for medical-surgical nurses in the acute care setting.

Keywords: nursing preceptor; medical surgical nurse preceptor; preceptee; preceptorship; preceptor training; preceptor competence; capabilities; retention; transition to practice

Table of Contents

Page

List of Tables

Chapter I: Introduction

Focus of Inquiry

Failure to receive formal preceptor training is a problem for nurse preceptors. Properly trained nurse preceptors require formalized education that can help them develop various skills (Darcy, 2020). If the profession of nursing is to attempt to reduce the estimated impact of the nursing shortage and decrease turnover rates, implementation of effective preceptor training programs is necessary (Watkins, Hart, & Mareno, 2016). It is no longer sufficient or beneficial to select nurse preceptors that have not been trained to precept (Watkins et al., 2016). Nurse preceptors have an important responsibility in the transition to practice process for new graduate registered nurses.

Nurse administrators are challenged with successfully responding to the nursing shortage. Compounded by the aging workforce, increasing acuity of patients, and high turnover rates of new graduates, the ongoing nursing shortage continues to impact the profession. Nurse administrators have an opportunity to address staffing deficits, caused by the nursing shortage, by decreasing the high turnover rates of new graduate registered nurses. Currently, 25% of new graduate registered nurses will vacate their first position with one year of hire (Africa, 2017). Nurse administrators must strategically focus on recruitment, training, and retention of new graduate registered nurses. The 2010 Institute of Medicine (IOM) report on *The Future of Nursing: Leading Change, Advancing Health,* recommended supporting new graduate registered nurses' transition into professional practice, specifically recommending the development and implementation of transition to practice programs. The purpose of this recommendation was to successfully integrate new graduate registered nurses into professional practice and ultimately

improve retention rates. Nursing turnover is estimated to range from $37,700 to $58,400 per nurse (Cain, Cronin, Nelson, Meredith, Newman, & Rudolf, 2018; Kennedy, 2019). This turnover results in a negative financial impact on an organization. As transition to practice programs are designed and implemented by hospitals, more consideration needs to be given to the support and development of nurse preceptor training programs (Blegen, Spector, Ulrich, Lynn, Barnsteiner, & Silvestre, 2015).

A program which supports the transition to practice will be considered expensive to initiate; however, it must be understood as a positive return on investment for the organization. According to the American Organization of Nurse Executives (AONE) (2010), it becomes the inherent responsibility of the nursing profession and healthcare organizations to define and implement strategies to create a learning and supportive environment that will position the new graduate nurse for success. Clipper and Cherry (2015) found graduate nurses who had well-trained preceptors had higher, more positive perceptions about their ability to render safe and optimal care, as well as higher first-year retention. In addition to pairing new graduates with preceptors, the AONE (2010) recognized that preceptors should be properly trained to assist new graduate registered nurses transition to independent, competent practice.

Nurse preceptors are essential to the successful transition to practice of new graduate registered nurses. A nurse preceptor is a competent, experienced nurse that guides, observes, and evaluates a less experienced nurse's ability to perform clinical skills and apply critical thinking skills with competence (Watkins et al., 2016). Being a nurse preceptor carries an enormous responsibility to adequately train and support new

graduate registered nurses. According to Nash and Flowers (2017), an effective preceptor is not only instrumental in molding the new nurse in the institution's mission and vision, but also can lead a new nurse to higher levels of job satisfaction and work effectiveness, as well as better quality of care and patient outcomes. The selection criteria and formal training for a nurse preceptor are key to their ability to effectively serve as a nurse preceptor.

It is imperative that administration needs to know how to properly identify and invest in proper training of nurses as preceptors. The most ideal preceptors are experienced nurses who are strong clinicians that demonstrate a positive attitude, enthusiasm, and self-respect, as well as have the respect of their peers (Clipper & Cherry, 2015). The development of competence in nurse preceptors relies on an investment in adequate preparation courses, ongoing development of skills, and role modeling by other team members (L'Ecuyer, Hyde, & Shatto, 2018). Kennedy (2019) found that preceptor programs positively impact nurse preceptors by broadening knowledge about the preceptor role in addition to providing educational support and strategies to effectively educate newly hired nurses. Preceptor programs are structured to include content on teaching and learning strategies, evaluation of preceptees, communication, and critical thinking (L'Ecuyer et al, 2018). However, even with the known benefits of having a formal preceptor training program in the clinical setting, not all nurse preceptors have the opportunity to participate in a formal preceptor training.

It should never be assumed that a registered nurse with excellent clinical skills will automatically translate those skills and naturally perform as an effective preceptor (Ciocco, 2016). While patient education and patient teaching are often a component of

nursing school, precepting peers is not routinely addressed, even at the bachelor's degree level; therefore, staff nurses need to have preceptor training before they precept (Sandford & Tipton, 2016). Nurturing and providing preceptors with education and support will aid in nurse recruitment, retention, and job satisfaction (Nash & Flowers, 2017). Nurse retention and patient safety are critical elements that may be impacted by an effective transition process for the new graduate registered nurse (Clipper & Cherry, 2015). An effective preceptorship has been shown to better facilitate transition to practice and increase retention rates (L'Ecuyer et al., 2018; Watkins et al., 2016). Preceptors can improve the retention rate of new nurses from 15% to 37% (Watkins et al., 2016). It is imperative to provide formal preceptor training in order to develop an effective nurse preceptor. A nurse preceptor who has access to the necessary tools and resources can gain the knowledge and skills to successfully precept. For the new graduate registered nurse to be successful, strategies must be put into place to provide meaningful learning experiences and support, and preceptors must be developed to take on such a role (Piccinini, Hudlun, Branam, & Moore, 2018).

Statement of the Problem

The AONE (2010) found, regardless of the recommendations for preceptor training, many transition to practice programs do not include preceptor training. Nurse leaders need evidence that implementing time- and cost-intensive training will yield measurable, positive results, but the research that connects preceptor training to new graduate registered nurse outcomes is lacking in the current literature (Piccinini et al., 2018). Failure to properly select and develop nurses into effective preceptors negatively impacts nurse preceptors and new graduate registered nurses. With regard to this study,

the researcher will examine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital.

Need and Background for the Study

In an effort to address the ongoing staffing deficits, caused by the nursing shortage and the decreased retention rates of new graduate registered nurses, the IOM (2010) recommended transformation of current nursing practice. The IOM (2010) recommended development and implementation of evidence-based orientation programs to support new graduate registered nurses transition into professional practice. Nurse administrators were called to action to respond to the recommendations. As a result, evidence-based transition to practice programs were developed to meet the needs of the new graduate registered nurses as they enter the workforce. In response to address the need, transition to practice programs were implemented nationwide with a preceptorship experience being the most common mode of support (Piccinini et al., 2018).

Recognizing the benefits of formal preceptor training could support the development and implementation of formal preceptor training programs across the acute care setting. Preceptor programs in healthcare facilities have shown a positive return on investment while improving nurse attrition, satisfaction, and performance (Kennedy, 2019). The implementation of an effective, structured preceptor training program is a valuable use of hospital resources to improve the transition processes of newly graduate nurses, likely resulting in a safer and more effective patient care environment (Clipper & Cherry, 2015). With the known benefits, it is surprising that every acute care setting has not implemented an evidence-based formal preceptor training program.

Nurses selected to serve as a preceptor may not possess the necessary attributes or characteristics to effectively precept. Failure to provide the nurse preceptor with formal preceptor training significantly impacts their abilities to understand the preceptor role, assess learning needs, effectively communicate, and provide constructive feedback. Allowing the nurse preceptor to participate in formal preceptor training increases understanding of the preceptor role, self-confidence, feeling of support, and employee retention (Kennedy, 2019).

Preceptors may also experience many challenges when an effective nurse preceptor training program does not exist, consequently not wanting to become a preceptor even though they have the experience and characteristics to become an ideal preceptor. According to Nash and Flowers (2017), some of those challenges preceptors experience include workload pressures, insufficient time, restricted communication with other preceptors, lack of structure, lack of clear protocols, lack of appreciation, poor preparation for the role, and insufficient formalized training. Preceptors describe feeling unprepared, unsupported, and ambivalent when not properly trained, often finding themselves in situations where they experience conflict, competing clinical demands, increased workload, and lack of support (L'Ecuyer et al., 2018). These situations can hinder their ability to function as an effective preceptor.

A formal preceptor program creates a supportive workplace and provides role clarity with clear expectations of the preceptor role and responsibilities (Nash & Flowers, 2017). A structured preceptor program may contribute to an improved transition to practice and improved first-year retention rates of new graduate registered nurses (Clipper & Cherry, 2015). Though the initial cost be burdensome, the overall benefits to

the organization must be understood through increased retention and positive outcomes. Clipper and Cherry (2015) found that new graduate registered nurses who had trained preceptors had a slightly higher 1-year retention rate at 89.5%, compared with 82.7% for the new graduate registered nurses with untrained preceptors. Improving retention rates allows for the development of skills and facilitates overall competence of the new graduate registered nurse.

By learning from and imitating their preceptors, new graduate registered nurses develop stronger clinical skills, a bias toward safety, more effective critical thinking patterns, and they more readily acclimate to their new work environment (Clipper & Cherry, 2015; Lee, Tzeng, Lin, & Yeh, 2009). The preceptorship of a nurse has far-reaching effects, including everything from the safety of the patient, to quality of care the patient receives, and the employment, retention, and job satisfaction of the new nurse (Ciocco, 2016). The purpose of this research study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care hospital.

Research Question

What is the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital?

Limitations

Limitations of this quantitative study on formal preceptor training include the small sample size. The preceptors limited opportunity to precept after participating in the formal preceptor training is a possible limitation due to the low volume of new graduate registered nurses being hired during the study period. During the study period, the

Coronavirus Pandemic led to a decreased hospital census. Ultimately, eliminating the immediate need to hire nurses.

Definition of Terms

Preceptor – A preceptor is a registered nurse who has been prepared for the role of supervision, teaching, assessment and who gives continuous feedback to the preceptee (Omer, Suliman, & Moola, 2015).

Preceptee – A novice or newly graduated registered nurse entering the workforce.

Preceptorship – A teaching-learning method of a novice or newly graduated registered nurse, with an experienced registered nurse, during the transition to practice (Omer et al., 2015),

Preceptor Training – The preceptor education training module includes roles and responsibilities, skills and characteristics, nursing reality shock, stages of skill acquisition, promotion of critical thinking, and ways to provide feedback.

Preceptor Competence – A nurse preceptor who demonstrates professionalism, communication skills, educator skills, and teamwork skills (L'Ecuyer et al., 2018).

Summary

Preceptors guide safe practice, accomplish connectedness, create positive learning experiences and relationships, deliver feedback, and consult with supportive colleagues for advice and guidance (Nash & Flowers, 2017). Preceptors should receive proper training on how to be a preceptor in order to provide the best experience to the preceptee (Ciocco, 2016). This quantitative, descriptive research study was conducted to study the effectiveness of formal preceptor training for medical surgical nurses in an

acute care hospital. This study will examine the current practice for preceptor training, the need for standardized formal preceptor training, and the impact on preceptors.

Chapter II: Literature Review

The purpose of this quantitative research study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital. A literature review was conducted to explore the overall impact of formal preceptor training and focus on roles and responsibilities of a nurse preceptor, current preceptor development programs, and benefits of formally trained preceptors. American Nurses Association (ANA) described that an individual who demonstrated competence had successfully performed at an expected level (2013). The ANA (2013) defined competency as an anticipated level of performance that integrates behaviors in the categories of knowledge, skills, abilities, and judgment. Additionally, this chapter introduces and discusses the conceptual framework for this study.

Conceptual Framework

Patricia Benner's Skill Acquisition theory was utilized as the conceptual framework for this research. First published in 1984, Benner's theoretical model *From Novice to Expert* is still relevant and applied in nursing practice today. Benner's theoretical model outlines five stages of skill acquisition: novice, advanced beginner, competent, proficient, and expert (Benner, 1984; McEwen & Willis, 2014). These five stages have been utilized as the foundation for developing orientation and training programs to prepare nurses for transition to practice. The first stage is the novice stage. The novice nurse has no experience, lacks confidence, tends to be task focused, and fails to understand the bigger picture. The second stage is the advanced beginner stage. The advanced beginner has had limited experience. They use their limited experience to build

knowledge and skills. The advanced beginner displays efficiency in some areas of practice; however, they still need support setting priorities. The third stage is the competent stage. The competent nurse has had a few years of experience. At this point, the nurse demonstrates efficiencies, time management, and organization in their nursing practice. The competent nurse delivers care with deliberate planning and critical thinking. The fourth stage is the proficient stage. The proficient nurse demonstrates speed and flexibility above the competent nurse. The proficient nurse has learned from their experiences and is able to see the situation as a whole. They understand how to set priorities in situations, use their decision-making skills for problem solving, and can adapt as needed to produce needed results. The final stage is the expert stage. The expert nurse utilizes their experience and allows intuition to drive responses. In this final stage, the nurse's performance is highly proficient and flexible. The expert nurse relies on their vast experiences to analytically assess and address patient needs. The expert nurse can adjust immediately to meet the patient's needs and can predict potential problems before they arise (Kelly & Tazbir, 2014).

Benner's model has been utilized in areas such as nursing management, career enhancement, clinical specialization, staff development programs, staffing, evaluation, clinical internships, and precepting students and novice nurses (McEwen & Wills, 2014). Using Benner's model as the framework for preceptor development programs facilitates the importance of nurses to perform at an expected level to serve as preceptors. Benner's model supports the necessary level of competence and expertise for a nurse to serve as a successful preceptor. It also supports the understanding of performance expectations of a new graduate registered nurse. Having an agreed upon expectation of performance

allows for the preceptor and new graduate registered nurse to build a relationship based on mutual trust and respect. This provides the opportunity for the preceptor and new graduate registered nurse to develop appropriate competency-based goals. As the nurse preceptor and the new graduate registered nurse both understand the significance of skill acquisition in nursing practice, they can proceed with building skills and gaining knowledge during the preceptorship (McEwen & Wills, 2014).

Benner's model is applicable to this research study related to the emphasis on skill acquisition and levels of competency. In this research study, the capabilities of the nurse preceptors are examined. Benner's model is appropriate for this study because the higher the competency level of the nurse preceptor the greater their skills and capabilities.

Review of Literature

The purpose of this study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors. For a preceptor to function effectively, development through education and training is essential. The literature supports the need for formal preceptor training to facilitate the development of necessary skills to successfully precept. The literature review addresses three areas related to preceptor training. The first section addresses research related to preceptor roles and responsibilities. The second section discusses research related to current preceptor training programs. Finally, the third section focuses on research related to benefits of formal preceptor training. A literature review search was conducted using Cumulative Index for Nursing and Allied Health Literature (CINAHL) and MEDLINE, Ovid, and ProQuest databases. Peer reviewed research articles within the last five years were

searched using key terms: nurse preceptor, preceptorship, preceptor programs, preceptor training, nurse educator, new graduate registered nurse, and nurse retention.

Preceptor Roles and Responsibilities

Nurse preceptor has been defined as an experienced, resourceful nurse who facilitates and evaluates learning and assists in critical thinking and development of nursing skills while fostering independence and socialization of the newly hired nurse (Kennedy, 2019). A main barrier to development of effective preceptors is inadequate preparation and support (Nelson, Joswiak, & Brake, 2019). Staff nurses, working as preceptors, are asked to train nursing students, new graduate nurses, and experienced nurses starting employment in a new setting, all of whom have different needs (L'Ecuyer et al., 2018). Formal preceptor training serves to educate and train preceptors about their roles and responsibilities. When nurses receive formal training to learn preceptor roles and responsibilities they are given the opportunity to assess and develop those characteristics and skills.

L'Ecuyer et al. (2018) conducted a qualitative study to explore the defining attributes of preceptor role competency. In their study, they sought to define characteristics of preceptor competency as described by preceptors after attending a day-long continuing education training. The study sample included preceptors who had attended one of 44 continuing education preceptor academies, in a nine-year span, in Missouri. A total of 553 preceptor responses were collected from the 44 continuing education preceptor academies.

The study utilized a descriptive qualitative design using content analysis to study responses. Qualitative analysis proceeded through an inductive approach and manifest

analysis was used to describe what the informants said. The study found the categories of knowledge, skills, and attitudes were perceived to be critical skills of role competency. The category of knowledge (N = 276, 26.3%) was defined as cognitive processes: what preceptors know. In this category, important attributes were expertise, understanding learning styles, understanding personality issues, role preparation, and emotional intelligence. The category of skills (N = 482, 45.9%) was defined as psychomotor processes: what preceptors do. In this category, important attributes were communicating, being flexible, providing feedback, having good interpersonal skills, being organized, being a good role model, being open to improvement as a preceptor, setting goals, critical thinking, and protecting. The category of attitudes (N = 241, 23%) was defined as interpersonal processes: how preceptors behave. In this category, important attributes were patience, desire to be a preceptor, understanding, approachable, kindness, confidence, trustworthy, and positive attitude.

L'Ecuyer et al. (2018) concluded the most important competencies of preceptors are communication, expertise, patience, flexibility, and feedback. As these competencies contributed to 50% of all responses, these were found to be among the most important preceptor competencies. The most important preceptor competency was communication. The researchers also concluded flexibility, adaptability, organization, openness to improving skills, and critical thinking as additional important components. When a preceptor develops these competencies, the preceptor gains the ability to successfully serve in the preceptor role.

In a similar study, Rebholz and Baumgartner (2015) sought to examine the attributes and qualifications of successful rural nurse preceptors. The purpose of their

qualitative study was to uncover the preceptor's perspective concerning the essential development and education of the nurse preceptor. Participants in the study included nurse preceptors from four rural hospitals, based on their geographical location and the population served, in the Midwest. A convenience sampling was used to select the nurse preceptors. The participants had to be hospital-based preceptors with at least one year of experience. The researcher met with the participants individually and conducted semi-structured interviews. In the study, they identified important nurse preceptor roles: role model, teacher, supervisor, facilitator of learning, friend making, motivator, counselor, assessor, critic, and protector. These nurse preceptor roles are similar to the findings from L'Ecuyer et al. (2018). The researchers also acknowledged desirable characteristics and behaviors of a nurse preceptor: confidence, motivation, enthusiasm, knowledge, expertise, approachability, time management, support of preceptee, eagerness to share knowledge, and good communication skills (Rebholz & Baumgartner, 2015).

The nurse preceptors identified four attributes or qualifications essential to be a successful preceptor: sense of honor, professionalism, self-efficacy, and the ability to learn (Rebholz & Baumgartner, 2015). Sense of honor was found to be an effect of being recognized as an expert in the nursing field. The study results found professionalism to consist of subcategories: role modeling, supporting the preceptee, knowledge sharing, keeping current, patience, and being non-judgmental and fair. Self-efficacy, defined as people's beliefs about their capabilities to produce specific levels of performance that affect events in their lives, consisted of confidence, competence, understanding, and pride. The nurse preceptors recognized that their preceptor skills improved as they gained experience as a nurse and as a preceptor. They acknowledged that precepting

helped to increase their confidence, improve their abilities, and provided them an opportunity to grow in their roles as preceptors.

Rebholz and Baumgartner (2015) acknowledged the trend in nursing to assign a nurse with experience, without consideration of these attributes and qualifications, as a preceptor. A nurse who does not possess these attributes and qualifications may not foster a positive experience for a preceptee. The participants did identify that it was best to possess these skills, attributes, and qualifications prior to being selected as a preceptor; however, they also recognized the opportunity for continuing education and preceptor training to assist preceptors to better serve their preceptees. A limitation noted with this study is the entire group of participants were white females. There was also a disproportionate number of nurses from the facility with whom the researcher had established relationships, consequently allowing access to more preceptors. Recommendations for further study included interviews of male nurses and deeper exploration of how nurses learn to precept. Rewards and recognition of the nurse preceptor also warrants further investigation.

Preceptor training is imperative for development of nurse preceptors (L'Ecuyer et al., 2018; Rebholz & Baumgartner, 2015). Formal preceptor training should set clear expectations for preceptor roles and responsibilities. Having clearly defined preceptor roles and responsibilities improves the experience for the preceptor and the preceptee. A study by Omer, Suliman, and Moola (2015) aimed to compare similarities and differences between expectations of preceptors and preceptees related to the nurse preceptors' roles and responsibilities. The researchers recognized criteria for selection of a nurse preceptor includes skills, judgment, and attendance of a preceptorship course. The study identifies

four preceptor roles: protector, evaluator, facilitator, and educator. The study setting included a college of nursing and a 900-bed general hospital which served as a clinical setting for the nursing students. A convenience sample technique was used and the participants consisted of 80 preceptors and 130 nursing students. The preceptors had acted as a preceptor to the nursing students in one of the following areas: Med/Surg I and II, Maternity Nursing, Pediatric Nursing, and Critical Care Nursing (Omer et al., 2015). The preceptors and nursing students were given a two-part questionnaire.

Preceptor participation was 77.5% while preceptee participation was 66.9%. Statistical Package for the Social Sciences (SPSS) was used for statistical analysis of numerical data. Descriptive statistics and inferential statistical methods were applied. The results indicated that both groups agreed the preceptor roles of protector, evaluator, educator, and facilitator were important. Additionally, both groups agreed that the role of the protector, including protecting patients from healthcare errors, was the most important. In comparison, similar studies found the role of protector was an important characteristic of a preceptor (L'Ecuyer, 2018; Rebholz & Baumgartner, 2015). According to the Omer et al. (2015) study results, the preceptors ranked the following responsibilities as most important: protect patients from health care errors, support developing skills while ensuring safe practice, ensure adherence to institution policies and procedures, and protect preceptee from making errors that might threaten self/others. The preceptees ranked the following preceptor responsibilities as most important: protect patients from health care errors, protect me from making errors that might threaten self/others, model professional behavior, evaluate and communicate about my progression, and provide opportunities for learning (Omer et al., 2015).

To support development of these nurse preceptor roles, there need to be clearly defined roles and responsibilities within the job description of the nurse preceptor as well as support for the nurse preceptor to attend formal preceptor training to gain the knowledge and skills to help develop as a preceptor. The nurse preceptor must receive measurable objectives and clear expectations as to what defines a successful preceptorship (Omer et al., 2015; Rebholz & Baumgartner, 2015). A successful preceptorship provides a foundation for the preceptee to gain knowledge and develop skills to transition into practice. A successful transition into practice is a direct result of support provided during the preceptorship. The preceptor needs to be aware of the effort and commitment needed to facilitate this successful transition. Limitations in the Omer et al. (2015) study may be related to the convenience sample from a single college and hospital. The researchers recommend using probability sampling and different colleges if the study is replicated.

Current Preceptor Training Programs

Nurses with particular skills, attributes, and characteristics are often chosen to serve as a preceptor; however, they are not always provided with the proper education or training. Educating new preceptors is imperative to increase their self-efficacy and confidence to precept (Rebholz & Baumgartner, 2015). The development of competence in nurse preceptors relies on an investment in adequate preparation courses, ongoing development of skills, and role modeling by other team members (L'Ecuyer et al., 2018). Evidence suggests that the success of the preceptor experience depends greatly on adequate preceptor role education and support (Shinners & Franqueiro, 2015). Using reflective learning in a preceptor preparation course can develop and strengthen

preceptors' view of their educational role and help them manage and create the preconditions for preceptorship (Martensson et al., 2016).

Sanford and Tipton (2016) conducted a retrospective study which identified potential changes to the practice of nurse preceptors due to education and identified situations that facilitate or hinder such practice change. A four-hour preceptor class was provided to twenty-seven staff members at a hospital in Texas. The participants included 21 nurses. Each four-hour preceptor class, taught by a clinic educator, consisted of topics necessary to develop and support nurse preceptors: role of the preceptor, learning styles, growth and development of new staff, competency assessment, and critical thinking (Sanford & Tipton, 2016). After the class, the participants completed an evaluation tool and listed goals for improvements or changes which they intended to make as preceptors due to information learned in the class. They were asked to identify three practice improvements based on course content (Sanford & Tipton, 2016). The participants were given a follow-up survey, two months after the class, to identify if they had achieved their goals. Eighteen participants completed the follow-up survey. Of these, 20% achieved one goal, 30% achieved two goals, and 50% achieved three goals (Sanford & Tipton, 2016). The participants acknowledged improved listening skills, application of content, and team building as key factors in their development as preceptors. After participating, the nurse preceptors also recognized the need for preceptor training prior to serving as a preceptor. In the study, Sandford and Tipton (2016) indicated that formal preceptor training is beneficial. The participants had gained valuable skills to enhance their abilities as a preceptor (Sandford & Tipton, 2016). The Sandford and Tipton (2016) study is similar in structure to the current study. For the current study, the researcher has

developed formal preceptor training for nurse preceptors and a follow-up questionnaire to evaluate the perception of their capabilities.

In another study focused on preceptor training, Clipper and Cherry (2015) evaluated the effectiveness of a structured preceptor development program by measuring perceptions of transition to practice and first year retention of former graduate nurses. Their study recognized the powerful impact of formal preceptor development. They identified that the positive environment and supportive relationship, created by formally trained preceptors, leads to improved retention rates and increased patient safety. As a supporter of the development and implementation of a formal preceptor program, the hospitals provided a preceptor development program which allowed the preceptors to gain an understanding of the resources, tools, and strategies needed to be an effective preceptor.

The preceptor development program was then evaluated using a self-assessment tool. The tool was designed to assess the new graduate registered nurse perceptions of the transition to practice period and the effectiveness of their preceptor (Clipper & Cherry, 2015). In order to evaluate the preceptor development program, the tool was used among two groups. One group was trained by a preceptor who had received the formal training; however, the other group was trained by a preceptor who had not received the formal training. The evaluation was completed by comparing the two groups. The tool used was a 16-item, investigator-developed survey, which consisted of seven demographic items, eight questions based off of a Likert-scale, and an open-ended qualitative question (Clipper & Cherry, 2015). The questions using the Likert-scale used a seven-point scale and ranged from strongly agree to strongly disagree. The one open-

ended qualitative question was to assess the new graduate registered nurse's perception of their overall orientation and transition to practice process (Clipper & Cherry, 2015).

The sample size for the survey consisted of 62 new graduate registered nurses who had untrained preceptors and 76 new graduate registered nurses who had trained preceptors. All of the participants were from the seven-hospital system in Texas and all had less than one year of nursing experience. The survey was distributed via email and was active for 30 days. The Mann-Whitney U test was used to analyze the data. The survey was completed by 59 participants which is a 42.8% response rate. The survey tool had a Cronbach's alpha of 0.954 and the significance was set at 0.05 (Clipper & Cherry, 2015).

The results indicated that the new graduate registered nurses with a trained preceptor had higher survey question means than those with an untrained preceptor. The results also indicated that those with a trained preceptor also had a higher retention rate at 89.5% compared to 82.7% (Clipper & Cherry, 2015). The new graduate registered nurses with trained preceptors did score significantly higher with two particular questions: my preceptor helped me develop collegial working relationships and promote a positive work environment in my new unit and my preceptor took adequate time with me to ensure a smooth transition from my role as a student nurse to that of an independent, professional nurse (Clipper & Cherry, 2015). The significantly higher responses to these two questions indicate that the trained preceptors were aware of and addressed relationships, positive environment, and role transition.

The study concluded that by having a trained preceptor the new graduate registered nurses benefited during their transition to practice period. The preceptors who

had received formal training through the preceptor development program had a significant impact during the transition to practice period. The trained preceptors were able to provide the new graduate registered nurses with an environment which facilitated the learning process. The new graduate registered nurses had increased confidence and retention rates at the one-year mark. Similar to the Sanford and Tipton (2016) study, Clipper and Cherry (2015) supports that it is critical to focus on the training and preparation of nurse preceptors. The preceptor development program provided the nurse preceptors with necessary skills and knowledge related to role transition, conflict resolution, delegation, and critical thinking skills (Clipper & Cherry, 2015). This allowed the nurse preceptors the tools to provide an effective and safe transition to practice for the new graduate registered nurses. As a benefit, the new graduate registered nurses had an increased retention rate. Limitations of this study can be related to sample size and timeframe. For further study, it may be helpful to increase the sample size and include a more diversified target population. Similar to the current research study, Clipper and Cherry (2015) study findings supports the benefits of formal preceptor training and the impact on nurse retention.

Benefits of Formal Preceptor Training

Preceptors who gain understanding of their roles and responsibilities, through education and training, also gain understanding of the benefits of formal preceptor programs. One great benefit is improvement of nurse retention. According to Shinners and Franqueiro (2015), per the United States Department of Labor, the expected employment growth rate of RNs from the years 2012 to 2022 is 19%. Preceptor programs have shown a positive return on investment while improving nurse attrition,

satisfaction, and performance (Kennedy, 2019). An organization which can improve nurse attrition, satisfaction, and performance will have an overall impact on retention rates. Positive relationships with preceptors have been found to have a direct impact on job satisfaction and retention rates (L'Ecuyer et al., 2018). Effective preceptors can improve retention rates up to 37% (Watkins et al., 2016).

Organizations understand and respect the financial impact of improving satisfaction and retaining nursing staff. Cain et al. (2018) found that cost estimates range from $37,000 to $58,400 per nurse turnover. Nursing Solutions, Inc. (2018) reported an average cost of $49,500 to replace every nurse. Increased nursing turnover then directly effects the costs of recruitment. In a market which is already experiencing a shortage of nurses, an organization has to allocate a significant amount of money and resources to sustain a competitive recruitment strategy.

Blegen et al. (2015) sought to explore the effects of preceptorships on competency and retention of the newly licensed registered nurse. Blegen et al. (2015) identified that working with an experienced nurse preceptor was a common feature of structured nurse residency programs. To gain empirical information, the National Council of State Boards of Nursing (NCSBN) included preceptorship experience questions in their multi-site study of a structured transition-to-practice program. The NCSBN used a longitudinal, randomized, multisite design focused on three states: Illinois, North Carolina, and Ohio. The hospitals recruited had to meet the following inclusion criteria: estimated at least ten new nurses would be hired in the four-month enrollment period, would allow their new nurses and preceptors to access the online

training modules during work hours, and be able to arrange for a study coordinator at each site (Blegen et al., 2015).

A total of 82 hospitals were included and using a stratified random method were assigned to either the control or study group. In the intervention group, new licensed registered nurses completed five online modules and preceptors completed one online module. The online module for the preceptors included an introduction to the NCSBN's transition to practice program, roles and responsibilities of the preceptor, teaching clinical reasoning, adult learning theories, communicating and providing feedback, assessment of competence, and fostering a culture of safety (Blegen et al., 2015). Survey data were collected online at six, nine, and twelve months from new licensed registered nurses and preceptors. The survey data assessed new licensed registered nurse's quality and safety competencies, overall competence, and the preceptor experience (six months only) (Blegen et al., 2015).

The measures of new licensed registered nurse competence were modified from previously used tools, and after extensive descriptive analyses, five subscales were constructed. New licensed registered nurse retention was tracked by the site coordinators. To measure preceptor experience, survey data were collected by questions that determined the arrangements for preceptors and questions about the preceptor experience. Using a twenty-three-item tool developed for this study, each new licensed registered nurse and preceptor evaluated the preceptor experience, using a five-point response (5 = agree to 1 = disagree). The participating hospitals were then classified for strength of preceptor support: high preceptor support (HPS) or low preceptor support (LPS). Analysis was completed using SPSS. Descriptions of all variables and

characteristics of the hospitals' programs and participants were completed, and differences between groups were calculated with analysis of variance to determine whether differences were statistically significant (Blegen et al., 2015).

The survey results found 41 hospitals were classified as HPS and 41 hospitals were classified as LPS. The findings also noted that the two groups were similar in bed size, Magnet designation, university affiliation, location, and ownership. Blegen et al. (2015) did find the HPS hospitals were more likely to be in the transition to practice intervention group and the LPS hospitals were more likely to be in the transition to practice control group. The new licensed registered nurse retention rates were found to be higher at the HPS hospitals at 86%. Compared to the new licensed registered nurse retention rates of the LPS hospitals at 80%. The new licensed registered nurse competencies were also found to be higher in the HPS hospitals. The new licensed registered nurses and preceptors both reported a more positive preceptor experience in HPS hospitals.

Blegen et al. (2015) concluded hospitals which support preceptors benefit from improved retention rates, higher new licensed registered nurse competency, and positive preceptor experiences. To best support preceptors, Blegen et al. (2015) suggested preceptors and new licensed registered nurses should share shift and patient assignments and for the preceptor to have adequate time to spend with the new licensed registered nurse. Adequate time helps the preceptor to assess, guide, and evaluate the new licensed registered nurse. It is also concluded that a preceptor should have few preceptees concurrently allowing for the preceptor to spend sufficient time with the new licensed registered nurse. The conclusion of the study indicates a positive impact from a

hospital's support of their preceptors. Blegen et al. (2015) recognized that a limitation in the study was related to the failure to recognize the strength of preceptor support in the random assignments. Since strength of preceptor support was not considered, after random assignment, there were more HPS hospitals in the intervention group than control group. This may be a reflection that the hospitals' support for preceptors was influenced by the NCSBN's support of a transition to practice program. Since multiple preceptor support areas were in place, another limitation is the inability to identify if a single factor may have improved the preceptor experience.

Organizations also understand the financial impact of improving performance and directly impacting patient outcomes. Quality of care metrics, along with patient outcomes, possess a great deal of financial impact on an organization. As value-based purchasing criteria requires public reporting of infection rates, readmission rates, and patient satisfaction, organizations have additional cost concerns related to these metrics. Cain et al. (2018) explains to achieve high scores in these areas, it is imperative to sustain an adequate number of committed and engaged staff. A benefit to formal preceptor training is the development of proficient and engaged nursing staff. The implementation of formal preceptor training programs results in having a competent and stable workforce which creates cost-effective, quality care (Nelson, Joswiak, & Brake, 2019).

A study by Watkins, Hart, and Mareno (2016) examined the newly licensed registered nurses' (NLRN) perception of preceptor role effectiveness, psychological empowerment, and professional autonomy. The study used a prospective, cross-sectional, descriptive research design. The NLRN must have recently graduated with a bachelor's degree in nursing, be older than 18, speak and read English, and had a nursing

license for less than twenty-four months. Convenience sampling was used to develop the sample. Power analysis was used to estimate sample size needed at 85 new licensed registered nurses (Watkins et. al, 2016).

Using Survey Monkey, an online survey was conducted which included Preceptor Role Effectiveness Scale (PRES), the Psychological Empowerment Scale (PES), and the Schutzenhofer Professional Nursing Autonomy Scale (SPANS). The online survey was distributed via email. Of the 101 responses, 69 of them met all criteria and were included in the study. The participants ranged in age from 22-49 nine years. They were 85.5% female and 73.9% Caucasian. The PRES used a 4-point Likert response scale, the PES used a five-point Likert response scale, and the SPANS also used a Likert scale. Preceptorships ranged from 0.5 months to 7 months and 84.1% reported that their preceptor was effective. The results of the PRES, PES, and SPANS indicated higher perceived level of preceptor role effectiveness, higher degree of perceived level of psychological empowerment, and moderate to higher level of professional autonomy. For data analysis, descriptive and inferential statistics were analyzed using SPSS. To examine the PRES, PES, and SPANS, correlational analyses were conducted (Watkins et. al., 2016).

Results of this study indicate that the relationship between the preceptor and the NLRN has a direct impact on the transition to practice process. As the preceptor supports the NLRN, the NLRN gains skills and knowledge to successfully transition into practice. As the NLRN gains confidence in their skills and knowledge base, they develop necessary abilities to improve their competence. Similar to Blegen et al. (2015), the study by Watkins et al. (2016) supports the significance of an effective preceptor for

retention of the NLRN after their transition to practice. A limitation in this study was based upon the lack of valid email addresses for potential participants. Another limitation was that the list of NLRNs came from only one university.

Literature Review Summary

The review of the literature supports the development and implementation of formal preceptor training. Preceptor roles and responsibilities, current preceptor training programs, and benefits of formal training programs were reviewed in the current literature. Formal preceptor training provides an understanding of the roles and responsibilities of a nurse preceptor. By learning the roles and responsibilities, the nurse preceptor understands characteristics, attributes, skills, and competencies necessary to function as an effective nurse preceptor (L'Ecuyer et al., 2018; Rebholz & Baumgartner, 2015). The ANA (2013) defines competence based upon an anticipated level of performance. Patricia Benner's Skill Acquisition theory, the conceptual framework utilized for this study, emphasizes the necessary level of competence to serve as a preceptor (McEwen & Willis, 2014).

Along with underlying theory, preceptor training programs provide preceptors with effective tools and strategies (Clipper & Cherry, 2015). Nash and Flowers (2017) found nurse preceptors valued the educational topics of communication, critical thinking, and prioritizing to be addressed in preceptor training programs. Clipper and Cherry (2015) found trained nurse preceptors provided encouragement and facilitated an environment conducive to learning. While the current literature supports the need to develop and implement formal preceptor training, it is not standard practice to formally train nurse preceptors. It is common to assign a nurse to be a preceptor without proper

training or consideration of capabilities to precept. A study of the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care setting would be a valuable addition to the current literature.

The literature shows current preceptor training programs support improved retention rates and increased patient safety (Blegen et al., 2015; Clipper & Cherry, 2015; Nash & Flowers, 2017). Watkins et al. (2016) indicated that preceptor role effectiveness is an important element in improving new graduate registered nurse's psychological empowerment and professional autonomy and ensuring the successful transition to practice of the new graduate registered nurse. With similar findings, Blegen et al. (2015) found a positive preceptor experience is an important component of a successful transition to practice.

Developing a team of skilled preceptors is the first step in realizing the overall goal of improving student education, transition to practice of new graduates, and new employee retention (L'Ecuyer et al., 2018). A nurse's attributes and characteristics must be considered as they are selected or invited to become a preceptor. The selected preceptor should then receive formal preceptor training to develop the necessary skills to be an effective preceptor. It is imperative for the nurse to understand their roles and responsibilities as a preceptor. The research literature supports that a preceptor development program needs to be utilized to teach and support the preceptor to develop and build their skills as a preceptor.

As they gain experience as a preceptor, the nurse needs continued support and encouragement from their teammates, leadership, and administration. The added support and encouragement would serve as an incentive to the nurse preceptor. The benefits of

formal preceptor training extend far beyond the skills of the preceptor. The nurse also needs to recognize that their role as an effective preceptor directly impacts retention rates of new graduate and newly licensed registered nurses. The successful transition to practice for the new graduate registered nurse hinges upon the effectiveness of the preceptor. The preceptor's ability to foster trusting relationships and build positive working environments allows for the new graduate registered nurses to be empowered and develop autonomy during their transition to practice.

Chapter III: Methodology

Introduction

Formal preceptor training provides the resources and tools for the nurse preceptor to build a positive work environment and foster learning in the new graduate registered nurses. The purpose of this quantitative research study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital. In this chapter, the research design, setting, sample, instrumentation, data collection, and data analysis are described in detail.

Research Design

A quantitative research design was chosen for this study to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital. Quantitative research allows the researcher to obtain numeric information from a formal measurement and analyze the information (Polit & Beck, 2017). The quantitative design for this study allowed for comparisons of the nurse preceptor's perceived abilities before and after they participated in a preceptor education module. This provided the researcher with comparison data to determine the effectiveness of the preceptor education module.

Setting

The study took place in a 284-bed teaching hospital in Arkansas. The rural community hospital is the largest employer in a six-county region employing more than 2,250 people including over 400 registered nurses. The hospital serves as a leading

healthcare provider in the area and offers a wide range of specialty services. This study focused specifically on the six nursing units in the hospital which cared for medical-surgical patients.

Sample

The participants in this study were recruited using a convenience sample of nurse preceptors working in one of the six identified medical-surgical units. Convenience sampling, a commonly used method of nonprobability sampling, involves selection of the most readily available persons as participants in a study (Polit & Beck, 2017). Using convenience sampling allowed for a larger number of nurse preceptors to be included in this study. To establish the sample, clinical directors of the targeted medical-surgical areas were asked to email the researcher a list of current nurse preceptors, nurses who had served as preceptors in the past and nurses who they would like to serve as a preceptor in the future. Once the clinical directors provided their lists to the researcher, a master list of nurse preceptors was developed along with email addresses obtained via the hospital email directory.

The nurse preceptors were then invited to participate in the research study via email. Participants received an email which consisted of a recruitment script and a link to an informed consent. Participation was voluntary and informed consent was obtained prior to participating in the research study. Once they agreed to the informed consent, they were directed to the CONE pre-questionnaire which was designed using QuestionPro. If they did not agree to the informed consent, they received a message which thanked them for their time and ended the email notification. If they did agree to the informed consent, they were directed to the CONE pre-questionnaire. Next, they

were instructed to complete a formal preceptor training module. After completing the CONE pre-questionnaire, the participants were to complete the Preceptor Training module on CareLearning. After four weeks, the participants received a second email with a CONE post-questionnaire.

Human Subjects

An application for review of human participants research was completed and sent to the Institutional Review Board at Arkansas Tech University. The application contained details related to purpose and objectives, methodology and procedures, risks and benefits, consenting process, data collection, copy of a letter of support from the hospital, copy of the CONE questionnaire used in this study, and the education module to be used in this study. The Institutional Review Board approved the application on May 6, 2020. Following approval, email distribution began on August 31, 2020.

The informed consent form was provided to the participants via email. As the participants received the email, it opened with an informed consent form to be checked either agree or do not agree. Participation was strictly voluntary and the participant could withdraw from the study at any point in time. Participants were provided with contact information of the researcher for any questions or concerns. Once the participant agreed to the informed consent, a hyperlink directed them to the CONE pre-questionnaire on QuestionPro. The use of the QuestionPro website allowed for confidentiality and protection of anonymity for the participants. All data collected from the questionnaires was reported in aggregate form to keep confidentiality of participants to the greatest extent possible. The data were aggregated via QuestionPro online survey website. The researcher was the only person with access to the raw data. Access to the data were

password protected via the researcher's personal computer. The raw data file on the researcher's personal computer will be kept for five years and then erased. The compiled data will be shared as the research results.

Instrumentation

The Capabilities of Nurse Educators (CONE) questionnaire was used for this study. Written permission was obtained from the author of the CONE questionnaire, Dr. Margaret McAllister, on March 26, 2020, to use the CONE questionnaire in this study. The CONE questionnaire was developed to assess capabilities in nurse educators. The purpose of assessing capabilities in nurse educators is to assist individuals to accurately self-assess their strengths and areas in need of improvement, form the basis for focused professional development, and evaluate the success of specific interventions for professional development and improved capabilities (McAllister & Flynn, 2016).

The CONE questionnaire consists of 45-items divided into six subsets: Teaching Knowledge and Practice, Drawing from Nursing Knowledge, Teaching Relationships, Leadership, Orientation to Research, and Research Action (McAllister & Flynn, 2016). Each item is described using a 5-point Likert scale anchored with "not at all descriptive" to "very descriptive." The CONE questionnaire had been found to be sensitive to changes in perceived capability following participation in professional development activities (McAllister & Flynn, 2016). Therefore, the participants were given the CONE questionnaire before and after participating in the preceptor training module.

The CONE questionnaire provides an opportunity for the nurse to identify and articulate their capability set (as a preceptor) and to identify areas for future professional development (McAllister & Flynn, 2016). Furthermore, the CONE questionnaire

examines changes in participants' perceived levels of knowledge, attributes, and skills relevant to a nurse preceptor (Ryan, Young, & McAllister, 2017). In this study, the CONE questionnaire will allow the researcher to measure the effectiveness of the formal preceptor training module on the perceived abilities of the nurse preceptors. The nurse preceptors answered the CONE pre-questionnaire, completed the preceptor training module, and then answered the CONE post-questionnaire. The collection of two data points allowed the researcher to compare the perceived abilities of the nurse preceptors before and after participation in the preceptor training module.

A research study by Ryan et al. (2017) utilized the CONE questionnaire to evaluate the impact of a professional development intervention. The results of their study indicated positive differences in a number of teaching capabilities between pre-test and post-test scores. They concluded that professional development opportunities are beneficial to nurse preceptors for inspiring, transforming, and supporting their practice in the role of nurse preceptor. The findings from the Ryan et al. (2017) study are similar to this study. The respondents in this study report improvement in the perceptions of their capabilities from the CONE pre-questionnaire to the CONE post-questionnaire. The item with the greatest improvement reported, with an increase of 44%, was the ability to inspire excellence by articulating vision, integrity, and courage. The respondents also reported improvements in cultivating a learning environment, implementing counseling strategies to support learners, and nurturing the capacity for leadership in others.

Data Collection

The CONE questionnaire was used as a tool to collect data for this quantitative research study. Using emails from the hospital directory, the participants were sent an

email which included a script explaining the study and the overall process of how to participate. If the participant agreed to participate, they were then directed to the CONE pre-questionnaire. The pre-questionnaire consisted of five demographic questions and then the CONE questions. Demographic information consisted of gender, age, years of nursing experience, years working as a preceptor, and highest level of education.

Following completion of the CONE pre-questionnaire, the participants were then instructed to complete a preceptor training education module on CareLearning. The Preceptor Training Module on CareLearning included educational information related to roles and responsibilities, skills and characteristics, nursing reality shock, stages of skill acquisition, promoting critical thinking, and providing feedback. The course topics were developed using evidence-based content supported by current literature. Kennedy (2019) found that the literature supported main content areas in preceptor training programs including role of the preceptor, adult learning principles, communication skills, feedback and evaluation, and learning styles. Top ranked curriculum topics identified by Nash and Flowers (2017) include roles and responsibilities, communication and conflict, teamwork, culture of safety, and critical thinking. Similar course content, discussed by Blegen et al., (2015), also included roles and responsibilities of the preceptor, adult learning theories, communication and providing feedback, assessment of competence, and fostering a culture of safety.

After completion of the CareLearning education module, the participants were then allowed a 4-week period to utilize the information learned in the Preceptor Training Module. After the 4-week period, they were sent a second email with a link to the CONE post-questionnaire. The questionnaires were accessed via the QuestionPro survey link in

the emails. The questions were the same and were used to evaluate the effectiveness of the education module.

Data Analysis

The survey data collected were analyzed using the online website QuestionPro. Descriptive statistics were used to determine central tendencies and frequencies. The data analysis consisted of noting the frequency of occurrence in which the respondents reported for each item of the CONE pre-questionnaire and CONE post-questionnaire. Descriptive statistics were utilized to identify the central tendencies of item rankings of each scored statement. Collective rankings of each item were presented as a group representation of the CONE pre-questionnaire and CONE post-questionnaire.

Summary

The purpose of this quantitative research study was to determine the effectiveness of a formal preceptor training program for medical-surgical nurses. A convenience sample was used to invite nurses who served as nurse preceptors in medical-surgical areas of the hospital to participate. Participation was strictly voluntary and informed consent was obtained prior to participation in the survey. The CONE questionnaire was used to obtain data. Using a 5-point Likert scale, the survey items were ranked from not at all descriptive to very descriptive. The data were aggregated via QuestionPro and analyzed. Prior to survey distribution, IRB approval was obtained from Arkansas Tech University.

Chapter IV: Results

Introduction

This chapter presents the findings of the study to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors in an acute care hospital. Using the CONE questionnaire for pre and post data collection, this study evaluated and compared the effects of formal preceptor training. In addition, demographic data were collected related to gender, age, years of nursing experience, years working as a preceptor, and highest level of education (see Tables 1-4). Demographic results are presented first, followed by the CONE pre-questionnaire and CONE post-questionnaire results.

The CONE questionnaire results are divided into two categories representative of individual and group results from the pre and post questionnaires. The individual results for each of the 45 questions were combined to show the frequency of responses according to a 5-point Likert response scale ranking of *not at all descriptive* (1), *rarely* (2), *sometimes* (3), *often* (4), and *very descriptive* (5) (see Tables 5-19).

Demographic Results

The demographic section of the CONE pre and post questionnaires consisted of gender, age, years of nursing experience, years working as a preceptor, and highest level of education. A total of 47 nurses working in medical-surgical areas were invited to participate in the study. A total of *N=22* nurses were enrolled in the study after they agreed to the informed consent and participated in the pre-questionnaire. Therefore, the overall participation rate was 47% of the eligible nurses invited to participate in this study. There was one nurse who opted out of the study and did not proceed past the

informed consent. Of the *N*=22 nurses who participated in the pre-questionnaire, only *N*=17 participated in the post-questionnaire. This left attrition of five participants. The gender of the participants included one male and all other participants were female.

Table 1. Age of Participants

CONE Pre-Questionnaire			CONE Post-Questionnaire		
Age Group	Responses	%	Age Group	Responses	%
18-24	7	32%	18-24	5	29%
25-34	6	27%	25-34	4	24%
35-44	5	23%	35-44	5	29%
45-54	3	14%	45-54	2	12%
55-64	1	4%	55-64	1	6%
Above 64	0	0%	Above 64	0	0%
Totals	22	100%	Totals	17	100%

The *N=22* participants responded to the CONE pre-questionnaire reported age between 18-24 years of age (*n*=7, 32%), 25-34 years of age (*n*=6, 27%), 35-44 years of age (*n*=5, 23%), 45-54 years of age (*n*=3, 14%), 55-64years of age (*n*=1, 4%), and above 64 years of age (*n*=0, 0%). The *N=17* participants who responded to the CONE post-questionnaire reported age between 18-24 years of age (*n*=5, 29%), 25-34 years of age (*n*=4, 24%), 35-44 years of age (*n*=5, 29%), 45-54 years of age (*n*=2, 12%), 55-64 years of age (*n*=1, 6%), and above 64 years of age (*n*=0, 0%). The majority of the respondents from the CONE pre-questionnaire age of participants are in the range of 18-24 years of age (n=7, 32%). The majority of the respondents from the CONE post-questionnaire age of participants are split evenly in the ranges of 18-24 years of age (*n*=5, 29%) and 35-44 years of age (*n*=5, 29%).

Table 2. Years of Nursing Experience

CONE Pre-Questionnaire			CONE Post-Questionnaire		
Years of Nursing Experience	Responses	%	Years of Nursing Experience	Responses	%
< 2 years	2	9%	< 2 years	2	12%
2-4 years	7	32%	2-4 years	4	23%
5-7 years	6	27%	5-7 years	5	29%
8-10 years	1	5%	8-10 years	1	6%
11-13 years	2	9%	11-13 years	2	12%
14-16 years	0	0%	14-16 years	0	0%
17-19 years	1	4%	17-19 years	1	6%
20+ years	3	14%	20+ years	2	12%
Totals	22	100%	Totals	17	100%

The *N=22* participants who responded to the CONE pre-questionnaire on years of nursing experience reported having less than 2 years of nursing experience *(n*=2, 9%), 2-4 years of nursing experience (*n*=7, 32%), 5-7 years of nursing experience (*n*=6, 27%), 8-10 years of nursing experience (*n*=1, 5%), 11-13 years of nursing experience (*n*=2, 9%), 14-16 years of nursing experience (*n*=0, 0%), 17-19 years of nursing experience (*n*=1, 4%) and 20 years or greater of nursing experience (*n*=3, 14%). The *N*=17 participants who responded to the CONE post-questionnaire on years of nursing experience reported having less than 2 years of nursing experience (*n*=2, 12%), 2-4 years of nursing experience (*n*=4, 23%), 5-7 years of nursing experience (*n*=5, 29%), 8-10 years of nursing experience (*n*=1, 6%), 11-13 years of nursing experience (*n*=2, 12%), 14-16 years of nursing experience (*n*=0, 0%), 17-19 years of nursing experience (*n*=1, 6%) and 20 years or greater of nursing experience (*n*=2, 12%). The majority of the respondents from the CONE pre-questionnaire on years of nursing experience reported being a nurse for 2-

4 years (*n*=7, 32%). The majority of the respondents from the CONE post-questionnaire on years of nursing experience reported being a nurse for 5-7 years (*n*=5, 29%).

Table 3. Years Working as a Preceptor

CONE Pre-Questionnaire			CONE Post-Questionnaire		
Years of Working as a Preceptor	Responses	%	Years of Working as a Preceptor	Responses	%
< 2 years	8	36%	< 2 years	6	35%
2-3 years	4	18%	2-3 years	3	18%
4-6 years	4	18%	4-6 years	3	18%
7-9 years	3	14%	7-9 years	2	11%
10+ years	3	14%	10+ years	3	18%
Totals	22	100%	Totals	17	100%

The *N*=22 participants who responded to the CONE pre-questionnaire on years as a preceptor who have less than 2 years of working as a preceptor (*n*=8, 36%), 2-3 years of working as a preceptor (*n*=4, 18%), 4-6 years of working as a preceptor (*n*=4, 18%), 7-9 years of working as a preceptor (*n*=3, 14%), 10 years or greater of working as a preceptor (*n*=3, 14%). The *N*=17 participants who responded to the CONE post-questionnaire on years as a preceptor who have less than 2 years of working as a preceptor (*n*=6, 35%), 2-3 years of working as a preceptor (*n*=3, 18%), 4-6 years of working as a preceptor (*n*=3, 18%), 7-9 years of working as a preceptor (*n*=2, 11%), 10 years or greater of working as a preceptor (*n*=3, 18%). The majority of respondents from the CONE pre-questionnaire on years as a preceptor reported working as a preceptor for less than 2 years (*n*=8, 36%). The same was true for the CONE post-questionnaire on years with a preceptor with 35% (*n*=6) of respondents reported working as a preceptor for less than 2 years.

Table 4. Highest Level of Education

CONE Pre-Questionnaire			CONE Post-Questionnaire		
Highest Level of Education	Responses	%	Highest Level of Education	Responses	%
Diploma in Nursing	0	0%	Diploma in Nursing	0	0%
Associate Degree	14	64%	Associate Degree	13	76%
Bachelor's Degree	8	36%	Bachelor's Degree	4	24%
Master's Degree	0	0%	Master's Degree	0	0%
Totals	22	100%	Totals	17	100%

The *N*=22 participants who responded to the CONE pre-questionnaire on highest level of education who have a diploma in nursing (*n* =0, 0%), an associate degree (*n*=14, 64%), a bachelor's degree (*n*=8, 36%), and a master's degree (*n*=0, 0%). The *N*=17 participants who responded to the CONE post-questionnaire on highest level of education who have a diploma in nursing (*n* =0, 0%), an associate degree (*n*=13, 76%), a bachelor's degree (*n*=4, 24%), and a master's degree (*n*=0, 0%). With the CONE pre-questionnaire on highest level of education respondents at 64% (*n*=14) and the CONE post-questionnaire on highest level of education respondents at 76% (*n*=13), the majority of respondents in both groups report their highest level of education as an associate degree.

CONE Questionnaire Results

The CONE questionnaire consisted of 45 questions postulated as statements. These statements pertain to the nurse preceptor's perceived levels of knowledge, attributes, and skills related to their capabilities as a preceptor. Each statement was scored according to a 5-point Likert response scale ranking of *not at all descriptive* (1), *rarely* (2), *sometimes* (3), *often* (4), and *very descriptive* (5). The CONE questionnaire statements along with the individual response rates of the CONE pre-questionnaires and the CONE post-questionnaires are presented in the following tables (see Tables 5-19).

Table 5. CONE Questionnaire Items 1-3.

1. I can demonstrate advanced clinical skills and judgement.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	4%	1	6%
Often	14	64%	7	41%
Very	7	32%	9	53%
Totals	22	100%	17	100%
2. I can demonstrate active, empathic listening skills.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	12	55%	6	35%
Very	10	45%	11	65%
Totals	22	100%	17	100%
3. I am able to use a range of communication strategies to facilitate and exchange of ideas.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	3	13%	2	12%
Often	14	64%	6	35%
Very	5	23%	9	53%
Totals	22	100%	17	100%

The majority of respondents from the CONE pre-questionnaire “I can demonstrate advanced clinical skills and judgement” indicated the ability to demonstrate advanced clinical skills and judgement as *often* (*n*=14, 64%). While the majority of respondents from the CONE post-questionnaire “I can demonstrate advanced clinical skills and judgement” indicated the ability to demonstrate advanced clinical skills and judgement as *very descriptive* (*n*=9, 53%).

The majority of respondents from the CONE pre-questionnaire “I can demonstrate active, empathic listening skills” reported the ability to demonstrate active, empathic listening skills as *often* (*n*=12, 55%). The majority of respondents from the CONE post-questionnaire “I can demonstrate active, empathic listening skills” reported the ability to demonstrate active, empathic listening skills as *very descriptive* (*n*=11, 65%). All respondents in both the pre and post questionnaires reported the ability to demonstrate active, empathic listening skills as *often* to *very descriptive*.

The majority of respondents from the CONE pre-questionnaire “I am able to use a range of communication strategies to facilitate and exchange of ideas” reported 64% (*n*=12) the ability to use a range of communication strategies to facilitate an exchange of ideas as *often*. For the CONE post-questionnaire, “I am able to use a range of communication strategies to facilitate and exchange of ideas” respondents, the majority, 54% (*n*=9) reported the ability to use a range of communication strategies to facilitate an exchange of ideas as *very descriptive*.

Table 6. CONE Questionnaire Items 4-6.

4. I am able to plan engaging learning experiences.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	2	9%	0	0%
Sometimes	3	14%	5	29%
Often	9	41%	7	42%
Very	8	36%	5	29%
Totals	22	100%	17	100%
5. I am able to manage uncertainty and risk in complex situations.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	4	18%	2	12%
Often	10	45%	7	41%
Very	7	32%	8	47%
Totals	22	100%	17	100%
6. I am able to stimulate student interest.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	4	18%	1	6%
Often	12	55%	7	41%
Very	6	27%	9	53%
Totals	22	100%	17	100%

For question 4, “I am able to plan engaging learning experiences,” forty-one percent of respondents from the CONE pre-questionnaire (*n*=9) and forty-two percent of respondents from the CONE post-questionnaire (*n*=7) indicated the ability to plan engaging learning experiences as *often*. The CONE post-questionnaire “I am able to plan engaging learning experiences” (*n*=5, 29%) shows a decrease from the CONE pre-questionnaire I am able to plan engaging learning experiences (*n*=8, 36%) in the report of *very descriptive*. In the CONE pre-questionnaire, “I am able to plan engaging learning

experiences" 9% (*n*=2) reported *rarely* being able to plan engaging learning experiences. While in the CONE post-questionnaire, "I am able to plan engaging learning experiences," 0% reported *rarely* or not at all being able to plan engaging learning experiences.

The majority of respondents from the CONE pre-questionnaire "I am able to manage uncertainty and risk in complex situations" reported the ability to manage uncertainty and risk in complex situations as *often* (*n*=10, 45%). The majority of respondents from the CONE post-questionnaire "I am able to manage uncertainty and risk in complex situations" reported the ability to manage uncertainty and risk in complex situations as *very descriptive* (*n*=8, 47%).

At 55% (*n*=12) the respondents from the CONE pre-questionnaire "I am able to stimulate student interest" reported the ability to stimulate student interest as *often*. For the CONE post-questionnaire, "I am able to stimulate student interest," 53% (*n*=9) reported the ability to stimulate student interest as *very descriptive*. None of the respondents reported *rarely* or not at all.

Table 7. CONE Questionnaire Items 7-9.

7. I am able to engage in the process of critical inquiry.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	1	5%	2	12%
Often	13	59%	7	41%
Very	7	31%	8	47%
Totals	22	100%	17	100%
8. I am able to use a variety of tools to enliven learning.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	1	5%	0	0%
Rarely	0	0%	0	0%
Sometimes	5	23%	5	29%
Often	10	45%	4	24%
Very	6	27%	8	47%
Totals	22	100%	17	100%
9. I am able to manage projects effectively.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	0	0%
Often	15	68%	8	47%
Very	5	23%	9	53%
Totals	22	100%	17	100%

For question 7, “I am able to engage in the process of critical inquiry,” the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=13, 59%). One respondent (5%) reported the ability to engage in the process of critical inquiry as *rarely*. The majority of respondents from the CONE post-questionnaire “I am able to engage in the process of critical inquiry” reported the ability to engage in the process of critical inquiry as *very descriptive* (*n*=8, 47%). In the CONE post-questionnaire, “I am

able to engage in the process of critical inquiry," zero respondents reported *rarely* or not at all for the ability to engage in the process of critical inquiry.

The majority of respondents from the CONE pre-questionnaire "I am able to use a variety of tools to enliven learning" reported the ability to use a variety of tools to enliven learning as *often* (*n*=10, 45%). One respondent (5%) reported the ability to use a variety of tools to enliven learning as *not at all descriptive*. This is the only *not at all descriptive* score in the entire study. For the CONE post-questionnaire, "I am able to use a variety of tools to enliven learning," 47% (*n*=8) reported *very descriptive* for the ability to use a variety of tools to enliven learning. In comparison with the CONE pre-questionnaire "I am able to use a variety of tools to enliven learning" with a reported 27% (*n*=6) as *very descriptive*.

For question 9, "I am able to manage projects effectively," the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=14, 68%). While the majority of respondents from the CONE post-questionnaire "I am able to manage projects effectively" reported *very descriptive* (*n*=9, 53%). The *very descriptive* score improved from 23% (*n*=5) in the CONE pre-questionnaire "I am able to manage projects effectively" to 53% (*n*=9) in the CONE post-questionnaire "I am able to manage projects effectively."

Table 8. CONE Questionnaire Items 10-12.

10. I am able to guide learners to develop self-reflective practice.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	3	14%	1	6%
Often	13	59%	7	41%
Very	6	27%	9	53%
Totals	22	100%	17	100%
11. I am able to plan assessment activities that guide learning.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	6	27%	2	12%
Often	10	45%	9	53%
Very	5	23%	6	35%
Totals	22	100%	17	100%
12. I am able to demonstrate strategies for the management of uncertainty and risk in practice.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	4	18%	1	6%
Often	11	50%	7	41%
Very	6	27%	9	53%
Totals	22	100%	17	100%

For question 10, “I am able to guide learners to develop self-reflective practice,” the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=13, 59%). While for the CONE post-questionnaire “I am able to guide learners to develop self-reflective practice,” majority of respondents reported the ability to guide learners to develop self-reflective practice as *very descriptive* (*n*=9, 53%). There was an improvement from the CONE pre-questionnaire “I am able to guide learners to develop

self-reflective practice" *very descriptive* (*n*=6, 27%) to the CONE post-questionnaire "I am able to guide learners to develop self-reflective practice" *very descriptive*(*n*=9, 53%).

The majority of both the CONE pre-questionnaire "I am able to plan assessment activities that guide learning" (*n*=10, 45%) and CONE post-questionnaire "I am able to plan assessment activities that guide learning" (*n*=9, 53%) reported the ability to plan assessment activities that guide learning as *often*. Unlike other items in the CONE post-questionnaire "I am able to plan assessment activities that guide learning," there was not an increase noted from *often* (*n*=9, 53%) to *very descriptive*(*n*=6, 35%). For the CONE pre-questionnaire "I am able to plan assessment activities that guide learning," 27% (*n*=6) reported *sometimes* and 5% (*n*=1) reported *rarely* for the ability to plan assessment activities that guide learning. For the CONE post-questionnaire, "I am able to plan assessment activities that guide learning," 12% (*n*=2) reported the ability to plan assessment activities that guide learning as *sometimes*.

The majority of respondents from the CONE pre-questionnaire "I am able to demonstrate strategies for the management of uncertainty and risk in practice" reported the ability to demonstrate strategies for the management of uncertainty and risk in practice as *often* (*n*=11, 50%). The majority of respondents from the CONE post-questionnaire "I am able to demonstrate strategies for the management of uncertainty and risk in practice" reported the ability to demonstrate strategies for the management of uncertainty and risk in practice as *very descriptive*(*n*=9, 53%). There is an improvement noted from the CONE pre-questionnaire "I am able to demonstrate strategies for the management of uncertainty and risk in practice" *very descriptive* (*n*=6, 27%) to the

CONE post-questionnaire “I am able to demonstrate strategies for the management of uncertainty and risk in practice” *very descriptive* (*n*=9, 53%).

Table 9. CONE Questionnaire Items 13-15.

13. I am able to provide timely and constructive feedback to learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	0	0%
Often	11	50%	8	47%
Very	9	41%	9	53%
Totals	22	100%	17	100%
14. I am able to plan assessment activities that deepen the level of learning accurately.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	4	18%	4	24%
Often	13	59%	5	29%
Very	4	18%	8	47%
Totals	22	100%	17	100%
15. I am able to present complex information in a way that can be easily understood by learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	1	5%	2	12%
Often	12	54%	6	35%
Very	8	36%	9	53%
Totals	22	100%	17	100%

In the CONE pre-questionnaire, “I am able to provide timely and constructive feedback to learners,” 50% (*n*=11) reported the ability to provide timely and constructive feedback to learners as *often*. While in the CONE post-questionnaire “I am able to provide timely and constructive feedback to learners,” the majority of respondents

reported the ability to provide timely and constructive feedback to learners as *very descriptive*(*n*=9, 53%).

For question 14, "I am able to plan assessment activities that deepen the level of learning accurately," the majority of respondents from the CONE pre-questionnaire reported 59% (*n*=13) as *often*. There is a split of 18% (*n*=4) for *very descriptive* and for *sometimes*. While in the CONE post-questionnaire "I am able to plan assessment activities that deepen the level of learning accurately," the majority of respondents reported *very descriptive* for the ability to plan assessment activities that deepen the level of learning accurately (*n*=8, 47%). The respondents reported 29% (*n*=5) as *often* and 24% (*n*=4) as *sometimes* for the ability to plan assessment activities that deepen the level of learning accurately. The 24% (*n*=4) *sometimes* is the third lowest score of the CONE post-questionnaire behind the 29% (*n*=5) *sometimes* of the ability to plan engaging learning experiences and the 29% (*n*=5) *sometimes* of the ability to use a variety of tools to enliven learning experience.

The majority of respondents from the CONE pre-questionnaire "I am able to present complex information in a way that can be easily understood by learners" reported *often* (*n*=13, 59%). The majority of respondents from the CONE post-questionnaire "I am able to present complex information in a way that can be easily understood by learners" reported *very* (*n*=9, 53%).

Table 10. CONE Questionnaire Items 16-18.

16. I am able to model strategies to adapt to change/setbacks.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	6	27%	2	12%
Often	11	50%	6	35%
Very	5	23%	9	53%
Totals	22	100%	17	100%
17. I am able to cultivate a learning environment that supports creative expression of ideas.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	1	6%
Often	14	64%	5	29%
Very	6	27%	11	65%
Totals	22	100%	17	100%
18. I am able to implement counseling strategies to support learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	4%	0	0%
Sometimes	3	14%	1	6%
Often	13	59%	6	35%
Very	5	23%	10	59%
Totals	22	100%	17	100%

For question 16, “I am able to model strategies to adapt to change/setbacks,” from the CONE pre-questionnaire, the respondents reported 27% (*n*=6) *sometimes*, 50% (*n*=11) *often*, and 23% (*n*=5) *very descriptive*. From the CONE post-questionnaire, the respondents reported 12% (*n*=2) *sometimes*, 35% (*n*=6) *often*, and 53% (*n*=9) *very descriptive* for the ability to model strategies to adapt to change/setbacks.

The majority of respondents to the CONE pre-questionnaire “I am able to cultivate a learning environment that supports creative expression of ideas” reported the

ability to cultivate a learning environment that supports creative expression of ideas as *often* (*n*=14, 64%). While the CONE post-questionnaire "I am able to cultivate a learning environment that supports creative expression of ideas" reported 29% (*n*=5) the ability to cultivate a learning environment that supports creative expression of ideas as *often*. The majority of respondents to the CONE post-questionnaire reported the ability to cultivate a learning environment that supports creative expression of ideas as *very descriptive* (*n*=11, 65%). There is an increase noted when comparing CONE pre-questionnaire "I am able to cultivate a learning environment that supports creative expression of ideas" *very descriptive* (*n*=6, 27%) and CONE post-questionnaire "I am able to cultivate a learning environment that supports creative expression of ideas" (*n*=11, 65%).

For question 18, "I am able to implement counseling strategies to support learners," both CONE pre-questionnaire and CONE post-questionnaire majorities reported 59%. The CONE pre-questionnaire "I am able to implement counseling strategies to support learners" reported 59% (*n*=13) as *often* while the CONE post-questionnaire "I am able to implement counseling strategies to support learners" reported 59% (*n*=10) as *very descriptive*. The *very descriptive* score increased from the CONE pre-questionnaire (*n*=5, 23%) to the CONE post-questionnaire (*n*=10, 59%).

Table 11. CONE Questionnaire Items 19-21.

19. I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	0	0%	0	0%
Often	17	77%	8	47%
Very	4	18%	9	53%
Totals	22	100%	17	100%
20. I am able to prepare learners for practice in the contemporary healthcare environment.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	4%	1	6%
Often	16	74%	8	47%
Very	5	23%	8	47%
Totals	22	100%	17	100%
21. I am able to inspire excellence in articulating vision, integrity, and courage.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	1	5%
Often	14	64%	4	24%
Very	6	27%	12	71%
Totals	22	100%	17	100%

For question 19, "I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field," the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=17, 77%). At 77%, this is the highest score of the CONE pre-questionnaire items. The CONE post-questionnaire "I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field" reported *often* at 47% (*n*=8). While the majority of respondents from the CONE post-

questionnaire “I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field” reported the ability to answer questions from learners knowledgeably, reflecting in depth understanding of the field as *very descriptive* (*n*=9, 53%). There is an increase noted when comparing the CONE pre-questionnaire “I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field” *very descriptive* (*n*=4, 18%) to the CONE post-questionnaire “I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field” *very descriptive* (*n*=9, 53%).

The majority of respondents from the CONE pre-questionnaire “I am able to prepare learners for practice in the contemporary healthcare environment” reported the ability to prepare learners for practice in the contemporary healthcare environment as *often* (*n*=16, 74%). At 74%, this is the second highest score of the CONE pre-questionnaire items. For the CONE post-questionnaire, “I am able to prepare learners for practice in the contemporary healthcare environment” the majority of respondents is split at 47% (*n*=8) as *often* and as *very descriptive*. Both the CONE pre-questionnaire (4%) and CONE post-questionnaire (6%) have one respondent who reported the ability to prepare learners for practice in the contemporary healthcare environment as *sometimes*.

In the CONE pre-questionnaire, “I am able to inspire excellence in articulating vision, integrity, and courage” the majority of respondents reported the ability to inspire excellence in articulating vision, integrity, and courage as *often* (*n*=14, 64%). While in the CONE post-questionnaire “I am able to inspire excellence in articulating vision, integrity, and courage,” 24% (*n*=4) of the respondents reported the ability to inspire excellence in articulating vision, integrity, and courage as *often*. The majority of

respondents from the CONE post-questionnaire reported the ability to inspire excellence in articulating vision, integrity, and courage as *very descriptive* (*n*=12, 71%). There is an increase noted from the CONE pre-questionnaire "I am able to inspire excellence in articulating vision, integrity, and courage" 27% (*n*=6) *very descriptive* to the CONE post-questionnaire "I am able to inspire excellence in articulating vision, integrity, and courage" 71% (*n*=12) *very descriptive*.

Table 12. CONE Questionnaire Items 22-24.

22. I am confident in my ability to teach effectively.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	4	19%	1	6%
Often	12	57%	9	53%
Very	5	24%	7	41%
Totals	21	100%	17	100%
23. I am a positive role model.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	27%	0	0%
Often	12	50%	6	35%
Very	8	23%	11	65%
Totals	21	100%	17	100%
24. I am a mentor and coach who supports and guides colleagues.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	14	67%	7	41%
Very	7	33%	10	59%
Totals	21	100%	17	100%

For question 22, “I am confident in my ability to teach effectively,” both CONE pre-questionnaire (*n*=12, 57%) and CONE post-questionnaire (*n*=9, 53%) majorities reported I am confident in my ability to teach effectively as *often*. There was also an increase noted in *very descriptive* from the CONE pre-questionnaire “I am confident in my ability to teach effectively” (*n*=5, 24%) to the CONE post-questionnaire “I am confident in my ability to teach effectively” (*n*=7, 41%).

For question 23, “I am a positive role model,” respondents to the CONE pre-questionnaire reported 27% (*n*=1) *sometimes*, 50% (*n*=12) *often*, and 23% (*n*=8) *very descriptive*. Respondents to the CONE post-questionnaire “I am a positive role model” reported 35% (*n*=6) *often* and 65% (*n*=11) *very descriptive* for I am a positive role model.

The CONE pre-questionnaire and CONE post-questionnaire respondents reported *often* and *very descriptive* for “I am a mentor and coach who supports and guides colleagues.” The CONE pre-questionnaire “I am a mentor and coach who supports and guides colleagues” respondents reported 67% (*n*=14) *often* and 33% (*n*=7) *very descriptive*. The CONE post-questionnaire “I am a mentor and coach who supports and guides colleagues” respondents reported 41% (*n*=7) *often* and 59% (*n*=10) *very descriptive*.

Table 13. CONE Questionnaire Items 25-27.

25. I am an advocate for nursing education in the political arena.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	2	9%	1	6%
Sometimes	4	19%	0	0%
Often	9	43%	7	41%
Very	6	29%	9	53%
Totals	21	100%	17	100%
26. I am viewed as approachable				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	3	18%
Often	10	48%	7	41%
Very	9	43%	7	41%
Totals	21	100%	17	100%
27. I am an attentive listener.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	10	48%	6	35%
Very	11	52%	11	65%
Totals	21	100%	17	100%

For question 25, “I am an advocate for nursing education in the political arena,” the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=9, 43%). The majority of respondents from the CONE post-questionnaire “I am an advocate for nursing education in the political arena” reported *very descriptive* (*n*=9, 53%). There was an increase noted from the CONE pre-questionnaire “I am an advocate for nursing education in the political arena” *very descriptive* (*n*=6, 29%) to the CONE post-questionnaire “I am an advocate for nursing education in the political arena” *very*

descriptive (*n*=9, 53%). From the CONE pre-questionnaire, 9% (*n*=2) of respondents reported "I am an advocate for nursing education in the political arena" as *rarely*. While 6% (*n*=1) of respondents, from the CONE post-questionnaire, reported "I am an advocate for nursing education in the political arena" as *rarely*.

The CONE pre-questionnaire "I am viewed as approachable" respondents reported 48% (*n*=10) *often* and 43% (*n*=9) *very descriptive* for I am viewed as approachable. The CONE post-questionnaire "I am viewed as approachable" respondents reported 41% (*n*=7) for both *often* and *very descriptive*.

For question 27, "I am an attentive listener" both CONE pre-questionnaire and CONE post-questionnaire respondents reported *often* and *very descriptive*. The CONE pre-questionnaire "I am an attentive listener" respondents reported 48% (*n*=10) *often* and 52% (*n*=11) *very descriptive* for I am an active listener. The CONE post-questionnaire "I am an attentive listener" respondents reported 35% (*n*=6) *often* and 65% (*n*=11) *very descriptive* for I am an active listener.

Table 14. CONE Questionnaire Items 28-30.

28. I believe that learning is promoted when a productive relationship is developed between teacher, learner, and peers.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	4%	0	0%
Often	6	29%	3	18%
Very	14	67%	14	82%
Totals	21	100%	17	100%
29. I respect and value learners different learning styles.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	5%	0	0%
Often	9	43%	4	24%
Very	11	52%	13	76%
Totals	21	100%	17	100%
30. I support evidence-based best practice.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	9	43%	5	31%
Very	12	57%	11	69%
Totals	21	100%	17	100%

For question 28, “I believe that learning is promoted when a productive relationship is developed between teacher, learner, and peers,” 67% percent (*n*=14) of respondents from the CONE pre-questionnaire reported *very descriptive* for “I believe that learning is promoted when a productive relationship is developed between teacher, learner, and peers.” With the highest score of the CONE post-questionnaire, 82% (*n*=14) of respondents reported *very descriptive* for “I believe that learning is promoted when a productive relationship is developed between teacher, learner, and peers.”

For question 29, “I respect and value learners different learning styles,” 52% (*n*=11) of respondents from the CONE pre-questionnaire reported *very descriptive*. While 76% (*n*=13) of respondents from the CONE post-questionnaire “I respect and value learners different learning styles” reported *very descriptive* for I respect and value leaners different learning styles.

The majority of respondents from the CONE pre-questionnaire “I support evidence-based practice” reported *very descriptive* for I support evidence-based best practice (*n*= 12, 57%). The CONE post-questionnaire “I support evidence-based practice” majority of respondents reported *very descriptive* for I support evidence-based best practice (*n*=11, 69%). In both the CONE Pre-Questionnaire “I support evidence-based practice” and the CONE post-questionnaire “I support evidence-based practice” all respondents reported *often* or *very descriptive*.

Table 15. CONE Questionnaire Items 31-33.

31. I seek opportunities to stay current in nursing knowledge.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	5%	1	6%
Often	9	43%	5	29%
Very	11	52%	11	65%
Totals	21	100%	17	100%
32. I respect learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	6	29%	4	24%
Very	15	71%	13	76%
Totals	21	100%	17	100%
33. I am self-confident.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	3	14%	1	6%
Often	9	43%	7	41%
Very	8	38%	9	53%
Totals	21	100%	17	100%

For question 31, “I seek opportunities to stay current in nursing knowledge,” both the CONE pre-questionnaire (*n*=11, 52%) and the CONE post-questionnaire (*n*=11, 65%) majorities reported *very descriptive*. Respondents from the CONE pre-questionnaire “I seek opportunities to stay current in nursing knowledge” (*n*=6, 29%) and CONE post-questionnaire “I seek opportunities to stay current in nursing knowledge” (*n*=4, 24%) also reported *often*. With CONE pre-questionnaire “I seek opportunities to stay current in

nursing knowledge" (*n*=1,5%) and CONE post-questionnaire "I seek opportunities to stay current in nursing knowledge" (*n*=1, 6%) reported *rarely* in response.

All respondents from the CONE pre-questionnaire "I respect learners" and the CONE post-questionnaire "I respect learners" reported *often* or very for I respect learners. The majority of respondents from the CONE pre-questionnaire "I respect learners" reported 71% (*n*=15) *very descriptive* and 29% (*n*=6) *often*. The majority of respondents from the CONE post-questionnaire "I respect learners" reported 76% (*n*=13) *very descriptive* and 24% (*n*=4) *often*. Along with "I respect and value leaners different learning styles," the 76% response rate for the CONE post-questionnaire "I respect learners" is the second most positive response.

The majority of respondents from the CONE pre-questionnaire "I am self-confident" reported I am self-confident *often* (*n*=9, 43%). While 14% (*n*=3) reported *sometimes* and 5% (*n*=1) reported *rarely* in response to "I am self-confident." The majority of respondents from the CONE post-questionnaire "I am self-confident" reported *very descriptive* for I am self-confident (*n*=9, 53%). There was an increase from the CONE pre-questionnaire "I am self-confident" (*n*=8, 38%) report of *very descriptive* to the CONE post-questionnaire (*n*=9, 53%) report of *very descriptive*.

Table 16. CONE Questionnaire Items 34-36.

34. I facilitate best practice that is person-family-and community-centered.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	0	0%
Often	10	48%	6	35%
Very	9	43%	11	65%
Totals	21	100%	17	100%
35. I enjoy teaching.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	0	0%
Often	9	43%	7	41%
Very	10	48%	10	59%
Totals	21	100%	17	100%
36. I actively seek opportunities to improve my educational practice.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	5%	0	0%
Sometimes	2	9%	3	18%
Often	10	48%	3	18%
Very	8	38%	11	65%
Totals	21	100%	17	100%

For question 34, “I facilitate best practice that is person, family, and community-centered,” the majority of respondents from the CONE pre-questionnaire reported *often* (*n*=10, 48%). The majority of respondents from the CONE post-questionnaire reported *very descriptive* (*n*=9, 53%) for “I facilitate best practice that is person, family, and community-centered.” There was an increase from the CONE pre-questionnaire “I facilitate best practice that is person, family, and community-centered “ (*n*=9, 43%)

report of *very descriptive* to the CONE post-questionnaire "I facilitate best practice that is person, family, and community-centered" (*n*=9, 53%) report of *very descriptive*.

For both the CONE pre-questionnaire "I enjoy teaching" and the CONE post-questionnaire "I enjoy teaching," the majority of respondents reported *very* in response to I enjoy teaching. The CONE pre-questionnaire "I enjoy teaching" respondents reported sometime (*n*=2, 9%), *often* (*n*=9, 43%) and *very* (*n*=10, 48%). The CONE post-questionnaire "I enjoy teaching" respondents reported *often* (*n*=7, 41%) and *very* (*n*=10, 59%) in response to "I enjoy teaching."

The majority of respondents from the CONE pre-questionnaire "I actively seek opportunities to improve my educational practice" reported *often* for I actively seek opportunities to improve my educational practice (*n*=10, 48%). The majority of respondents from the CONE post-questionnaire "I actively seek opportunities to improve my educational practice" reported *very* (*n*=11, 65%) There was an increase from the CONE pre-questionnaire (*n*=8, 38%) to the CONE post-questionnaire (*n*=11, 48%) reported of *very* in response to "I actively seek opportunities to improve my educational practice." Respondents to both the CONE pre-questionnaire (*n*=2, 9%) and the CONE post-questionnaire (*n*=3, 18%) reported *sometimes* in response to "I actively seek opportunities to improve my educational practice."

Table 17. CONE Questionnaire Items 37-39.

37. I am interested in the progress and welfare of learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	0	0%	0	0%
Often	8	40%	5	29%
Very	12	60%	12	71%
Totals	20	100%	17	100%
38. I motivate peers to achieve excellence.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	5%	0	0%
Often	11	50%	7	41%
Very	10	45%	10	59%
Totals	22	100%	17	100%
39. I actively participate in strategies which facilitate positive change in nursing.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	4	18%	1	6%
Often	9	41%	5	29%
Very	9	41%	11	65%
Totals	22	100%	17	100%

For both the CONE pre-questionnaire “I am interested in the progress and welfare of learners” and the CONE post-questionnaire “I am interested in the progress and welfare of learners,” the respondents reported *often* or *very*. The CONE pre-questionnaire “I am interested in the progress and welfare of learners” respondents reported *often* (*n*=8, 40%) and *very* (*n*=12, 60%). The CONE post-questionnaire “I am interested in the progress and welfare of learners” respondents reported *often* (*n*=5, 29%) and *very* (*n*=12, 71%).

The majority of respondents from the CONE pre-questionnaire "I motivate peers to achieve excellence" reported *often* (*n*=11, 50%). The majority of respondents from the CONE post-questionnaire "I motivate peers to achieve excellence" reported *very* (*n*=10, 59%) There was an increase from the CONE pre-questionnaire "I motivate peers to achieve excellence" (*n*=10, 45%) to the CONE post-questionnaire "I motivate peers to achieve excellence" (*n*=10, 59%) report of *very*.

For question 39, "I actively participate in strategies which facilitate positive change in nursing," respondents from the CONE pre-questionnaire reported 41% (*n*=9) *often* and 41% (*n*=9) *very*. The respondents from the CONE post-questionnaire "I actively participate in strategies which facilitate positive change in nursing" reported 29% (*n*=5) *often* and 65% (*n*=11) *very*. Respondents from both the CONE pre-questionnaire (*n*=4, 18%) and the CONE post-questionnaire (*n*=1, 6%) reported *sometimes* in response to "I actively participate in strategies which facilitate positive change in nursing."

Table 18. CONE Questionnaire Items 40-42.

40. I nurture the capacity for leadership in others.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	4%	0	0%
Sometimes	2	9%	1	6%
Often	12	55%	5	29%
Very	7	32%	11	65%
Totals	22	100%	17	100%
41. I engage regularly in self-reflection to facilitate scholarly practice.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	4%	0	0%
Sometimes	5	23%	0	0%
Often	9	41%	9	53%
Very	7	32%	8	47%
Totals	22	100%	17	100%
42. I frequently provide support and encouragement to students.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	1	4%	0	0%
Often	12	55%	5	31%
Very	9	41%	11	69%
Totals	22	100%	17	100%

For question 40, “I nurture the capacity for leadership in others,” respondents from the CONE pre-questionnaire reported *rarely* 4% (*n*=1), *sometimes* 9% (*n*=2), *often* 55% (*n*=12), and *very* 32% (*n*=7). Respondents from the CONE post-questionnaire reported *sometimes* 6% (*n*=1), *often* 29% (*n*=5), and *very* 65% (*n*=11) for “I nurture the capacity for leadership in others.” There was an increase noted from the CONE pre-questionnaire “I nurture the capacity for leadership in others” (*n*=7, 32%) report of *very*

to the CONE post-questionnaire “I nurture the capacity for leadership in others” (*n*=11, 65%) report of *very*.

Both the majorities of respondents from the CONE pre-questionnaire “I engage regularly in self-reflection to facilitate scholarly practice” and the CONE post-questionnaire “I engage regularly in self-reflection to facilitate scholarly practice” reported *often*. The CONE pre-questionnaire “I engage regularly in self-reflection to facilitate scholarly practice” respondents reported *rarely* 4% (*n*=1), *sometimes* 23% (*n*=5), *often* 41% (*n*=9), and *very* 32% (*n*=7). While the CONE post-questionnaire “I engage regularly in self-reflection to facilitate scholarly practice” respondents reported *often* 53% (*n*=9) and *very* 47% (*n*=8).

For question 42, “I frequently provide support and encouragement to students,” the majority of respondents from the CONE pre-questionnaire reported *often* in response to “I frequently provide support and encouragement to students” (*n*=12, 55%). The majority of respondents from the CONE post-questionnaire “I frequently provide support and encouragement to students” reported *very* (*n*=11, 69%). There was an increase noted from the CONE pre-questionnaire “I frequently provide support and encouragement to students” (*n*=9, 41%) report of *very* to the CONE post-questionnaire “I frequently provide support and encouragement to students” (*n*=11, 69%) report of *very*.

Table 19. CONE Questionnaire Items 43-45.

43. I create and maintain networks and collaborations.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	1	4%	1	6%
Sometimes	3	14%	1	6%
Often	14	64%	6	35%
Very	4	18%	9	53%
Totals	22	100%	17	100%
44. I actively cultivate effective inter-professional networks.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	1	6%
Sometimes	2	9%	1	6%
Often	15	68%	6	35%
Very	5	23%	9	53%
Totals	22	100%	17	100%
45. I advocate for and promote mutual respect between teachers and learners.				
	CONE Pre-Questionnaire		CONE Post-Questionnaire	
	Responses	%	Responses	%
Not at All	0	0%	0	0%
Rarely	0	0%	0	0%
Sometimes	2	9%	0	0%
Often	9	41%	6	35%
Very	11	50%	11	65%
Totals	22	100%	17	100%

For question 43, “I create and maintain networks and collaborations,” the CONE pre-questionnaire respondents reported *rarely* 4% (*n*=1), *sometimes* 14% (*n*=3), *often* 64% (*n*=14), and *very* 18% (*n*=4). While the CONE post-questionnaire “I create and maintain networks and collaborations” respondents reported *rarely* 6% (*n*=1), *sometimes* 6% (*n*=1), *often* 35% (*n*=6) and *very* 53% (*n*=9). There was an increase noted from the CONE pre-questionnaire “I create and maintain networks and collaborations” (*n*=4, 18%)

report of *very* to the CONE post-questionnaire "I create and maintain networks and collaborations" report of *very* (*n*=9, 53%).

The majority of respondents from the CONE pre-questionnaire "I actively cultivate effective inter-professional networks" reported other to I actively cultivate effective inter-professional networks (*n*=15, 68%). While the majority of respondents from the CONE post-questionnaire "I actively cultivate effective inter-professional networks" reported *very* (*n*=9, 53%). The CONE pre-questionnaire "I actively cultivate effective inter-professional networks" respondents reported *sometimes* 9% (*n*=2), and *very* 23% (*n*=5). The CONE post questionnaire "I actively cultivate effective inter-professional networks" respondents reported *rarely* 6% (*n*=1), *sometimes* 6% (*n*=1), and *often* 35% (*n*=6). There was an increase noted from the CONE pre-questionnaire "I actively cultivate effective inter-professional networks" (*n*=0, 0%) report of *rarely* to the CONE post-questionnaire "I actively cultivate effective inter-professional networks" (*n*=6, 1%) report of *rarely*.

For question 45, "I advocate for and promote mutual respect between teachers" and learners, the CONE pre-questionnaire majority reported *often* (*n*=9, 41%). While the CONE post-questionnaire "I advocate for and promote mutual respect between teachers and learners," the majority reported *very* (*n*=11, 65%). There was an increase noted from the CONE pre-questionnaire report "I advocate for and promote mutual respect between teachers and learners" of *very* (*n*=11, 50%) to the CONE post-questionnaire "I advocate for and promote mutual respect between teachers and learners" (*n*=11, 65%) report of *very*.

Summary

This study proved a null hypothesis for all questions concluding there were no significant differences between the median of the CONE pre-questionnaire and the CONE post-questionnaire for each related question. The original intention was to compare each participant's CONE pre-questionnaire and CONE post-questionnaire results; however, data did not record in QuestionPro. Therefore, the researcher resorted to using median differences for the CONE pre-questionnaire and the CONE post-questionnaire. A Wilcoxon Sign Test with a p value set at a significance level of $p = 0.05$ was used to assess the change in participants' ratings to each question.

There were 47 nurse preceptors invited to participate in the voluntary study. Twenty-two nurse preceptors participated in the CONE pre-questionnaire resulting in a 47% response rate for study participation. The response rate was below the desired goal of 24 participants. Seventeen, of the 22 nurse preceptors who participated in the CONE pre-questionnaire, participated in the CONE post-questionnaire after completing a formal nurse preceptor education module. The results of the demographic questions, from the CONE questionnaires, are presented in tables and the findings discussed. The results of the additional 45 items, which make up the CONE questionnaires, are presented in tables and discussed. The individual results for each of the 45 questions were combined to show the frequency of responses according to the Likert response scale ranking of *not at all descriptive* (1), *rarely* (2), *sometimes* (3), *often* (4), and *very descriptive* (5). The results presented in the tables are divided into two categories representative of the CONE pre-questionnaire results and CONE post-questionnaire results.

Chapter V: Summary

Introduction

Formal preceptor training is an essential component of developing competent nurse preceptors. However, limited studies examine the effectiveness of formal preceptor training for medical-surgical nurses in the acute care setting. This quantitative research study was conducted to determine the effectiveness of a formal preceptor training program for medical-surgical nurse preceptors. Data collection consisted of completing a CONE pre-questionnaire and a CONE post-questionnaire to determine the perception of the nurse preceptor's capabilities before and after participating in formal preceptor training. Data were analyzed via QuestionPro website with results presented in Tables 1-19. The study results will be discussed, along with the conclusion, implications, and recommendations for further research.

Discussion

This quantitative research study evaluated the effects of formal preceptor training for medical-surgical nurses in the acute care setting. Demographic data collection included age of participants, years of nursing experience, years working as a preceptor, and highest level of education. Forty-seven nurse preceptors were invited to voluntarily participate in the research study. Twenty-two (*N*=22*)* nurse preceptors completed the CONE pre-questionnaire. While seventeen (*N*=17) nurse preceptors completed the CONE post-questionnaire after participating in a formal preceptor training education module. The response rate was below the desired goal of 24 participants. The CONE post-questionnaire age of participants majority split between the 18-24 age group (*n*=5,

29%) and the 35-44 age group (*n*=5, 29%). The majority of the nurse preceptors from the CONE post-questionnaire years of nursing experience reported 5-7 years of experience (*n*=5, 29%). The majority of the nurse preceptors from the CONE post-questionnaire years working as a preceptor reported less than 2 years working as a preceptor (*n*=6, 35%).

The conceptual framework utilized for this research was Patricia Benner's Skill Acquisition theory. Benner's theoretical model outlines five stages of skill acquisition: novice, advanced beginner, competent, proficient, and expert (Benner, 1984; McEwen & Willis, 2014). The central concepts of Benner's model are those of competence, skill acquisition, experience, clinical knowledge, and practical knowledge. Benner's model supports the necessary level of competence and expertise for a nurse to serve as a successful preceptor (McEwen & Willis, 2014). In this research study, the majority of respondents reported 5-7 years of nursing experience (*n*=5, 29%). The majority of respondents reported less than 2 years working as a preceptor (*n*=6, 35%).

In the competent stage, Benner's third stage, the nurse has been on the job for a few years. The competent nurse's characteristics are deliberate planning and critical thinking which allow the nurse to achieve efficiency and organization (Kelly & Tazbir, 2014). The competent nurse's capabilities include advanced clinical skills and judgement. In this research study, the majority of respondents to the CONE pre-questionnaire I can demonstrate advanced clinical skills and judgement reported 32% (*n*=7) very descriptive while the majority of respondents to the CONE post-questionnaire I can demonstrate advanced clinical skills and judgement reported 53% (*n*=9) very descriptive.

In the proficient stage, Benner's fourth stage, the nurse possesses a deeper understanding of situations and understands how to modify their plans (Kelly & Tazbir, 2014). The proficient nurse's capabilities include in depth understanding of the field of nursing. In this research study, the majority of respondents to the CONE pre-questionnaire "I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field" section reported 18% (*n*=4) very descriptive while the majority of respondents to the CONE post-questionnaire "I am able to answer questions from learners knowledgeably, reflecting in depth understanding of the field" section reported 53% (*n*=9) very descriptive.

In the expert stage, Benner's final stage, the nurse's performance is flexible and highly proficient (Kelly & Tazbir, 2014). The expert nurse's capabilities include flexibility and adapting to change. In this research study, the majority of respondents to the CONE pre-questionnaire I am able to model strategies to adapt to change/setbacks reported 23% (*n*=5) very descriptive while the majority of respondents to the CONE post-questionnaire I am able to model strategies to adapt to change/setbacks reported 53% (*n*=9) very descriptive.

This research study's findings revealed that the perception of the nurse preceptor's capabilities improved after participating in formal preceptor training. The findings support developing and implementing formal nurse preceptor training for medical-surgical nurses in the acute care setting. The use of a preceptor development program, including time for preceptor training and ongoing preceptor competency development, is a vital tool for organizations pursuing an improved transition to practice and first-year retention of new graduate registered nurses (Clipper et al, 2015). This study found nurse

preceptors who have participated in formal nurse preceptor training support the belief that learning is promoted when a productive relationship is developed between teacher, learner, and peers. The trained nurse preceptor respects learners. They also respect and value learner's different learning styles. These results are based on the group ranking of CONE post-questionnaire items.

The CONE post-questionnaire results indicated that 82% of the respondents believe that learning promotes a productive relationship between teacher, learner, and peers. Compared to the CONE pre-questionnaire, with a response of 67%, this is found to be an improvement. In the CONE post-questionnaire, greater than 76% of the acute care nurse preceptors reported respecting and valuing learners' different learning styles. Compared to the CONE pre-questionnaire, with a response of 52%, this is found to be an improvement. After participating in formal preceptor training, the greatest improvement in the nurse preceptor's perceptions of the nurse preceptor's capabilities was their ability to inspire excellence by articulating vision, integrity, and courage. This particular item had a 44% increase from the CONE pre-questionnaire to the CONE post-questionnaire. With a 38% increase, the respondents report an improvement in their ability to cultivate a learning environment that supports the creative expression of ideas.

Several items in the CONE post-questionnaire have a 35% or more remarkable improvement: ability to implement counseling strategies to support learners, answer questions from learners knowledgeably, and create and maintain networks and collaborations. The respondents also reported an improvement in their ability to nurture leadership capacity in others, use a range of communication strategies to facilitate an exchange of ideas, and model strategies to adapt to change or setbacks. Other abilities

found to have improved after formal preceptor training include providing encouragement and actively listening. The literature has shown that preceptor development programs help the preceptors improve their effectiveness in facilitating the transition and orientation process (Clipper et al., 2015). The literature also shows that the development and implementation of a preceptor program are vital for nurse training and retention to provide quality care at any healthcare institution (Nash & Flowers, 2017).

Conclusions

Nash and Flowers (2017) found that implementating an evidence-based preceptor program creates a workplace environment conducive to learning and success. Kennedy (2019) posit preceptor programs positively impact nurse preceptors, making them feel knowledgeable about their role, providing educational support and strategies to educate newly hired nurses effectively. Like recent studies, this study found the perception of the nurse preceptor's capabilities improved after participating in formal preceptor training. The conclusion, based on the findings of this study, is that medical-surgical nurse preceptors working in the acute care setting perceive their capabilities to be higher after participating in formal preceptor training.

The research into the effectiveness of formal preceptor training is not without limitations. The CONE pre-questionnaire (N=22) and the CONE post-questionnaire (N=17) relatively small sample size, in addition to the limited timeframe for this research study, are considered limitations of this study. The small sample size from one organization may limit the generalizability of the entire sample population. The nurses had limited time, four weeks, to utilize their formal preceptor training, which may have impacted the perceived level of change with their capabilities. This study took place

during the Coronavirus pandemic preventing hosting the formal preceptor training in an in-person, interactive, classroom setting due to social distancing restrictions and safety of the nurses participating. The formal preceptor training was converted to an all online education module that nurses viewed on their own time. The sample was limited according to gender involvement with only one male nurse respondent. Additionally, information regarding previous preceptor training could have provided additional meaning to the results of the study.

Implications

Research to support the effectiveness of formal preceptor training programs is vital. Organizations need to support the development and implementation of formal preceptor training programs. A practical, structured preceptor training program is a valuable resource to improve the transition to practice of new graduate registered nurses, likely resulting in a safe and more effective patient care environment (Clipper & Cherry, 2015). Kennedy (2019) found that preceptor training programs increase preceptors' confidence with the needed skills to educate the workforce's future. Kennedy (2019) also found that more attention is required to develop such programs and have healthcare organizations support and fund formal preceptor training.

The study findings indicate that formal preceptor training improved the medical-surgical nurse preceptor's perception of their capabilities. After participating in an evidence-based, structured preceptor training program, the nurse preceptors reported improvement in their capabilities. The respondents reported improvement to items such as their ability to guide learners to develop self-reflective practice, plan assessment activities that accurately deepen the learning level and demonstrate strategies for

managing uncertainty and risk in practice. The study findings suggest that the nurse preceptor's confidence in their abilities and skills also improved after participating in formal preceptor training.

Recommendations

Formal preceptor training needs to become standard practice for all nurse preceptors. Trained nurse preceptors are essential to transition to practice period for new graduate registered nurses. Nurse retention and patient safety are critical elements that may be impacted by a significant transition to practice for the new graduate registered nurse (Clipper & Cherry, 2015).

Apart from professional development's inherent benefits, the nurse preceptors do not receive any recognition or monetary incentives for serving as a preceptor. Organizations need to support and encourage nurses to serve as nurse preceptors by a system of rewards and recognitions.

Though there were notable improvements in the study of nurses benefitting from formal preceptor training before precepting, future research conducted over a more extended period might be beneficial. Thus, allowing the nurse preceptor a more extended period to utilize the information and skills gained during the preceptor training. A more extensive multi-site study on the target population of medical surgical nurses would be beneficial for generalizability. After the social distancing restrictions related to Coronavirus cease, pivoting the preceptor training material to an on-site, interactive class versus online modules is recommended. This may also improve the response and completion rates to the CONE pre-questionnaire and CONE post-questionnaire. Additional research on the benefits of requiring a formal preceptor training program for

nurses will only shed light on the value of trained nurse preceptors for the successful transition to practice of new graduate registered nurses, impact on nurse retention rates, and quality of patient care.

References

Africa, L. M. (2017). Transition to practice programs: Effective solutions to achieving strategic staffing in today's healthcare systems. *Nursing Economic, 35*(4), 178.American Nurses Association. (2013). *Competency model*. Retrieved from https://www.nursingworld.org/globalassets/docs/ce/leadershipinstitute_competency_model_brochure.pdf

American Organization of Nurse Executives. (2010). *Guiding principles for the newly licensed nurse's transition into practice*. Retrieved from http://www.aone.org/resources/newly-licensed-nurses-transition-practice.pdf

Benner, P. (1984). From novice to expert excellence and power in clinical nursing practice. *AJN, American Journal of Nursing, 84*(12), 1479. doi:10.1097/00000446-198412000-00025

Blegen, M., Spector, N., Ulrich, B., Lynn, M., Barnsteiner, J., & Silvestre, J. (2015). Preceptor support in hospital transition to practice programs. *The Journal of Nursing Administration, 45*(12), 642-649.

Cain, L., Cronin, S., Nelson, D., Meredith, D., Newman, K., & Rudolf, S. (2018). A tool to identify key behaviors and attributes of high-performing nurses. *The Journal of Nursing Administration, 48*(4), 197-202.

Ciocco, M. (2014). *Fast facts for the medical–surgical nurse* (Fast facts). New York: Springer Publishing company.

Clipper, B., & Cherry, B. (2015). From transition shock to competent practice: Developing preceptors to support new nurse transition. *The Journal of Continuing Education in Nursing*, *46*(10), 448-454. doi:10.3928/00220124-20150918-02

Darcy, A. M. (2020). Allowing education to be learner-driven. *Journal for Nurses in Professional Development*, *36*(1), 46-49. doi:10.1097/nnd.0000000000000598

Institute of Medicine. (2010). *The future of nursing: Leading change, advancing health.* Washington, DC: National Academies Press.

Kelly, P., & Tazbir, J. (2014). *Essentials of nursing leadership & management* (3rd ed.). Clifton Park, NY: Cengage Learning.

Kennedy, A. (2019). Nurse preceptors and preceptor education: Implications for preceptor programs, retention strategies, and managerial support. *Medsurg Nursing*, *28*(2), 107-113.

L'Ecuyer, K. M., Hyde, M. J., & Shatto, B. J. (2018). Preceptors' perception of role competency. *The Journal of Continuing Education in Nursing*, *49*(5), 233-240. doi:10.3928/00220124-20180417-09

Lee, T., Tzeng, W., Lin, C., & Yeh, M. (2009). Effects of a preceptorship programme on turnover rate, cost, quality and professional development. *Journal of Clinical Nursing*, *18*(8), 1217-1225. doi:10.1111/j.1365-2702.2008.02662.x

Martensson, G., Löfmark, A., Mamhidir, A., & Skytt, B. (2016). Preceptors' reflections on their educational role before and after a preceptor preparation course: A prospective qualitative study. *Nurse Education in Practice, 19*, 1-6.

McAllister, M., & Flynn, T. (2016). The capabilities of nurse educators (CONE) questionnaire: Development and evaluation. *Nurse Education Today, 39*, 122-127. doi:10.1016/j.nedt.2016.01.022

McEwen, M., & Wills, E. M. (2014). *Theoretical basis for nursing* (4th ed.). Lippincott Williams & Wilkins.

Nash, D., & Flowers, M. (2017). Key elements to developing a preceptor program. *The Journal of Continuing Education in Nursing, 48*(11), 508-511.

Nelson, D. M., Joswiak, M. E., & Brake, K. A. (2019). “Just in time” training for novice preceptors. *Journal for Nurses in Professional Development, 35*(4), 228-231. doi:10.1097/nnd.0000000000000562

Nursing Solutions, Inc. (2018). *2018 national health care retention & RN staffing report*. Retrieved from http://www.nsinursingsolutions.com/files/assets/library/retention-institute/nationalhealthcarernretentionreport2018.pdf

Omer, T., Suliman, W., & Moola, S. (2016). Roles and responsibilities of nurse preceptors: Perception of preceptors and preceptees. *Nurse Education in Practice, 16*(1), 54-59.

Piccinini, C., Hudlun, N., Branam, K., & Moore, J. (2018). The effects of preceptor training on new graduate registered nurse transition experiences and organizational outcomes. *The Journal of Continuing Education in Nursing*, *49*(5), 216-220.

Polit, D. F., & Beck, C. T. (2017). *Nursing research: Generating and assessing evidence for nursing practice* (10th ed.). Lippincott Williams & Wilkins.

Rebholz, M., & Baumgartner, L. (2015). Attributes and qualifications of successful rural nurse preceptors: Preceptors' perspectives. *Qualitative Report*, *20*(2), 93.

Ryan, C., Young, L., & McAllister, M. (2017). The impact of an online learning platform about nursing education on enrolled nurse preceptor teaching capabilities: A pre–post-test evaluation. *Contemporary Nurse*, *53*(3), 335-347. doi:10.1080/10376178.2017.1347512

Sanford, P. G., & Tipton, P. H. (2016). Is nursing preceptor behavior changed by attending a preceptor class? *Baylor University Medical Center Proceedings*, *29*(3), 277-279. doi:10.1080/08998280.2016.11929434

Shinners, J. S., & Franqueiro, T. (2015). Preceptor skills and characteristics: Considerations for preceptor education. *The Journal of Continuing Education in Nursing*, *46*(5), 233-236. doi:10.3928/00220124-20150420-04

Watkins, C., Hart, P., & Mareno, N. (2016). The effect of preceptor role effectiveness on newly licensed registered nurses' perceived psychological empowerment and professional autonomy. *Nurse Education in Practice, 17*, 36-42.

APPENDIX A

Email Recruitment Script

Hi. My name is Jessica Strickland and I am a graduate student at Arkansas Tech University. I would like to invite you to be a part of my research study. The purpose of this study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care hospital. You have served as a preceptor in the past or you have been selected by your Clinical Director. If you choose to take part in the research study, you will be asked to complete a questionnaire prior to participating in a formal preceptor training module on CareLearning, and then again in 4 weeks after the formal preceptor training. Reviewing the informed consent will take approximately 5 minutes. The questionnaires will take approximately 10 minutes to complete. Completing the formal preceptor training module on CareLearning should take approximately 2 hours. Participating in the research study is strictly voluntary. Please be aware that you may choose to withdraw your participation at any time. If you would like to participate in this study, please click the link below.

https://www.questionpro.com/t/AQScGZg6i1

APPENDIX B

Informed Consent Statement

Informed Consent Form

Arkansas Tech University

Title of Project: A Quantitative Study to Determine the Effectiveness of a Formal Preceptor Training Program for Medical-Surgical Nurse Preceptors

Principal Investigator: Jessica Strickland

The Introductory Paragraph

You are invited to participate in a research study A Quantitative Study to Determine the Effectiveness of a Formal Preceptor Training Program for Medical-Surgical Nurse Preceptors at Unity Health – White County Medical Center. The study seeks to determine the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care hospital. Your participation is strictly voluntary. Feel free to discuss any questions you have about this study with the researcher. If you decide to participate, please sign this form. You may withdraw your participation at any time during the study.

Section 1. Purpose of the Research

The purpose of this research study is to determine the effectiveness of a formal preceptor training program for medical-surgical nurses in an acute care hospital. You have been asked to take part in this research study because you have served as a preceptor in the past or have been selected as a nurse preceptor by your Clinical Director.

Section 2. Procedures

If you choose to participate, you will receive an email with a link to the informed consent. The email will also have a link to the pre-questionnaire. After completing the informed consent, you will fill out the pre-questionnaire. You will then complete the CareLearning Formal Preceptor Training module. You will work in your normal assigned duties as a RN preceptor for four weeks. You will receive a second email with a post-questionnaire. You will fill out the post-questionnaire.

Section 3. Time Duration of the Procedures and Study

If you choose to participate in this research study, your involvement will last a total of four weeks. You will be involved for 5 minutes to read and sign the consent form; 10 minutes to complete the pre-questionnaire and 2 hours for the CareLearning Formal Preceptor Training module. After four weeks of working in your normal assigned duties as a RN preceptor, you will be involved for 10 minutes to complete the post questionnaire. All research study involvement is concluded after completing the post questionnaire. You may withdraw from the study at any time.

Section 4. Discomforts and Risks

The risks for participating in this study are minimal. Since the questionnaire pertains to your preceptor teaching capabilities, you may encounter questions which you feel are personal or sensitive.

Section 5. Potential Benefits

The participants have been selected by their Clinical Directors to serve as a preceptor on their unit. The CareLearning Formal Preceptor Training module allows them the opportunity to receive formal training on the roles and responsibilities of a nurse preceptor. The participants will assess their capabilities as a preceptor using the CONE questionnaire. They will gain understanding of their capabilities and evaluate areas of professional development. It is important for the participants to gain understanding of their capabilities as a preceptor. As they broaden their knowledge base, they will directly impact nurse attrition, satisfaction, and performance. The participants will gain understanding of how to effectively communicate and provide constructive feedback. They will gain self-confidence and learn the value of their role as a preceptor. The participants will be able to facilitate productive conversations and build relationships based on mutual respect. As their capabilities improve, the experience for the preceptee will improve. Therefore, participating in formal preceptor training may impact the future recruitment and retention of new nurses in the organization.

Possible benefits to others:

The benefits of the CareLearning Formal Preceptor Training module may directly impact the future recruitment and retention of new nurses in the organization. If there is an impact on turnover in the organization, it may directly impact the cost associated with high turnover rates. As the organization gains experienced nurses, there may be a positive impact on quality of care and patient outcomes. Improvement of quality metrics and patient experience scores can directly impact the reimbursement for the organization. As the preceptors learn the significance of their role as a preceptor and gain self-confidence, the participant will learn to appreciate and seek out opportunities for professional development. Professional development of nurses is a benefit to society as nurses seek to practice at the top of their licensure. These nurses are capable of identifying opportunities for improvement and offering solutions to process issues. They also value suggestions from frontline staff and serve to empower others to improve patient care. Engaging the participants in formal preceptor training allows them to serve

as role models to new nurses in the workforce.

Section 6. Statement of Confidentiality

Privacy and confidentiality measures

Research records that are reviewed, stored, and analyzed at Unity Health – White County Medical Center will be kept in Jessica Strickland's office. Hard copy data of the research will be kept in locked filing cabinet while at Unity Health – White County Medical Center. The raw data file on the computer will be protected on the researcher's personal computer that is also protected. The data will be kept for five years. After five years, data will be shredded and erased.
In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

Your participation in this research study is confidential to the extent permitted by law. However, it is possible that other people may become aware of your participation in this study. For example, the following people/groups may inspect and copy records pertaining to this research.

- The Arkansas Tech University Institutional Review Board (a committee that reviews and approves research studies) and
- The Arkansas Tech University IRB Office

Section 7. Costs for Participation
There are no costs to the participant.

Section 8. Compensation for Participation

Each participant will receive normal compensation and release time during work hours by the hospital for time spent completing the questionnaires and completing the CareLearning Formal Preceptor Training module. The participants will be scheduled time to complete the questionnaires and the CareLearning Formal Preceptor Training module by their Clinical Director.

Section 9. Research Funding

No grantors, institutions, or companies are involved in the research through funding or grants.

Section 10. Voluntary Participation

Participating in this research study is strictly voluntary. If you choose to participate, your major responsibilities will be to fill out the questionnaire, complete the CareLearning Formal Preceptor Training, and then four weeks later fill out the questionnaire again. You may withdraw your participation anytime during the study.

Section 11. Contact Information for Questions or Concerns

You have the right to ask any questions you may have about this research. If you have any questions, you may contact Jessica Strickland at 501-724-4482 or email at Jessica.strickland@unity-health.org. You also have the right to express any concerns or complaints and can contact Jessica Strickland or Dr. Shelly Randall, Research Advisor, Department of Nursing, Arkansas Tech University at srandall@atu.edu.

If you have questions regarding your rights as a research participant or you have concerns or general questions about the research contact the research participants protection advocate in the Arkansas Tech University's IRB website at https://www.atu.edu/standingcommittees/irb.php.

For more information about participation in a research study and about the Institutional Review Board (IRB), a group of people who review the research to protect your rights, please visit Arkansas Tech University's IRB web site at https://www.atu.edu/standingcommittees/irb.php. Included on this website you can access federal regulations and information about the protection of human research participants.

Before making the decision regarding enrollment in this research you should have:
- Discussed this study with an investigator,
- Reviewed the information in this form, and
- Had the opportunity to ask any questions you may have.

Participant: After reading the informed consent form, you will select either "I consent" which will direct you to the questionnaire or "I do not consent," which will end your session on the QuestionPro website. At any time, you may withdraw your participation. By clicking the "I consent" check box, you are indicating that the primary investigator has explained the research study and answered any questions you may have. You are also indicating that you are voluntarily choosing to participate in the research study.

APPENDIX C

Capabilities of the Nurse Educator (CONE) Questionnaire

https://www.atu.edu/_resources/images/logo.png

Identifying the Capabilities of Nurse Educators

Thank you for volunteering to participate in this project.
Before we get started you will need to create a code that is unique to you. This code will be used so that we do not know who you are when we analyze the data, and so that when we ask you similar questions in four weeks' time we will know we are talking to the right person. To create your code answer the following questions and place your answers in the space provided.

Example Code: My mother's name is Connie = C. My birthday is in August = 08. My favorite color is blue = B.
So my code would be C08B

	Answers
What is the first letter of your mother's name?	
What month is your birthday in numbers?	
What is the first letter of your favorite color?	
Your code would be:	

Demographic and Professional Information

Gender

- ◯ Male
- ◯ Female

Age

- ◯ Under 18
- ◯ 18-24
- ◯ 25-34
- ◯ 35-44
- ◯ 45-54
- ◯ 55-64
- ◯ Above 64

Years of nursing experience

- ◯ <1 year
- ◯ 2-4 years
- ◯ 5-7 years
- ◯ 8-10 years
- ◯ 11-13 years
- ◯ 14-16 years
- ◯ 17-19 years
- ◯ 20+ years

Years working as a preceptor

- ◯ <1 year
- ◯ 2-3 years
- ◯ 4-6 years
- ◯ 7-9 years
- ◯ 10+years

Highest level of education

- ◯ Diploma in Nursing
- ◯ Associate Degree
- ◯ Bachelor's Degree
- ◯ Master's Degree

I can demonstrate:

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Advanced clinical skills and judgement	◯	◯	◯	◯	◯
Active, emphathic listening skills	◯	◯	◯	◯	◯

I am able to:

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Use a range of communication strategies to facilitate an exchange of ideas	○	○	○	○	○
Plan engaging learning experiences	○	○	○	○	○
Manage uncertainty and risk in complex situations	○	○	○	○	○
Stimulate student interest	○	○	○	○	○
Engage in the process of critical inquiry	○	○	○	○	○
Use a variety of tools to enliven learning (e.g. simulation, case studies , discussing triggers; e-learning)	○	○	○	○	○
Manage projects effectively	○	○	○	○	○
Guide learners to develop self-reflective practice	○	○	○	○	○
Plan assessment activities that guide learning	○	○	○	○	○
Demonstrate strategies for the management of uncertainty and risk in practice	○	○	○	○	○

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Provide timely and constructive feedback to learners	○	○	○	○	○
Plan assessment activities that deepen the level of learning accurately	○	○	○	○	○
Present complex information in a way that can be easily understood by learners	○	○	○	○	○
Model strategies to adapt to change/setbacks	○	○	○	○	○
Cultivate a learning environment that supports creative expression of ideas	○	○	○	○	○
Implement counseling strategies to support learners	○	○	○	○	○
Answer questions from learners knowledgeably, reflecting in depth understanding of the field	○	○	○	○	○
Prepare learners for practice in the contemporary healthcare environment	○	○	○	○	○
Inspire excellence by articulating vision, integrity, and courage	○	○	○	○	○

I am:

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Confident in my ability to teach effectively	○	○	○	○	○
A positive role model	○	○	○	○	○
A mentor and coach who supports and guides colleagues	○	○	○	○	○
An advocate for nursing education in the political arena	○	○	○	○	○
Viewed as approachable	○	○	○	○	○
An attentive listener	○	○	○	○	○

I:

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Believe that learning is promoted when a productive relationship is developed between teacher, learner, and peers	○	○	○	○	○
Respect and value learner's different learning styles	○	○	○	○	○
Support evidence-based best practice	○	○	○	○	○
Seek opportunities to stay current in nursing knowledge	○	○	○	○	○
Respect learners	○	○	○	○	○
Am self-confident	○	○	○	○	○
Facilitate best practice that is person-family-and community-centered	○	○	○	○	○
Enjoy teaching	○	○	○	○	○
Actively seek opportunities to improve my educational practice	○	○	○	○	○
Am interested in the progress and welfare of learners	○	○	○	○	○

	Not at All Descriptive				Very Descriptive
	1	2	3	4	5
Motivate peers to achieve excellence	○	○	○	○	○
Actively participate in strategies facilitate positive change in nursing	○	○	○	○	○
Nurture the capacity for leadership in others	○	○	○	○	○
Engage regularly in self-reflection to facilitate scholarly practice	○	○	○	○	○
Frequently provide support and encouragement to students	○	○	○	○	○
Create and maintain networks and collaborations	○	○	○	○	○
Actively cultivate effective inter-professional networks	○	○	○	○	○
Advocate for, and promote mutual respect between teachers and learners	○	○	○	○	○