5-2018

Stress Management and the Novice Nurse

Patrice Lawrency

Stress Management and the Novice Nurse

by

Lawrency P. Jones

A thesis submitted to the faculty of
Gardner-Webb University Hunt School of Nursing
in partial fulfillment of the requirements for the
Master of Science in Nursing Degree

Boiling Springs, North Carolina

2018

Submitted by:	Approved by:
_____	_____
Lawrency P. Jones	Cindy Miller, PhD, RN
_____	_____
Date	Date

Abstract

The stress of the novice nurse impacts the quality of patient care, emotional, and physical wellbeing of the novice nurse and hospital costs. The aging of the Baby Boomer generation is impacting the nursing profession. These factors should be addressed to promote the retention of novice nurses in the profession. Research has shown that the mitigation of stress in the novice nurse can have a positive impact on the nursing shortage. An inundation of literature exists on the evolution process from the academic to the clinical setting, but few studies identified resources to provide support to the novice nurse. Strategies are necessary to aid new graduate nurses in the management and inhibition of emotions of stress due to transitioning into working in the complex healthcare environment. The purpose of this research was to assess if use of the Deep Breathing Relaxation Technique (DBRT) has an impact on the novice nurse's stress level. The Nursing Stress Scale (NSS) was administered to novice nurses in a Nurse Residency Program. These nurses were then educated on use of the Deep Breathing and Relaxation Technique and were encouraged to practice it daily and during times of stress. Approximately four weeks later, the NSS was administered to the same novice nurses. The results showed that the DBRT does impact stress, but the findings were not statistically significant.

Keywords: Stress, novice nurse, new graduate nurse, management strategies, Deep Breathing Relaxation Technique, and Compassion Fatigue

Acknowledgments

I would like to thank each instructor at Gardner-Webb University who provided encouragement, support, and guidance, daily devotionals on Blackboard, prayers, and empathy. I would like to extend my gratitude to Dr. Cindy Miller for her unparalleled dedication to assist me in delivering a meaningful thesis. I want to express my thanks to my loving family and friends. I would like to thank my academic mentors for assisting me on this journey. I am grateful to my former and present employers who embrace and support me continuously. Each of you has contributed to my professional development.

Table of Contents

CHAPTER V: DISCUSSION

List of Figures

List of Tables

CHAPTER I

Introduction

The American Nurses Association (2017) notes that stress among nurses is one of the most unrecognized problems that largely affects the nursing profession. Nursing is a stressful occupation, especially for the new graduate nurses who are in transition from the academic setting (Richez, 2014). Nurses experience emotional fatigue leading to diminished quality of care, patient outcomes, and job satisfaction that is strongly related to burnout (Meyer, Li, Klaristenfeld, & Gold, 2015). The needs of the patient are increasing and a global deficiency of nurses exists, which impact the sustaining foundation of healthcare systems, the wellbeing of workers, and in due course compromises the quality and safety of patient care (Scammell, 2016). Meyer et al., (2015) found that 89.2% of novice nurses were exposed to a stressful event during the first three months at the bedside. Employment and retention of new graduate nurses are strategies that will ensure that health care has the necessary staff to provide quality care (Scott, Engelke, & Swanson, 2008). Nurses should feel allowed to openly discuss stresses and to move forward to address them (Richez, 2014).

In a review of literature, Delaney (2003) found that the first three months of being a new graduate nurse will be the most stressful of their lifespan in the nursing profession, and in North America, 35%-65% of the novice nurses will change jobs within their first year. Chang and Hancock (2003) stated that role ambiguity, lack of confidence, expectations of self and peers, lack of support, acclimation to shift work, heightened responsibility, acknowledgement of personal responsibility, and modifications such as coping with their current skill level are all reasons for stress in the novice nurse.

Numerous factors come into play and influence the novice nurse's ability to manage stress. Prior experiences and ability to cope with stressors impact the perspective of stress and how nurses will address the issue. Employment stressors can lead to inappropriate behaviors that affect health negatively (Hu, Zhang, Shen, Wu, & Malmedal, 2016).

Significance

Stress is a leading catalyst to burnout, unsafe patient outcomes, medication administration errors, lack of job commitment, employment dissatisfaction, diminished patient safety, and poor health for the novice nurse. The Bureau of Labor Statistics (BLS) projects the need for 525,000 additional nurses in the workforce bringing the entire sum of job openings for nurses to 1.05 million by 2022, due to growth in the field and the addition of nurses (*Nursing Shortage Fact*, 2014). The nursing shortage, due to the Baby Boomers aging and retiring, facilitates a desperate need for novice nurses to stay in the profession. Stress management strategies are necessary to mitigate these variables and promote quality patient care, job satisfaction, and retention. Burnout is a form of stress syndrome that is categorized by "emotional exhaustion" (Erikson & Grove, 2008). The stress, peril, exhaustion, and frustration that have become building blocks in the regular routine of hospital nurses establish the single biggest aspect driving nurses out of the industry (Erikson & Grove, 2008). Ming-Chen and Yu (2009) found that new graduate nurses suffered somewhat stressful conditions 31.5% intended to quit. Eifering, Semmer, and Grebner (2007) found that over 14 days, 23 young nurses from a hospital in Switzerland documented 314 stressful events. The most common safety-related stressful events involved inadequate or incorrect

documentation (40.3%), medications (near misses 21%), postponements in delivery of patient care (9.7%), and violent patients (9.7%) (Eifering et al., 2007). Novice nurses make up for approximately 10% of the nursing labor force in acute care settings (Liu et al., 2016). The turnover frequency among novice nurses is 30% within the first year as a nurse, rising to 57% by the second year (Liu et al., 2016). Research reported that about 17.5% of novice nurses resigned within the first year of employment (Liu et al., 2016). The average turnover cost per nurse ranges from $20,561 to $48,790 across countries (Liu et al., 2016, p. 66). Cho, Spence-Laschinger, and Wong (2006) found that 66% of novice nurses reported suffering from severe burnout. The problem of stress impacts nurses on a global level. Nurses are experiencing many challenges simultaneously (e.g. stress, burnout, job dissatisfaction, turnover, and increasing costs) and it is paramount that nurses in the profession identify a resolution that can manage these issues to ensure safety and quality care, currently and in the future. Research on stress reduction is significant to the nursing profession because it can provide valuable information that may provide a practical, realistic stress management intervention that can assist new nurses in managing stress. This research can impact the nursing profession, enhance staff retention, quality of care, safety, job satisfaction, and decrease turnover, thus decrease costs.

Pioneering and inventive strategies are necessary to aid new graduate nurses in the management and inhibition of emotions of stress due to transitioning into working in a multifaceted and thought-provoking healthcare environment. The authors of the Institute of Medicine (IOM) report (2011) stated that the high turnover rate of new graduate nurses designates an essential element for programs that assist with the

transition from school to work. Jennings (2008) stated healthcare organizations can no longer ignore the omnipresence of stress in nursing and its damaging impact on nurses and patients. Rather, they must act to improve and change an unhealthy situation. Pipe et al. (2012) also pointed out that the solution to addressing stressors in the healthcare environment is not to continue to focus on the problem, but to shift efforts toward identifying positive ways of coping, which lead to the development of resiliency in providers of patient care.

Purpose

The purpose of this study was to explore the impact of use of the Deep Breathing and Relaxation Technique on stress levels of the new graduate nurse.

Theoretical Framework

Research on coping is suggestive of an increasing belief that coping is a major influence in the relation between stressful events and adaptational outcomes (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986) Lazarus and Folkman's Transactional Model of Stress and Coping was used to guide this study. Nurse burnout and job dissatisfaction decrease the commitment to employers and the profession; therefore, new nurses can benefit early in their career from use of coping strategies. The theory identifies two processes, cognitive appraisal and coping, as serious mediators of stressful person-environment relations and their direct and long-range outcomes (Folkman et al., 1986). Cognitive appraisal is a process through which the person assesses whether an encounter with the milieu is pertinent to an individual's welfare, and if so, in what ways (Folkman et al., 1986). In a primary appraisal, the person appraises whether they possess anything valuable that can be in danger in any way (Folkman et al.,

1986) In secondary appraisal, the individual estimates what, if anything, can be done to overcome or avert harm or to recover the predictions for benefit (Folkman et al., 1986). Numerous coping possibilities are evaluated, such as changing the situation, accepting it, inquiring of more material, or holding back from behaving impulsively and in a counterproductive method (Folkman et al., 1986). Primary and secondary appraisals unite to determine whether the person-environment transaction is regarded as salient for welfare, and if so, whether it is primarily intimidating (containing the possibility of harm or loss), or challenging (holding the possibility of mastery or benefit). Coping is defined as an individual's continuously altering cognitive and behavioral exertions to manage explicit external or internal demands that are appraised as demanding or beyond the individual's resources (Folkman et al., 1986). Significant features of this definition are important: it is process oriented, meaning that it focuses on what the person thinks and does in a definite stressful meeting, and how this modifies as the encounter is revealed (Folkman et al., 1986).

The Transactional Model of Stress and Coping, illustrated in Figure 1, offers a framework for comprehending the workings of how meaningful based agenda can positively affect the stress appraisal of new nurses. Folkman et al. (1986) acknowledged that stress be used as a forming idea for understanding a diverse phenomenon; stress is not a distinct entity, but a rubric that includes many additional variables. The pathophysiology of the stress relies on the connection between the stress stimulus, the response, and reaction. The process is continuously altering as the individual appraises the circumstances and copes if necessary. Folkman et al. (1986) expressed psychological stress as a connection between the milieu that is appraised by the person as strenuous or

beyond their own means and imperiling their own wellness. The pathophysiology of stress is conjectured as: stressful circumstances exist within the individual and in the condition, the response of the arbitrating appraisal process, and the collaborating process has an impact on the methods of coping and behavioral response.

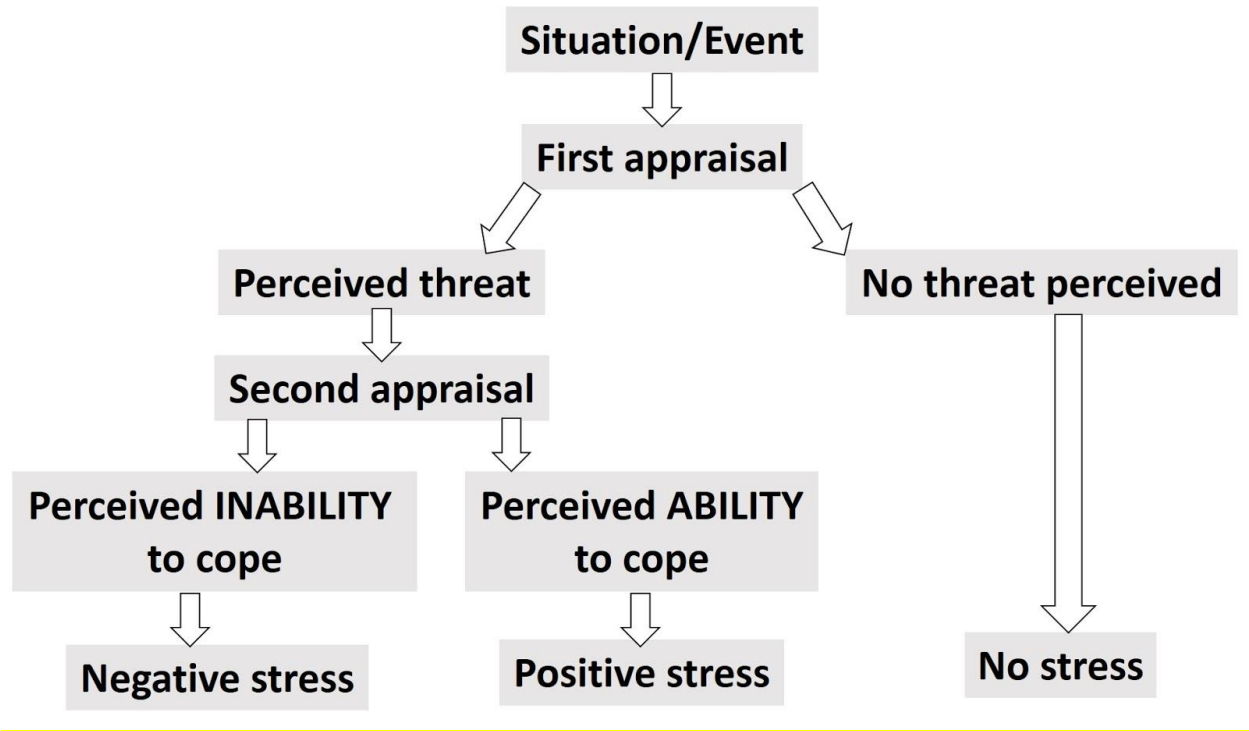

Figure 1. Transactional Model of Stress and Coping

The Conceptual-Theoretical-Empirical Model for this study is shown in Figure 2.

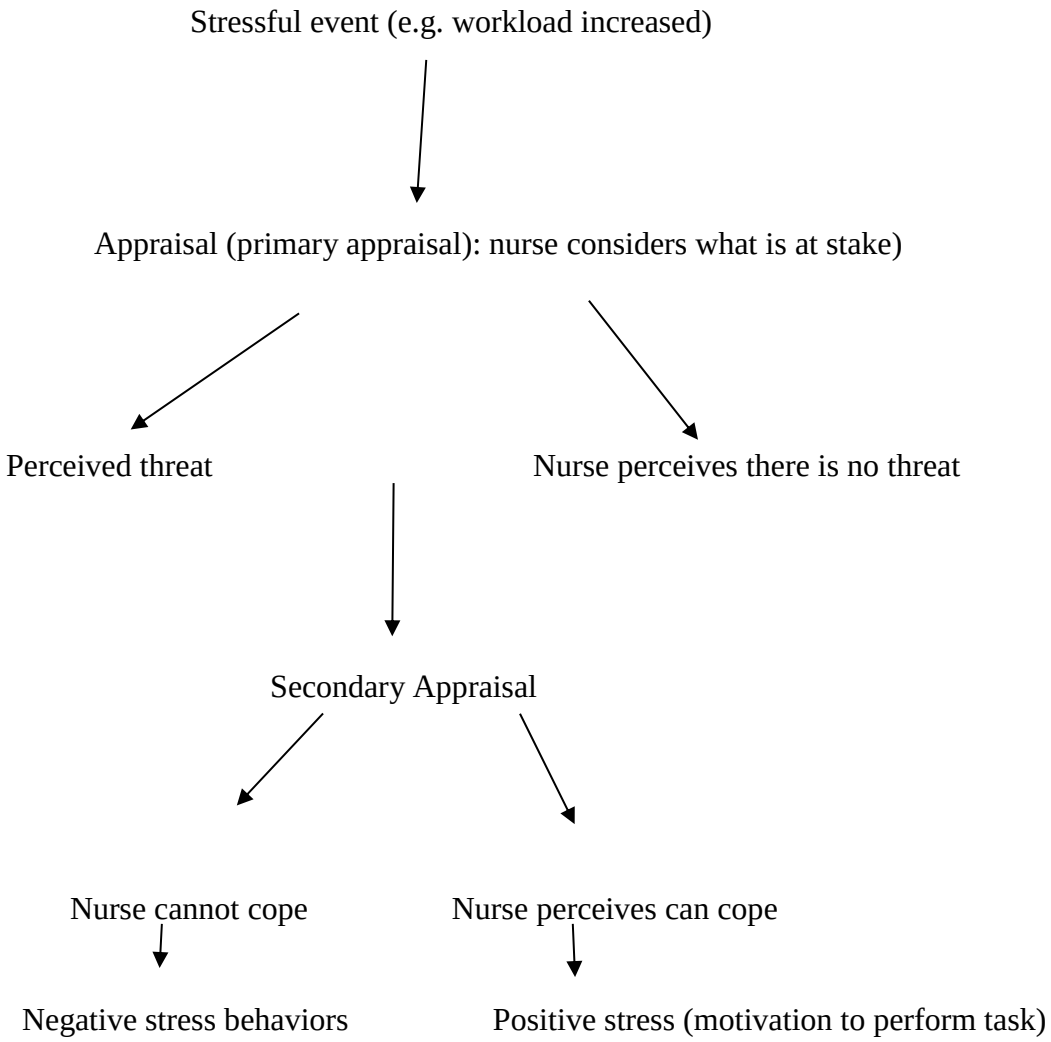

Figure 2. Thesis CTE of Transactional Model of Stress and Coping

Thesis Question

Does use of coping strategies such as the Deep Breathing and Relaxation Technique impact stress of the new graduate nurse after using the coping strategies daily and during times of stress for a four-week period? Stress of the new graduate nurses was assessed through use of surveys before and after implementation of the stress management strategy.

Definition of Terms

- Stress is well defined as a response or incitement, and catalysts can be positive or negative. If stress is a reaction it is the same as definite modifications that the human biological system is undergoing. If stress is an incitement it is akin to the environment that is the cause for those modifications.
- Burnout is defined as experiencing a state of emotional exhaustion consisting of three dimensions: emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment.
- Nurse Residency Program is a planned comprehensive period during which nursing graduates can acquire the knowledge and skills to deliver safe, quality care that meets defined (organization or professional society) standards of practice supported mostly in hospitals and larger health systems, with a focus on acute care.

Research regarding stress management for the novice or new graduate nurse is significant to combat the barriers of retiring baby boomers, increased health disparity, poor quality of care, job dissatisfaction, and new graduates leaving the profession. The study's aim is

to obtain valuable information to complement prior research. The literature review verified that an effective resolution is needed to make an impact on these challenges.

CHAPTER II

Literature Review

This review of literature is composed of two sections. Section 1 reviews literature regarding stress research in nursing and graduate nurses. Section 2 reviews literature related to the Transaction Model of Stress and Coping. The literature on resilience and resilience-based stress intervention is described. CINAHL and ProQuest databases were searched using the terms: nurse, stress, Transactional Model of Stress and Coping, Lazarus & Folkman.

Stress (Section 1)

Stress in nursing is an issue that impacts job retention, health, finances of the institution, and nurse burnout. The transition from student nurse to registered nurse has been found to be stressful and even deemed as reality shock by earlier research (Blomberg et al., 2016). Nurses have been leaving the workforce due to the Baby Boomer generation retiring. A need exists for a coping strategy to manage stress for new graduate nurses to promote job satisfaction, wellness, job retention, and hospital costs.

Valuable research data is provided by identifying the impact of relaxation strategies on stress of the new graduate nurse. Newly graduated nurses possess the rudimentary education and practical skills essential for the entry-level competent practitioner; however, they have been unable to completely fuse theory with practice and face numerous difficulties and high levels of stress as they embark on their careers (Ebrahimi, Hassankhani, Negarandeh, Gillespie, & Azizi, 2016). Novice nurses may experience an array of feelings such as anxiety, fear, depression, burnout, helplessness, time constraints, and despair (Ebrahimi et al., 2016). Novice nurses not only internalize

those emotions but must integrate themselves into their workplace and facilitate acceptance. New graduate nurses are duty-bound to leave the profession without the appropriate support (Ebrahimi et al., 2016).

A paramount resource in support of new graduate nurses is support programs, administered precisely by others in the nursing discipline that are regularly visible, have an impact on novice nurses' work, endorse success in skill attainment, and offer role support (Ebrahimi et al., 2016). Most research has focused on the view of the preceptor, and few studies examined the resources to provide support to the novice nurse from the lens of the qualified nurse (Ebrahimi et al., 2016). Prior research had not addressed the means to provide support to the new graduate nurse, so for a more profound comprehension, a qualitative design was used in the study by Ebrahimi et al. (2016). This study examined the experiences of nurses in relation to providing support to the new graduate nurse. The study merged clinical settings such as emergency departments, intensive care units, and surgery wards in six governmental, wide-ranging teaching hospitals in the cities of Hamadan and Tabriz, in the northwest of Iran and lasted 15 months within the period of 2014-2015 (Ebrahimi et al., 2016). Data were first obtained via unstructured in-depth interviews, lasting 30-90 minutes, using wide-ranging questions about the experiences of qualified nurses working with newly graduated nurses, then sustained with semi-structured questions such as "what needs do newly graduated staff have?" and "how do you support their emotional needs?" (Ebrahimi et al., 2016). Field notes and observations were also a part of the data collection method and were analyzed using conventional content analysis (Ebrahimi et al., 2016, p. 13). This method is composed of six stages: (a) transcribing data, reading and re-reading documents and

perceiving initial ideas, (b) creating original codes, coding verbatim line by line, (c) searching for themes: contracting the codes into potential themes, (d) reviewing of themes: relating themes with each other, with extracted codes and the entire data set, (e) defining and naming themes: ongoing analysis, distillation of themes, creating apparent definitions and names for each theme, and (f) producing the report: final analysis, transitioning between transcripts and themes, choice of vivid stories for each theme, concluding the report. MAXQDA software 10.0 R250412 was used to facilitate classification and organization of data during the process of analysis (Ebrahimi et al., 2016, p. 13). The four major themes that were found in this data collection were assurance, developing a sense of relaxation and security, elating spirits, and emotional fitting and immersion (Ebrahimi et al., 2016). In conclusion, these findings help establish an effective basis of emotional support for newly graduated nurses that can play a significant role in diminishing their stress and anxiety, increasing their self-assurance, and forming a productive relationship between experienced staff and newly graduated nurses (Ebrahimi et al., 2016). The primary limitation of this study included perceptions presented in the study that might be miscomprehended as suggestive of a utopia and representative of the best possible performance; however, owing to the word length limitations on the study, the researchers left out many of the questions related to the concept of support related to the study in order to circumvent boring the reader (Ebrahimi et al., 2016). Provision of emotional support resorts to basic kindness, empathy, and honesty (Ebrahimi et al., 2016). There is an unrelenting need to perform such studies to change the policies, practical plans, and attitudes of nursing personnel toward providing emotional support to the new graduate nurse (Ebrahimi et al., 2016).

The challenges of the current health care state impact care at the bedside and affect quality of patient care, which affect nurses' performance, attitudes, competence, and self-perception, and these factors have an incredible impact on the evolution of practice of the new graduate registered nurses (RNs) (Figueroa, Bulos, Forges, & Judkins-Cohn, 2013). The deficiency of nurses, due partly to the Baby Boomer generation retiring, increases a further burden to the already demanding nursing role (Figueroa et al., 2013). According to the Bureau of Labor Statistics (2017), employment of registered nurses is projected to grow 16% from 2014 to 2024, much faster than the average for all occupations. Current research has shown that the turnover frequency for new graduate RNs is between 35% and 65% within the initial year of employment (Figueroa et al., 2013). If a plan of action is not in place to prepare for the turnover rates for new graduate RNs and the impending exodus of Baby Boomer nurses, the nursing profession and health care will suffer (Figueroa et al., 2013). Research has shown that new graduate nurses require support during their evolution process of student nurse to practicing nurse. A nurse residency program emphasizing the retention of nurses, nursing competencies, and improved patient outcomes is a valuable resource that the Robert Wood Johnson Foundation and the Institute of Medicine recommended for the transitioning of new graduate RNs into practice and care environments (Figueroa et al., 2013). New graduate nurses have retention rates of 88% to 96% when they take part in residency programs (Figueroa et al., 2013, p. 366).

This study utilized the evidence-based Versant® RN Residency program. Components of this residency program are involvement in the classroom for educational learning, one-on-one preceptor-guided clinical experience, mentoring, and a self-care and

debriefing session (Figueroa et al., 2013). The one-on-one preceptor-guided clinical experience used for this study is the Married State Preceptorship Model (MSPM). MSPM is a process for precepting that champions for quality of care and safety for both patients and new graduate RNs (Figueroa et al., 2013). The goals of the MSPM, considered a best practice for nurse residency programs, are to embrace new graduate RNs, to deliver leadership support, to simplify the transition of knowledge to knowing, and to prepare new graduate RNs to deliver safe and effective patient care (Figueroa et al., 2013). The question in this study was: Will the integration of the MSPM help new graduate RNs to work more independently in the clinical setting and experience less anxiety during the transition to practice? (Figueroa et al., 2013). The setting was the southeast region of the United States. The sample was composed of two groups from a health system that was comprised of seven hospitals. There were preceptors (n=100) from four acute care hospitals and new graduate RNs (n= 108) from August 2 to December 10, 2010 (Figueroa et al., 2013). The MSPM was employed during orientation. Preceptors were experienced clinical nurses who were on the list of preceptors of the Versant® RN Residency training program found in the web-based Voyager (Figueroa et al., 2013). The preceptor list found in Voyager identifies nurses who served as preceptors for the previous cohorts of nursing residents (Figueroa et al., 2013). Other preceptors were obtained from the list of attendees of ongoing preceptor classes (Figueroa et al., 2013). In addition, 15 new graduate RNs were included in focus groups conducted to obtain a more in-depth understanding of their experiences and perceptions of the MSPM (Figueroa et al., 2013).

Data were collected through researcher-developed surveys that contained contrast questions for preceptors and new graduate RNs (Figueroa et al., 2013). Participants were

asked about their perceptions and experiences regarding the MSPM. One hundred percent of the nurses participated. Focus groups with new graduate RNs were led to discover their perceptions of the effects of the MSPM on satisfaction, safety, and the transition to clinical areas (Figueroa et al, 2013). Three focus group sessions were conducted using questions from the MSPM, each lasting about an hour, with a total of 15 participants (Figueroa et al., 2013). Preliminary analysis of word frequencies on the transcripts of the focus groups was conducted with NVivo 9 before content analysis for theme development was conducted by the research team (Figueroa et al., 2013). New graduate RNs acknowledged their experiences with the MSPM as positive, with 97.2% of participants reporting that the MSPM was advantageous for new graduate RNs who are transitioning to bedside nursing and 99.1% reporting that the MSPM endorsed safety (Figueroa et al., 2013). The MSPM also positively affected key components of transitioning to an independent direct patient care role, including feelings of being able to safely assume a full patient load (89.9%, n = 97) and less anxiety in moving from orientation to the clinical setting (92.6%, n = 100). Preceptors perceived the MSPM as valuable to new graduate RNs, 90% recommended its implementation in orientation, 97% perceived the MSPM promoted safety, enhanced safe practice, achieved the needs of new graduate RNs in developing successfully at the bedside, influenced retention of new graduate RNs (86.0%), and increased the confidence of new graduate RNs (89.0%) (Figueroa et al., 2013). The study showed that the MSPM, which uses one-on-one preceptorship, meets the needs of new graduate RNs in the following areas: retention, safety, less anxiety, preparation, competency, and confidence. All of these are collective benefits to the new graduate nurse and mitigate the chaotic beside (Figueroa et al., 2013).

This study used a convenience sampling method limiting the ability of the results to be generalized (Figueroa et al., 2013). In conclusion, the MSPM is a valuable tool in the nurse residency programs.

A major influential factor in the nursing shortage is the high turnover of nurses and low recruitment of nursing students that is connected to stress and burnout (Hu et al., 2017). In recent years, there is a critical shortage of nurses in China. In mainland China, there are 1.66 nurses per 10,000 people, which is far less than the 2.86 per 10,000 global ratios, and 4.49 per 10,000 for South-East Asia (World Health Organization, 2015). Recent studies have revealed that Chinese nurses are facing stressors that contribute to burnout and intention to leave (Hu et al., 2017). A study among 527 nurses from Shanghai hospitals showed that nurses experienced a high level of work-related stress and burnout, and young nurses being especially vulnerable (Hu et al., 2017). The questions in this study are: (1) What observable stressors are present among newly graduated nurses in pediatric wards? and (2) What stressors are experienced by newly graduated nurses in pediatric wards? Fifty-two newly graduated nurses were observed following their enrollment in a pediatric hospital and 25 were interviewed individually after six months (Hu et al., 2017). The first three to six months have been found to be the most stressful and the time when the intent is to leave was the greatest for the nursing profession. The interviewees were predominantly female (80.0%) with bachelor's degrees (68.0%) and were employed at 14 different units, with the average age being 22 years. Convenience and snowball sampling strategies were used to recruit the participants (Hu et al., 2017, p. 186). New nurses' daily routine was observed and field notes were taken. The first author initiated informal discussion with some of the nurses about their work experience

and as the study continued, more emphasis was placed on things such as workload and staff and patient interaction (Hu et al., 2017). The field notes were analyzed and more general pattern codes were created (Hu et al., 2017). Semi-structured interviews were conducted with questions such as: 'What do you think about stress in your work?', 'What kind of stressors do you have?', 'What has bothered you most?', 'What led to that experience?' When the participants' statements were like the themes in the field notes, the interviewer could demonstrate their correlation and conduct more in-depth interviews. The interviews took place in private cubicles at the nursing unit and lasted 30–60 minutes (Hu et al., 2017). All interviews were recorded and transcribed verbatim and two researchers read the data repeatedly and independently in its entirety to gain sense and deeper comprehension (Hu et al., 2017).

This field observation showed that new nurses were exposed to various stressors such as heavy workload, most ran or walked quickly when the senior nurse called, and the unit was noisy because of equipment and crying children. Frequently the nurses could not locate resources they needed because they were unfamiliar with the environment and because of frequent changes owing to an ongoing accreditation process in the hospital (Hu et al., 2017). 'Tired', 'tedious' and 'worried' were words frequently spoken by new nurses when describing their experience (Hu et al., 2017). From the interviews, five main themes and 16 subthemes of stressors were identified. The findings from this study recommended that graduate nurses in pediatric hospitals are exposed to various factors that contribute to their experience of stress. The study was strong in showing a correlation between young nurses with heavy workload (frequent shifts and night duty), few sources of support (poor interdisciplinary relationship) and less

empowerment (perhaps deriving from lack of ability and skills, or few personal accomplishments), and suffered higher emotional fatigue, which is also widely recognized in Western research (Hu et al., 2017). Results from field observations and in-depth interviews at the pediatric hospital have their limitations. Full anonymity and confidentiality were difficult to guarantee. In addition, to evaluate the stress and stressors of new pediatric nurses, a future quantitative study with a larger and more diverse sample from different hospitals and provinces is required (Hu et al., 2017).

Stress and its many consequences, such as burnout, sick leave, and high nurse turnover have been well-documented (Blomberg et al., 2016). The life of a new nurse is stressful, and this impacts the quality and safety of patient care (Blomberg et al., 2016). This study examined the impact of the workplace on the new graduate nurse. The lack of support during the first year has been identified as a catalyst of stress, and clinical group supervision as a resource has been shown in prior studies to be advantageous to the new graduate nurse (Blomberg et al., 2016). The desired goals for this study were to depict work stress among new graduate nurses, research effects of workplace on stress, and study whether the clinical group supervision makes an impact in the response to stress (Blomberg et al., 2016). The study used a sample of nurses (n=200) who graduated in spring 2012 from a bachelor's degree program at one of the three universities in Sweden (Blomberg et al., 2016). The universities were similar in curriculum. A cross-sectional study with comparative design was implemented (Blomberg et al., 2016). Fifty-seven percent of the participants answered the questionnaire asking age, gender, work experience related to health care prior to attending the nursing program, month of employment as a graduate nurse, change of workplace at least once since becoming a RN,

current workplace, shift, work and work hours per month. The nurses completed it at home and returned it in an enclosed prepaid envelop (Blomberg et al., 2016, p. 82). The results showed 90% of the participants were female, ages ranged from 21-51 years old, half had been employed in health care prior to nursing, on average had worked as a nurse for nine months, 43% had changed workplaces a minimum of once, currently they were working in shifts, and most worked in hospital departments (Blomberg et al., 2016, p. 82). Twenty-four percent stated they obtained clinical group supervision in the work place (Blomberg et al., 2016). In conclusion, the workplace did not influence the new graduate nurse's stress level; they experienced stress wherever they worked. The new graduate nurse has difficulty being accepted by her peers and this creates fear, anxiety, and stress. The study showed the new graduate nurse working in surgical care experienced the most and more frequent stress and those not working in the hospital were least stressed (Blomberg et al., 2016). A limitation of this study was the study design because cross-sectional studies do not permit conclusions to be made about the impact of supervision. A larger sample would have strengthened the study, and an experimental design is needed to confirm the results (Blomberg et al., 2016). One of the strengths of the study is it displayed that clinical group supervision can be a method of decreasing stress among newly graduated nurses.

In the United States, it is estimated that new nurse graduates (NNGs) are exiting the profession before the end of the first year at an alarming rate ranging from 35% to 60%, and the turnover rate is 57% by the second year (Cheng, Liou, Tsai, & Chang, 2015). The turnover rate in Taiwan is two to three times higher than those of other Asian countries and research has shown job stress is a significant factor in this data

(Cheng et al., 2015). Job satisfaction is another concentration for the retention of NNGs and research has demonstrated that job satisfaction is negatively associated with turnover rate (Cheng et al., 2015). These nursing issues are speaking to national health and economic issues for countries (Cheng et al., 2015).

A study was conducted that focused on NNGs of Generation Y. The questions for this study were: What are the relationships between job stress and job satisfaction in the third, sixth and twelfth months? Do job stress and job satisfaction change at the intervals? Do job stress and job satisfaction differ among demographic groups? (Cheng et al., 2015). This study used a descriptive, correlational and longitudinal design, and convenience sampling. Participants were NNGs who graduated from the RN-BSN program. Students (n=206) were invited to participate, and response rates were: 56.80%, 50%, and 36.90% for the three-time intervals respectively (Cheng et al., 2015). The Clinical Stress Scale (CSS) was developed by the research team and used along with the Job/Work Environment Nursing Satisfaction Survey (WENSS) designed by Halfer and Graf, 2006. All participants were women, with an average age of 23 years. The possibility of a NNG remaining on their current unit at each time interval was high (Cheng et al., 2015). Their outlook on job satisfaction and job stress were moderate across each interval. Job stress of the NNG decreased from the second to the third interval, job satisfaction was decreased in the twelfth month, and job stress or job satisfaction level experienced by NNGs between each interval were strongly and positively correlated (Cheng et al., 2015). New Nurse Graduates (NNGs) are exiting their first employer at distressing rates and the significance of this study was to discover the relationships between job stress, job satisfaction, and related factors over time among

NNGs (Cheng et al., 2015). This study used a longitudinal design with three additional meetings after NNGs started their first job (Cheng et al., 2015). No significant change in job stress was observed at the time intervals and the average of job satisfaction increased from the second to third time interval (Cheng et al., 2015). This study's strength was exploring job stress and job satisfaction of Generation Y NNGs so that administrators can develop new strategies to decrease job stress, increase job satisfaction, and decrease turnover (Cheng et al., 2015). This survey was limited because it included NNGs from only one nursing program and other nursing programs should be investigated (Cheng et al., 2015)

New graduate nurses are bullied during their first experience as Registered Nurses (RNs) which impacts the new graduate nurses negatively. Transition programs may provide enhanced contact with resources and help bridge the transition from student to practice nurse (Rush, Adamack, Jordan, & Janke, 2014). This study examined the relationships between access to support, workplace bullying, and the new graduate nurse. The questions for this study were: When is the greatest need for new graduate nurses participating in the program and nurses that are not? Are new graduate nurses that participate in transition programs more able to access support when they feel the greatest need for support compared to non-participants? What is the frequency of self-reported bullying between new graduates participating in a transition program compared to non-participants? What is the relationship between the transition quality and the nurse's ability to access support when needed? The results are part of a larger mixed method study that was carried out in selected hospitals, across seven health authorities within the western Canadian province of British Columbia (Rush et al., 2014). The sample was

obtained from students who graduated in 2010, who had been employed less than a year in an acute setting. Representatives working with the new graduate transition program selected eligible study participants (n=245) who were provided an online survey via email. Of those who completed the survey, 54.7% were aged 25-35, 90.6% were females, and almost 40% had been employed from six months to one year (Rush et al., 2014). The results of this study show 39% of new graduates had experienced bullying or harassment. Self-reported bullying was unexpectedly parallel among new graduates whether or not they participated in a transition program, which recommends the transition program provides a buffer for new graduates (Rush et al., 2014). The results were among the first to discover and illuminate that bullying weakened the relationship between new graduate's access to support and their transition (Rush et al., 2014). The data is limited in that it used self-reporting. This study concludes that an awareness of bullying exists, but the problem still is not resolved and the lack of access to support when necessary compared to non-bullied peers has a negative effect on the new graduate nurses.

A nursing shortage has been predicted that will become alarming and extended due to the Baby Boomer Generation aging and retiring and less young people selecting health careers. Health systems are reintroducing their focus on developing a culture that will promote job satisfaction and retention for new graduate nurses (Halfer & Graf, 2006). In the first year of employment, the new graduate nurse turnover ranges from 35%-60% and this causes stress and financial loss to the institution (Halfer & Graf, 2006). A study by Halfer and Graf (2006) investigated the following questions: What drives the new graduate's satisfaction/dissatisfaction? How do they view the work environment? Do these views change with time (Halfer & Graf, 2006)? The principal

investigator and a nurse researcher designed the Halfer-Graf Job/Work Environment Nursing Satisfaction Survey to collect data on new graduate nurse's perceptions at three, six, 12, and 18 months of employment (Halfer & Graf, 2006). The sample size was 84, 80% were from the generation X birth years and 71% worked a night or day-night rotating shift. Two and a half years after the study's inception, 67 nurses remained active in the study yielding a 20% turnover in this cohort of new graduate nurses (Halfer & Graf, 2006). This study displays that new graduate nurses were satisfied with their overall experience of transitioning to their first professional job at the 18-month mark (Halfer & Graf, 2006). The factors that displayed importance were comprehension, practice, and the knowledge to engage in opportunities that create professional development and showed significant improvement (Halfer & Graf, 2006). Survey attrition did affect the value of several variables that altered over time: errors treated as educational, prospective professional influences valued, physicians as respectful, management of staffing schedules, comfort with asking questions, and satisfaction with schedule and the overall job. The variables that showed dissatisfaction as measured by mean scores included participation in solving unit issues (six months), staffing schedules (six and 12 months), scheduled work days and hours (six and 12 months), and participation in professional development programs (three, six, and 12 months). These findings reflect the negative influence of a night or a day/night rotating shift schedule on new nurse job satisfaction (Halfer & Graf, 2006, p. 154).

Globally there is a nursing shortage coupled with the Baby Boomer Generation retiring, sicker patients, and decreased enrollment into nursing programs. A dire need exists for new graduate nurses to seek and remain in the nursing profession. The Health

Resources and Service Administration (HRSA) foresees the United States' shortage will require a need of one million nurses by 2020. The premise for this study was to use a descriptive correlational design to discover work-related stressors, coping strategies, and intention to quit employment reported by graduates from a BSN program (traditional students) and ADN graduates during their first three years following graduation (Wu, Stokes, & Adam, 2012). This study was guided by four primary research questions: What are the levels of workplace stressors among newly graduated nurses? Do relationships exist between work-related stressors with: (a) types of nursing program completed (i.e., ADN vs. BSN), (b) length of time (experience) working as RN, (c) gender, (d) length of time since graduation, and (e) length of orientation? Does a relationship exist between specific work-related stressors (five factors) and study participant's intention to quit their current employment? Does a relationship exist between work related stressors and coping strategies? A convenience sample (n = 154) was obtained from all nursing student graduates within the past three years from a baccalaureate nursing program at a local university and community college in the mid-western United States. Survey data was collected from 2009-2010, with a 38% response rate (Wu et al., 2012). Instruments consisted of demographics including 13 items related to age, gender, program type, year of graduation, orientation, length of practice/clinical unit, as well as intention to quit current employment, and work-related stressors. These were measured using a 52-item Job Stress Scale for Newly-Graduated Nurses (Wu et al., 2012). Greater than 93% of the sample was female and ranged in ages from 22 years to 55 years. The results addressed each question. Workplace stressors were ranked: (1) demanding care, (2) equipment issues, (3) nursing skills, (4) interpersonal relationships, and (5) hospital responsibilities.

There was a relationship between program and stressor. BSN graduates are inclined to report higher stress levels compared to Associate Degree Nurse graduates in their overall stressor scale and all five factors except in factor 3 - hospital responsibilities (which involves nursing research or participation in committee work). Thirty-one percent of the overall study sample reported intention to quit their current employment; Associate Degree Nurse graduates reported lower intention to quit (30%) compared to BSN graduates (33%) (Wu et al., 2012). Work-related stressors overall were statistically significantly related to coping strategies ($r = .497$, $p = .00$). Stress is positively associated with coping strategies. The use of such a small convenience sample and not having BSN graduates explain their stressors are weaknesses of this study. In conclusion, this study is valuable because it can be used by agencies to develop strategies that can impact the new graduate nurses' experience and promote job retention.

Neck and back pain are prevalent in registered nurses, especially women. The pain is a primary cause of sick leave. Minimal research has been done regarding injuries. A study was conducted to: explore the frequency and occurrence neck/shoulder and back pain in nursing students in their final semester (baseline), and one and two years after graduation, using a national sample; recognize common paths of neck/shoulder and back pain; and discover sociodemographic and lifestyle-related factors, contextual factors at work and health outcomes that might be characteristic of individuals in the various paths (Lovgren, Gustavsson, Melin, & Rudman, 2015). The study participants at baseline ($n = 1153$) ranged in age from 21 to 52 years, were mostly females (89%), of Swedish background (93%), have a joint household (75%), and 54% had worked in health care before (Lovgren et al., 2015). Data was self-reported. Two single items measuring

neck/shoulder and back pain severity were taken from a symptom checklist. The question "During the last four weeks, have you experienced the following health problem?" was followed by a symptom checklist including neck/shoulder pain and back pain respectively and symptoms were rated on a scale with four response categories: none (0), mild (1), moderate (2) and severe (3) (Lovgren et al., 2015, p. 627). Results of the study showed there was no statistical difference in neck/back pain over time (Lovgren et al., 2015). Among the new graduates with no reported neck/shoulder and back pain in their final semester of nursing education, 27% stated that they had neck/shoulder pain, and 25% stated they had back pain one year after graduation. The following year, another 16% reported for the first time that they suffered from neck/shoulder pain, and a further 21% that they had back pain (Lovgren et al., 2015). In the longitudinal analysis, six different paths were found for each symptom; a symptom free group, two groups with decreasing pain levels, two groups with increasing pain levels, and one group with chronic pain (Lovgren et al., 2015). Limitations of this study are the times that measured neck/back pain can be read differently, the sociodemographic and lifestyle factors were not measured, and paths may have been simplified.

Transaction Model of Stress and Coping (Section 2)

A study by Abdelmajid and Nawres (2015) was initiated in response to the authors' observation of nurse burnout. The goal of this study was to explore the impact of coping on burnout in the framework of the JD-C-S (Job Demand-Control-Support) model. Nurses live many stressful experiences daily, including acquaintance with dying and death, danger of infections and struggles with associated healthcare workers due to insufficient staffing, work excess and irregular hours, extending working schedules, and

demanding patients (Abdelmajid & Nawres, 2015). These challenges affect the nurse negatively. This study addressed the following hypotheses: A high level of burnout will be associated with emotion focused coping in a context of high extent job demand and low decision latitude. A low level of burnout will be associated with problem focused coping in a context of high extent job demand and high sense of control. This study explored the impact of two important variables that are thought to be causes for the level of burnout; the psychosocial job traits desired and possession of diverse coping strategies to impact the stress level and promote health (Abdelmajid & Nawres, 2015). This study highlights the coping process. The Transactional Theory of Folkman and Lazarus recognizes the process of coping as intermediaries of stressful person- environment relationships. The Physiological effect encompasses the concepts that stress cannot be avoided during life, and if an individual experiences continuous stress they will move through the three phases called the General Adaptation Syndrome (Abdelmajid & Nawres, 2015). The Cognitive effect is described as after stress is identified, the individual assesses and deems if the consequence of the stress will cause potential harm, loss, or challenge (Abdelmajid & Nawres, 2015). The sample from the Habib Thameur Hospital consisted of 72 nurses, 81.94% were female with an average age of 39.88, with most holding a college degree (Abdelmajid & Nawres, 2015).). The Maslach Burnout Inventory (MBI), Karsek's job content questionnaire, and the Ways of Coping Check List were the three questionnaires used to measure burnout. The results of the MBI illustrated an increased level of emotional exhaustion and depersonalization, with a low range of personal achievement (Abdelmajid & Nawres, 2015). Work and coping strategy was not significant ($\beta = 0.015$, $p > 0.05$) (Abdelmajid & Nawres, 2015). The type of work was a

strong possibility for the level of burnout ($\beta = -0.413$, $p > 0.05$) (Abdelmajid & Nawres, 2015). The Karsek's job content questionnaire displayed job type (work) and coping strategy interaction (work coping centered) was not significant ($\beta = 0.015$, $p > 0.05$) (Abdelmajid & Nawres, 2015). Yet, type of job (work centered) was a good predictor for the level of burnout. ($\beta = 0.988$, $p < 0.05$) (Abdelmajid & Nawres, 2015). The Ways of Coping Check List results displayed emotion focused coping was significantly and positively correlated with emotional exhaustion (Abdelmajid & Nawres, 2015). However, there have been no significant relationships between problem solving coping and social support seeking strategies with the level of burnout. This result is in contradiction to the earlier studies (Abdelmajid & Nawres, 2015). Based on these findings, both these approaches seem to have no adaptive function (Abdelmajid & Nawres, 2015). The results were contrary to the initial hypothesis; coping mechanism and the job type had independent and direct impact on burnout (Abdelmajid & Nawres, 2015). The type of job is more likely associated with the level of burnout. According to the MBI, workload is most directly related to the exhaustion aspect of burnout. There was a negative relationship between emotional exhaustion and social support, and emotion focused coping was significantly and positively correlated with emotional exhaustion (Abdelmajid & Nawres, 2015). This research identified no association between the varying coping strategies and the psychological demand of a work place, or with the level of burnout (Abdelmajid & Nawres, 2015). Also, it was found that using a certain coping strategy does not result in a negative or positive outcome (Abdelmajid & Nawres, 2015). Weaknesses of this study are the two non-standardized questionnaires, the fact that

culture may impact data, and that a self-reported questionnaire may not be the most effective method to appraise psychological distress. (Abdelmajid & Nawres, 2015).

Structural modifications have a damaging effect on nurses and there is a lack of research on the institutional changes (Chang et al., 2006) Change can result in increased sick time, work disability, loss of efficiency, job commitment, more turnover, stress and change fatigue (Chang et al., 2006). Change fatigue is defined as the state of disengagement by the staff, lack of emotion, and passivity about the changes. Because of this passivity, it is unnoticed by nurse managers. Resilient nurses acclimate effectively to organizational change and have decreased emotional exhaustion (Chang et al., 2006). The Transactional Model of Stress and Coping developed by Lazarus and Folkman (1984) suggests that stressors and methods individuals cope with stress should essentially be measured equally in describing the stress and coping process because they are interdependent. The sample for this study consisted of 535 nurses from a rural hospital. Study participants finished an online survey using: The Change Fatigue Scale, Connor-Davidson Resilience Scale (CD-RISC), and McCloskey/Mueller Satisfaction Scale (MMSS). Institutional modification is often a stressor experienced by nurses that causes job dissatisfaction and change fatigue (Chang et al., 2006). Experienced nurses had higher change fatigue, resilience, and job satisfaction. The study also reported a significant negative association between change fatigue and job satisfaction ($r = -.295$, $p = .000$), change fatigue and resilience ($r = -.145$, $p = .002$) and a significant positive association was found between resilience and job satisfaction ($r = .251$, $p = .000$) (Chang et al., 2006, p. 39). A linear trend found that as the size of the hospital and the number of

patients increases, change fatigue increases, and as educational level increases, change fatigue decreases (Chang et al., 2006).

In summary, a review of the literature suggested that stress negatively impacts the new graduate nurse and leads to lack of job retention, commitment, nurse burnout, job dissatisfaction, and increased cost to the facility. The Transactional Model of Stress and Coping can be used as a framework by organizations to positively impact the new nurse graduates' first three years and the nursing profession as a whole.

CHAPTER III

Methodology

Nurse burnout, job retention, stress, and the exodus of Baby Boomers from the workforce all impact the nursing profession negatively. These variables are even more devastating for the new graduate nurse. New graduate nurses are leaving the profession due to the impact of stress. The purpose of this study was to assess if use of the Deep Breathing Relaxation Technique has an impact on the novice nurse's stress level.

Study Design

The study design was descriptive and was used to identify the level of work-related stress in new graduate nurses and the impact of use of the Deep Breathing Relaxation Technique.

Setting and Sample

The study was conducted at a teaching hospital in the southeastern region of the United States (US). The hospital is equipped with 186-beds. The hospital provides a comprehensive array of services, such as: a cancer center, orthopedic and spine center, cardiovascular services, neurosciences (including a skull base and cerebrovascular center), advanced digestive care, disease management and prevention, wound healing, outpatient imaging, intensive and progressive care, pain clinic, same-day surgery, emergency department, community outreach, and education programs.

Seven study participants were part of the Nurse Residency Program and had been practicing for approximately six months. The research participants were from the United States, female, and ranged in age from 22 to 40 years of age.

Intervention and Materials

The researcher demonstrated the Deep Breathing Relaxation Technique and educated participants about utilizing this technique on a daily basis and during times of stress for the next four weeks. The Deep Breathing Relaxation Technique was performed as a scan of individual body areas starting from the head to the legs, encouraging deep breathing during the transition from one area of the body to another. The researcher uploaded a video of the Deep Breathing Relaxation Technique on YouTube and provided the link to participants. This video could be used by participants to practice the technique.

Measurement Methods

The Nursing Stress Scale (NSS) was the instrument used to measure stress. It consists of 34 items that explain conditions that have been identified as etiology of stress for nurses in the performance of their duties (Gray-Toft & Anderson, 1981). The NSS delivers a total stress score and scores on seven individual subscales that measure the frequency of stress experienced by nurses in the hospital milieu. Permission was obtained to use the NSS instrument. The instrument has established reliability and validity.

Data Collection Procedure

Participants of the Nursing Residency Program were provided an envelope containing the Nursing Stress Scale (NSS) survey upon entrance into the classroom. The researcher administered the NSS, demonstrated the Deep Breathing Relaxation Technique, and encouraged participants to utilize the Deep Breathing Relaxation Technique on a regular basis and during times of stress. Four weeks later the research participants were asked once again to complete the Nurse Stress Scale. This time the

survey also contained a question that asked, on average, how often per week the Deep Breathing Relaxation Technique was practiced. The choices were: A. 0 - 2 times, B. 3 - 5 times, C. greater than 6 times.

Protection of Human Subjects

The study was initiated after receiving approval from the University's and Hospital's Institutional Review Boards. The information that was provided in the study was handled confidentially. All survey data was kept confidential and only the researcher had access to the participant's information. Throughout the study, surveys were stored in a secured location. Following study completion, surveys will be kept in a secure area for three years, and then destroyed.

Data Analysis

Data sets were entered into Microsoft Excel manually. Descriptive statistics were calculated in Excel, including the mean and standard deviation for each stress scale item, means for each category of stress, and the differences between the pre- and post- data. The differences from the pre-survey and post-survey NSS scores were obtained for each participant. The means for the changes in NSS scores for the participants who used the Deep Breathing Relaxation Technique three to five times per week were calculated. The means for the changes in NSS scores for the participants who used the Deep Breathing Relaxation Technique zero to two times per week were calculated. A t-test was performed on the differences in mean NSS scores between the groups (the one that did the DBRT 0-2 times per week versus 3-5 times per week) prior to the DBRT instruction was performed. Also, differences in each subscale item were calculated, and t-tests on the difference between the pre- and post- survey NSS Scores for each group were calculated.

Finally, a t-test was performed on the difference in changes (pre- and post-) between the two groups.

CHAPTER IV

Results

The final sample size was seven individuals. There were no nonresponses or withdrawals from the study. The NSS scores for each nurse, before and after the intervention, and the change in the scores are shown below in Table 1, along with means and sample standard deviations.

Table 1

NSS Scores for Each Nurse

Nurse	Pre-DBRT NSS Score	Post-DBRT NSS score	Change in NSS score
1	52	47	-5
2	65	60	-5
3	59	53	-6
4	69	56	-13
5	82	55	-27
6	84	98	14
7	48	44	-4
Mean	65.57	59	-6.57
Std. dev	13.89	18.04	12.20

Nurses 1, 5, and 7 indicated that they practiced the DBRT 3-5 times per week (Group A). Nurses 2, 3, 4, and 6 indicated that they practiced the DBRT 0-2 times per week (Group B). Summary statistics for each group are shown below in Table 2.

Table 2

Pre- and Post-DBRT Statistics

	Group A	Group B
Pre- survey NSS score mean	60.67	69.25
Post- survey NSS score mean	48.67	66.75
Pre- survey NSS sample standard deviation	10.66	18.58
Post- survey NSS sample standard deviation	5.67	21.02
Mean change (post – pre)	-12	-2.5

Major Findings

The mean NSS score for all participants prior to the study was 59. Group A had a lower mean NSS score prior to the DBRT instruction; however, the difference (Group A – Group B) was not statistically significant ($t = -.72$, $p = 0.55$). The NSS categories with the highest mean score for all participants were "Workload" and "Inadequate preparation to deal with emotional needs of patients and their families," both with a mean of 2.29 prior to the DBRT instruction (on a scale from 1-4). The category with the lowest mean score prior to the instruction was "conflict with other nurses and supervisors," with a mean score of 1.46. The mean score for each category decreased following the DBRT instruction, with "Workload" remaining as the highest mean, and "conflict with other nurses and supervisors," remaining as the lowest.

Following the DBRT instruction, Group A's mean score dropped from 60.67 to 48.67. The change in score appears substantial, but was not statistically significant ($t = -1.60$, $p = 0.125$). Group B's mean score dropped from 69.25 to 66.75, which was clearly not statistically significant ($t = -0.43$, $p=0.69$). A comparison between the mean change

in Group A's scores versus the mean change in Group B's scores (-12 versus -2.5) was calculated. The difference was not statistically significant ($t = -1.00$, $p = 0.195$).

Summary

In summary, the mean NSS score for all participants prior to the study was 59. Total scores range from 0 to 102 with higher scores indicating more frequent stress. Group A's stress level was lower than Group B's stress level prior to DBRT instruction. The DBRT was found not to be statistically significant to the stress levels of the participants. "Workload" and "Inadequate preparation to deal with emotional needs of patients and their families" were the highest stress categories prior to DBRT instruction. The participants had less stress in the "Conflict with other nurses and supervisors" prior to the DBRT instruction. The stress experienced by the participants decreased in each of these categories after implementation of the DBRT. "Workload" continued to be the most stressful category and "conflict with other nurses and supervisors" was the least stressful. Following DBRT, the stress of Groups A and B was decreased but was not statistically significant. The decrease in stress may not be due to just the DBRT.

The comparison of Group A's mean change and Group B's mean change was found not to be statistically significant. The mean change of Group A and Group B may not be due to the DBRT. There are areas of decreased stress with the use of the DBRT, but it may not be due to the DBRT independently.

CHAPTER V

Discussion

The novice nurse experiences stress in relation to transitioning from the academic to the clinical setting. Stress of this type impacts patients' quality of care, emotional and wellbeing of the nurse, hospital cost, and the nursing profession. A nursing shortage is taking place partly because of the exit of the Baby Boomer generation. Novice nurses can aid in managing this predicament. Employment and retention of new graduate nurses are strategies that will ensure that healthcare has the necessary staff to provide quality care. The purpose of this research was to explore the impact of the Deep Breathing Relaxation Technique (DBRT) on the stress of the novice nurse.

The results showed there was a decrease in the stress experienced by the participants who used the DBRT more often, but there was no statistically significant relationship that showed the decrease was from the use of the DBRT alone.

Implication of Findings

The major findings indicated there was a stress reduction experienced by Groups A and B. This stress reduction was not statistically significant; there was no strong relationship shown between the reduction in stress and the use of the DBRT. "Workload" and "Inadequate preparation to deal with emotional needs of patients and their families" were the categories in which Groups A and B experienced the most stress. After the use of the DBRT, there was a decrease in stress for Group A more than Group B. Both groups decreased in these categories, but it was not statistically significant. The purpose of this research was to explore if the DBRT being used by the novice nurse will impact stress. The DBRT cannot be identified exclusively as the source of stress reduction. There was no previous research on the use of the DBRT and novice nurses.

Application to Theoretical/Conceptual Framework

Lazarus and Folkman's Transactional Model of Stress and Coping was used in this MSN Thesis. However, only certain aspects are applicable to this thesis. The final aspect of manifestation of behaviors is not researched in this thesis. Instead, this research focused on the coping with the perceived threat and if this impacts the perception of the threat. The results showed that participants who did use the coping strategy, DBRT, experienced a reduction in their stress levels. However, this decrease was not statistically significant. The DBRT cannot be identified as an exclusionary premise for stress reduction.

Limitations

A small sample size is the main limitation of this study. A larger sample may show more significant results. The option of the DBRT not being used during times of stress could be addressed. It is possible that the participants who did not use the DBRT showed less improvement than those who used it one or two times per week, but they were not distinguished as an additional option in the choice of frequency of use.

Implications for Nursing

The results imply that stress of the novice nurse can be decreased by using the Deep Breathing Relaxation Technique. Even though the DBRT was shown not to exclusively reduce stress, it did impact the stress in Group A and Group B in the most stressful categories of the NSS, which were "Workload" and "Inadequate preparation to deal with emotional needs of patients and their families." The DBRT as a coping strategy to manage stress can be used to promote quality patient care, the wellbeing of the novice nurse, and novice nurse retention.

Recommendations

The DBRT can be used as a coping strategy to manage stress in the novice nurse. This study needs to be repeated using a larger sample over an extended period of time.

Conclusion

In conclusion, the MSN thesis aimed to explore the relationship of the novice nurse's stress and the DBRT. The DBRT was found to reduce the stress in the categories that were found to be most stressful; however, the DBRT's impact on the nurse's stress was not found to be statistically significant.

References

Abdelmajid, N., & Nawres, Z. (2015). Burnout and coping in the perspective of job demands-control-support model among Nurses. *Psychology*, *6*, 1841-1849. http://dx.doi.org/10.4236/psych.2015.614180

American Nurses Association. (2017). http://nursingworld.org/MainMenuCategories/ThePracticeofProfessionalNursing/2017-Year-of-Healthy-Nurse/April.html

Blomberg, K., Isaksson, A., Alvin, R., Bocholt, B., Emerson, M., Enstrom, A. K., ... & Gustafson, M. (2016). Work stress among newly graduated nurses in relation to workplace and clinical group supervision. *Journal of Nursing Management, 24*, 80-87. http://dx.doi.org/10.1111/jonm.12274

Bureau of Labor Statistics, U.S. Department of Labor. (2016-17 edition). Occupational Outlook Handbook. Retrieved from http://www.bls.gov/ooh/healthcare/registered-nurses.htm

Chang, E., & Hancock, K. (2003, June). Role stress and role ambiguity in new nursing graduates in Australia. *Nursing & Health Sciences [serial online], 5*(2), 155-163. Retrieved from http://eds.a.ebscohost.com.ezproxy.gardner-webb.edu/eds/pdfviewer/pdfviewer?vid=1&sid=050eef90-1aa7-4769-89a2-da97cba78d0d%40sessionmgr4008&hid=4208

Chang, E. M., Daly, J. W., Hancock, K. M., Bidewell, J., Johnson, A., Lambert, V. A., & Lambert, C. E. (2006, January-February). The relationship among change fatigue, resilience, and job satisfaction of hospital staff nurses. *Journal of Professional Nursing*, *22*(1), 30-38. http://dx.doi.org/10.1016/j.profnurs.2005.12.002

Cheng, C., Liou, S., Tsai, H., & Chang, C. (2015). Job stress and job satisfaction among new graduate nurses during the first year of employment in Taiwan. *International Journal of Nursing Practice*, *21*, 410-418. http://dx.doi.org/10.111/ijn.12281

Cho, J., Spence-Laschinger, H. K., & Wong, C. (2006, October). Workplace empowerment, work engagement and organizational commitment of new graduate nurses. *Nursing Leadership, 19*(3). http://dx.doi.org/10.12927/cjnl.2006.18368

Delaney, C. (2003). Walking a Fine Line: Graduate Nurses' Transition Experiences During Orientation. JOURNAL OF NURSING EDUCATION, (10). 437

Ebrahimi, H., Hassankhani, H., Negarandeh, R., Gillespie, M., & Azizi, A. (2016, March). Emotional support for new graduated nurses in clinical setting: a qualitative study. *Journal Caring of Science*, *5*(1), 11-21. http://dx.doi.org/10.15171/jcs.2016.002.

Eifering, A., Semmer, N. K., & Grebner, S. (2007, February 20). Work stress and patient safety: Observer-rated work stressors as predictors of characteristics of safety-related events reported by young nurses. *Journal of Ergonomics*, *49*(5-6), 457-469. http://dx.doi.org/

Erikson, R. J., & Grove, W. J. (2008, January). Why emotions matter: Age, agitation, and burnout among registered nurses. *The Online Journal of Issues in Nursing*, *13*(1). http://dx.doi.org/10.3912/OJIN.Vol13No01PPT01

Figueroa, S., Bulos, M., Forges, E., & Judkins-Cohn, T. (2013). Stabilizing and retaining a quality nursing work force using the married State Preceptorship Model. *The Journal of Continuing Education in Nursing, 44*(8), 365-373. http://dx.doi.org/10.3928/00220124-20130603-0

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology, 50*(5), 992-1003. Retrieved from http://eds.a.ebscohost.com.ezproxy.gardner-webb.edu/eds/pdfviewer/pdfviewer?sid=8eb0cb25-913a-4db6-a549-8aa1422b8dff%40sessionmgr4006&vid=1&hid=4103

Gray-Toft, P., & Anderson, J. G. (1981, March). The Nursing Stress Scale: Development of an instrument. *Journal of behavioral assessment, 3*(1), 11-23. http://dx.doi.org/10.1007/BF01321348

Halfer, D., & Graf, E. (2006, May/Jun). Graduate nurse perceptions of the work experience. *Nursing Economics, 24*(3), 150-5, 123. Retrieved from http://search.proquest.com.ezproxy.gardner-webb.edu/central/docview/236937968/7F5CEE76624B4186PQ/13?accountid=11041

Hu, Y., Zhang, Y., Shen, N., Wu, J., & Malmedal, W. K. (2016, November 1). Stressors of newly graduated nurses in Shanghai pediatric hospital: a qualitative stud. *Journal of Nursing Management, 25*, 184-193. http://dx.doi.org/10.1111/jonm.12454

Hu, Y., Zhang, Y., Shen, N., Wu, J., Wu, J., & Malmedal, W. K. (2017). Stressors of newly graduated nurses in Shanghai pediatric hospital: a qualitative study. *Journal of Nursing Management, 25*, 184-193. Retrieved from http://onlinelibrary.wiley.com.ezproxy.gardner-webb.edu/doi/10.1111/jonm.12454/pdf;jsessionid=2B81D37D6406F4E611A7F24425F3C793.f04t03

IOM (Institute of Medicine). (2011). *The future of nursing: leading change advancing health, Washington, DC: The National Academies Press*. Retrieved from: http://www.nap.edu/catalog/12956.html

Jennings B. M. (2008). Work Stress and Burnout among Nurses: Role of the Work Environment and Working Conditions. In: Hughes RG, editor. Patient Safety and Quality: An Evidence-Based Handbook for Nurses. Rockville (MD): Agency for Healthcare Research and Quality (US); 2008 Apr. Chapter 26. Available from: https://www.ncbi.nlm.nih.gov/books/NBK2668/

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping.* New York : Springer Pub. Co.,

Liu, Y., Wu, L., Chou, P., Chen, M., Yang, L., & Hsu, H. (2016). The influence of work-related fatigue, work conditions, and personal characteristics on intent to leave among new nurses. *Journal of Nursing Scholarship, 48*(1), 66-73. http://dx.doi.org/10.1111/jnu.12181

Lovgren, M., Gustavsson, P., Melin, B., & Rudman, A. (2015). April. *International Journal of Nursing Studies*, *51*(4), 625-639. http://dx.doi.org/10.1016/j.ijnurstu.2013.08.009

Meyer, R. M., Li, A., Klaristenfeld, J., & Gold, J. I. (2015). Pediatric novice nurses: Examining compassion fatigue as a mediator between stress exposure and compassion satisfaction, burnout, and job satisfaction. *Journal of Pediatric Nursing*, *30*(1), 174-183. http://dx.doi.org/10.1016/j.pedn.2013.12.008

Ming-Chen, Y., & Yu, S. (2009, December). Job stress and intention to quit in newly-graduated nurses during the first three months of work in Taiwan. *Journal of Clinical Nursing*, *18*(24), 3450-3460. http://dx.doi.org/10.1111/j.1365-2702.2009.02941.x

Nursing Shortage Fact Sheet [Fact sheet]. (2014). Retrieved from American Association of Colleges of Nursing website: http://www.aacn.nche.edu/media-relations/NrsgShortageFS.pdf

Pipe, T. B., Buchda, V. L., Launder, S., Hudak, B., Hulvey, L., Karns, K. E., & Pendergast, D. (2012). Building Personal and Professional Resources of Resilience and Agility in the Healthcare Workplace. *Stress and Health*, (1). 11.

Richez, M. (2014, February). Resilience-building strategies for nurses in transition. *Journal of Continuing Education in Nursing*, *45*(2), 54-55. Retrieved from http://resolver.ebscohost.com.ezproxy.gardner-webb.edu/openurl?sid=EBSCO%3arzh&genre=article&issn=00220124&ISBN=&volume=45&issue=2&date=20140201&spage=54&pages=54-55&title=Journal+of+Continuing+Education+in+Nursing&atitle=Resilience-Building+Strategies+for+Nurses+in+Transition.&aulast=Richez%2c+Madeline&id=DOI%3a10.3928%2f00220124-20140124-12&site=ftf-live

Rush, K. L., Adamack, M., Jordan, J., & Janke, R. (2014, October). New graduate nurse transition programs: Relationships with bullying and access to support. *Contemporary Nurse*, *48*(2), 219-228. Retrieved from http://search.proquest.com.ezproxy.gardner-webb.edu/central/docview/1641646999/fulltextPDF/FB9CA507B720488DPQ/3?accountid=11041

Scammell, J. (2016). Should I stay or should I go? Stress, burnout and nurse retention. *British Journal of Nursing*, *25*(17). Retrieved from file:///C:/Users/00jon/Downloads/New%20folder/Should%20%20I%20stay%20or%20go%20Uk.pdf

Scott, E. S., Engelke, M. K., & Swanson, M. (2008). New graduate nurse transitioning: Necessary or nice? *Applied Nursing Research, 21*, 75-83. http://dx.doi.org/10.1016/j.apnr.2006.12.002

World Health Organization. (2015). World Health Statistics 2015. Retrieved from Available at: http://www.who.int/gho/publications/world_health_statistics/2015/en/, accessed 16 May 2015.

Wu, T., Stokes, D. P., & Adam, C. (2012). Work-related stress and intention to quit in newly graduated nurses. *Nurse Education Today*, *32*(6), 669-674. Retrieved from https://www-clinicalkey-com.ezproxy.gardner-webb.edu/service/content/pdf/watermarked/1-s2.0-S0260691711002231.pdf?locale=en_US